



Department
for Education

Children's centres evaluation in England

**Strand 2: longitudinal survey of
families using children's centres in the
most disadvantaged areas**

Research report

February 2015

**Ruth Maisey, Eloise Poole, Jenny Chanfreau &
Alexandra Fry – NatCen Social Research**

Contents

List of figures	6
List of tables	7
Research team and acknowledgements	10
Executive Summary	11
Introduction	11
Family services and childcare use (pre-natal to age 3)	11
Monitoring the evaluation's outcome measures at age 3	13
Physical and mental well-being	13
Parenting and family functioning	14
Child development	14
Conclusions	15
1 Introduction	17
1.1 Background to the evaluation	17
1.2 Aims of the survey of parents	18
1.3 Methodology	20
1.3.1 Sampling	20
Figure 1 ECCE Sample Design	21
1.3.2 Data collection	22
1.3.3 Interviewer training and quality assurance	23
1.3.4 Response rates	24
1.4 Socio-demographic profile of families using children's centres	26
1.5 Table conventions	26
2 Parents' use of children's centres	27
2.1 Key findings	27
2.1.1 Family services	27

2.1.2	Children's use of childcare	28
2.2	Family services	29
2.2.1	Take-up of family services	29
2.2.2	Patterns of using children's centre services	34
Figure 2	Formal childcare overall and at the named children's centre	38
2.3	Reasons for not using the children's centre	39
2.4	Children's use of childcare	40
3	Physical and mental well-being	42
3.1	Key findings	42
3.1.1	Family diet	42
3.1.2	Accidents, illness and disability	42
3.1.3	Parental mental well-being	43
3.1.4	Smoking, drinking and drugs	43
3.2	Family Diet	43
3.2.1	Food preparation	44
3.2.2	Eating fresh and convenience food	45
3.3	Accidents, illness and disability	48
3.3.1	Children's accidents and injuries	48
3.3.2	Children's illness and development	50
3.3.3	Parental illness and disability	52
3.4	Parents' mental well-being	53
3.5	Smoking, drinking and drugs	55
4	Parenting and Family Functioning	58
4.1	Key findings	58
4.1.1	Home learning environment	58
4.1.2	Order and chaos at home	58

4.1.3	Relationship with non-resident parent	59
4.1.4	Quality of relationship with partner	59
4.1.5	Fathers' involvement in child rearing	59
4.1.6	Parenting stress index (PSI)	59
4.2	Home learning environment	59
4.2.1	Frequency of different home learning activities	60
4.2.2	Overall home learning environment	63
4.3	Order and chaos at home	64
4.4	Relationship with non-resident parent	67
4.5	Quality of relationship with partner	68
4.6	Fathers' involvement in child rearing	70
4.7	Parenting stress index (PSI)	73
5	Child development	77
5.1	Key findings	77
5.1.1	The Strengths and Difficulties Questionnaire	77
5.1.2	The British Ability Scales	77
5.2	Strengths and Difficulties Questionnaire	78
5.2.1	The Total Difficulties Score	78
5.2.2	The pro-social scale	80
Figure 3	Pro-social scale scores, by mother's educational attainment (%)	81
5.2.3	Additional pro-social scales	81
5.3	British Ability Scales	82
5.3.1	Naming vocabulary	83
5.3.2	Picture similarities	84
6	Conclusions	86
	References	88

Appendix A – Socio-demographics & changes in household structure	91
Appendix B – Weighting Strategy	97
Appendix C – Additional Tables	100

List of figures

Figure 1	ECCE Sample Design	21
Figure 2	Formal childcare overall and at the named children's centre	38
Figure 3	Pro-social scale scores, by mother's educational attainment (%)	81

List of tables

Table 1.1	Detailed wave 3 survey response figures	24
Table 1.2	Longitudinal survey response figures	25
Table 2.1	Take-up of family services at children's centres and elsewhere between 3 months before the birth of the selected child and age 3 (%)	31
Table 2.2	Number of services received through the named children's centre over time (% & averages)	34
Table 2.3	Take-up of services through the named children's centre over time (%)	36
Table 2.4	Reasons for not using the named children's centre (%)	39
Table 2.5	Children's take-up of formal childcare providers from birth to 3 (%)	40
Table 3.1	Attitudes to preparing meals from fresh ingredients over time (%)	44
Table 3.2	How often salt is added to food whilst cooking over time (%)	45
Table 3.3	Consumption of fresh and convenience foods (%)	46
Table 3.4	Consumption of junk food, fried food and fast food (%)	47
Table 3.5	How often child eats fresh fruit and vegetables (%)	48
Table 3.6	Accidents and injuries over time (%)	49
Table 3.7	Visits to A&E or MIU over time (%)	50
Table 3.8	Nature of long-standing health problems over time (%)	51
Table 3.9	Visits to the hospital or the GP over time (%)	52
Table 3.10	Nature of developmental or behavioural problem (%)	52
Table 3.11	Whether parent/carer has a long-standing illness or disability over time (%)	53
Table 3.12	GHQ12 scores, by demographics (%)	54
Table 3.13	GHQ12 scores over time (%)	55
Table 3.14	Alcohol consumption over time (%)	55
Table 3.15	Smoking over time (%)	56
Table 3.16	Drug use over time (%)	57
Table 4.1	Reading at home over time (%)	61

Table 4.2	Visiting the library (%)	61
Table 4.3	Frequency of home learning activities: Letters, numbers, singing and drawing (%)	62
Table 4.4	Children's screen time (%)	62
Table 4.5	Home learning environment (HLE) score, by demographics (averages)	63
Table 4.6	Confusion, hubbub and order in the home over time (%)	65
Table 4.7	Confusion, hubbub and order scale (CHAOS), by demographics (averages)	66
Table 4.8	How often selected child usually sees their natural non-resident parent overtime (%)	67
Table 4.9	Nature of respondent's relationship with selected child's natural non-resident parent over time (%)	68
Table 4.10	Respondent's satisfaction with the relationship with their partner overtime (%)	68
Table 4.11	Level of criticism in the relationship over time (%)	69
Table 4.12	Frequency of partner violence towards respondent over time (%)	70
Table 4.13	Frequency of father's involvement in child rearing overtime (%)	71
Table 4.14	Father's involvement score, by demographics (averages)	71
Table 4.15	How often mother can count on father to take care of child (if needed) overtime (%)	72
Table 4.16	Overall how close father in household is to the child (%)	73
Table 4.17	Parenting Stress Index (PSI): parental distress subscale, by demographics (averages)	74
Table 4.18	Parenting Stress Index (PSI): parent-child dysfunctional interaction subscale, by demographics (averages)	76
Table 5.1	Total Difficulties Score and subscales (%)	79
Table 5.2	Total Difficulties Score, by demographics (%)	80
Table 5.3	BAS III scores (averages)	82
Table 5.4	Naming vocabulary standardised test scores, by demographics (averages)	83
Table 5.5	Picture similarities standardised test scores, by demographics (averages)	85
Appendix Table A.1	Age of the selected child (%)	91

Appendix Table A.2	Children's term of birth (%)	92
Appendix Table A.3	Language spoken by the selected child (%)	92
Appendix Table A.4	Household type and work status (%)	93
Appendix Table A.5	Number of children in the household (%)	93
Appendix Table A.6	Sources of income (%)	94
Appendix Table A.7	Level of income (%)	95
Appendix Table A.8	Tenure of household (%)	95
Appendix Table A.9	Major life changes over time (%)	96
Appendix Table C.1	Hypothesised links between services and outcomes	100
Appendix Table C.2	Change in use of services through the named children's centre from wave one to wave three (%)	102
Appendix Table C.3	Number of services received through the named children's centre over time, for families who used the children's centre (averages)	103
Appendix Table C.4	Number of services used through the named children's centre by family characteristics (averages)	103
Appendix Table C.5	Take-up of services through the named children's centre by income (%)	104
Appendix Table C.6	Take-up of services through the named children's centre by household type (%)	105
Appendix Table C.7	Take-up of services through the named children's centre by mental well-being (%)	107
Appendix Table C.8	Frequency of partner violence towards respondent by household income (%)	108
Appendix Table C.9	Pro-social scale scores (%)	109
Appendix Table C.10	Pro-social scale scores, by demographics (%)	109
Appendix Table C.11	Additional scores in the Strengths and Difficulties Questionnaire (averages)	110
Appendix Table C.12	Naming vocabulary raw scores, by demographics (averages)	110
Appendix Table C.13	Picture similarities raw scores, by demographics (averages)	111

Research team and acknowledgements

We would like to thank everyone within NatCen Social Research who contributed to the design and implementation of ECCE, but especially Svetlana Speight and Emily Tanner for their leadership at various stages of the project.

We are also grateful to the ECCE research teams at the University of Oxford and at Frontier Economics for their comments on the questionnaire and the report.

Our thanks go to the following people at the Department for Education for their guidance and comments: Michael Dale, Steve Hamilton, Dan Evans and Alison Oakins.

Finally and most importantly we are extremely grateful to all the leaders of children's centres for their support, to all the parents and children who gave their time to the evaluation and all the interviewers who went out to speak to them.

Executive Summary

Introduction

The Evaluation of Children's Centres in England (ECCE) 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. To date the evaluation has provided rich data on the types of services that children's centres have offered between 2011 and 2014 (Poole et al. 2014), and detailed information on service delivery, multi-agency working, and reach (Sylva et al. 2014). This report adds to the research evidence on children's centres by providing valuable insight from the perspective of families. The longitudinal nature of the survey is a particular strength because it provides a baseline assessment of families alongside early outcome measures from which to assess impact, and allows us to explore how families' use of children's centres has changed over time.

The sample for this survey comprised families who were registered with one of 128 children's centres that took part in an earlier survey of children's centre managers (the 'named children's centre'), when the family had a child aged 9-18 months (the 'selected child'). The longitudinal survey of families collected data at three time points, when the selected child was aged 9-18 months old and then again when the child was aged about 2 and about 3. The surveys collected information on the extent of families' involvement with their named children's centre and their take-up of services elsewhere. It also collected information on physical and mental well-being, parenting and family functioning, and child development. This will ultimately allow the next stage of the evaluation to investigate potential associations between families' use of children's centre services, and child and family outcomes.

We present the data in this report to show a picture of children's centre families: the extent to which they use different services and how they have been faring in relation to the outcome measures we have selected for the study. We also show how these statistics have changed over the three years that the study has followed these families and how they vary significantly by families' socio-economic circumstances.

Family services and childcare use (pre-natal to age 3)

- The types of service that families had commonly used through the named children's centre were stay and play or play and learn groups (60%) and midwife/ health visitor drop in sessions or clinics (58%).¹
- At the other end of the spectrum, some children's centre services were used by relatively few people. For instance, only 1% of families used relationship support, 2% used a

¹ At some point in the survey reference period which started three months prior to the birth of the selected child, and finished when the selected child was about three years old.

psychologist or counsellor, 2% attended a basic IT or jobs skills course, 2% attended an English class for speakers of another language, and 2% attended a first aid course.

- A notable proportion of families had used the kinds of services that are offered by children's centres, but had done so through an organisation that was unrelated to a children's centre. This was particularly the case for the following services: a midwife or health visitor drop in session (31%); organised sport or exercise for babies or children (26%); stay and play or play and learn groups (25%); and antenatal classes (21%).
- There was a substantial reduction in families' use of the named children's centre over time. While 85% of families had used a service through the named children's centre when the selected child was aged about 1 year old, this had fallen to 54% when the selected child was aged about 3 years old.
- There was a drop-off in use of most services over time. The only services that were used more when children were aged 3 than when they were aged 9-18 months were childcare and early education, and speech and language therapy
- Affluent families were the most likely to have stopped using the named children's centre between waves one and three. Correspondingly, low income families and non-working families were least likely to have stopped using services through the named children's centre.
- There was some evidence that disadvantaged families had used more services through the named children's centre than affluent families e.g. non-working families and parents with poorer mental well-being used a greater number of services that had been delivered or signposted by the named children's centre.
- Disadvantaged families were also more likely than affluent families to have used a number of targeted services through the named children's centre. Most notably they were more likely to have used childcare and early education which suggests that where children's centres offer childcare they are focusing on delivery of the free entitlement to disadvantaged 2 year olds.
- Seventy-four per cent of the selected children had attended formal childcare between the ages of 0 and 3. The most common types of formal childcare provider that children had attended were day nurseries (34%) and play groups or pre-schools (21%).
- Take-up of the free entitlement to early education for disadvantaged 2 year olds amongst children of the appropriate age was low at 17%. However, although the evaluation focussed on disadvantaged areas, not all families would have met the income criteria for eligibility.² Therefore this measure of take-up is likely to be lower than one would expect amongst the eligible population.
- Amongst children of the appropriate age, take-up for the entitlement for 3 year olds was much higher at 69%. This is lower than the national take-up figure of 79% reported by

² Unfortunately the survey did not collect sufficiently detailed data on income and benefit receipt to allow us to identify the families that would have met the income criteria for eligibility.

Huskinson et al. 2014,³ but their research also shows that take-up is lower for more disadvantaged families, so it is perhaps unsurprising to see lower take-up within this evaluation.

Monitoring the evaluation's outcome measures at age 3

The measures chosen for the evaluation reflect the family outcomes that children's centres are intended to support; these cover a wide range of areas in order to capture the breadth of possible benefits that children's centres might have. For the purpose of reporting, these outcomes have been grouped into three areas: physical and mental wellbeing (e.g. healthy diet), parenting and family functioning (e.g. reading to the child) and child development (e.g. problematic behaviour).

Physical and mental well-being

- Families generally reported eating a healthy diet; the vast majority of families (77%) and children (80%) were eating meals cooked from fresh ingredients most days with only a small minority eating ready meals, junk food or takeaways this often.
- Most children ate fresh fruit (72%) and fresh vegetables (52%) every day, though a minority had less healthy diets; 4% of children ate fresh fruit and 9% of children ate fresh vegetables or salad just once a week, less often or never.
- Most children had had an accident or injury in the past year: 72% at wave one and 95% at wave three. However a minority had had more serious accidents such as breaking a bone (3%) or swallowing something poisonous (2%).
- Most children had no long-standing health problems: 67% of children at wave one and 58% at wave three. Where children did have a long-standing health problem, the most common at wave three were skin problems (16%) and breathing problems (14%).
- Six per cent of parents at wave three reported that their child had developmental or behavioural problems, with speech problems being by far the most frequently reported issue.
- Fourteen per cent of respondents had poor mental well-being at wave three which represents a reduction since wave one (where it was 18%). Poor mental well-being was most common amongst families with a low income, non-working families, and lone parents.
- Parents within the evaluation drank alcohol to a moderate extent (at wave three 30% said that they never drank alcohol and 27% said that they drank at least once a week or more often). The majority of parents were non-smokers at wave three (81%) and only 1% reported that they used drugs.

³ The Department for Education Early Years Census and Schools Census take-up figure for 3 and 4 year olds is 97%. Provision for Children Under Five Years of Age in England: January 2014, Department for Education (June 2014).

Parenting and family functioning

- Three quarters of parents reported someone reading to their child daily or more than once a day at home. Over half of parents reported someone teaching their child songs, poems or nursery rhymes seven times a week or constantly, and a similar proportion reported someone at home trying to teach child numbers or counting equally often.
- Higher income families, families with highly educated mothers, working families and couple families engaged in the most learning activities with their children at home.
- There was a small but significant increase in reported confusion, hubbub and disorder within households between wave one and wave three. In both waves, more disadvantaged families tended to have slightly (but significantly) more chaotic and less organised homes than those in more advantaged circumstances.
- Among children in lone parent families, the prevalence of contact with the non-resident parent remained relatively stable between the two waves. However, the frequency of contact reduced over time and there was a reduction in the proportion of lone parents describing their own relationship with their child's non-resident parent as fairly or very good.
- Among couples, there was little change in the reported quality of parental relationships. Over nine in 10 respondents in each wave reporting being quite or very satisfied with their relationship. Levels of criticism, and violence, in relationships remained stable and at a low level. However, partner violence was significantly more common among the poorest households in both waves.
- In couple families, fathers were less frequently involved in child rearing activities when their child was aged about 3 years old, than they had been when their child was about 9-18 months. However, while playing with their child had declined, involvement at bedtime increased.
- Overall stress associated with parenting remained stable over time, although stress associated with parents' and children's interactions had increased a little. Higher levels of parental stress were apparent among more disadvantaged families in both waves.

Child development

- Overall 10% scored highly on a measure of their social behaviour, indicating problematic behaviour. This was particularly likely to be the case for children in low income households, children whose mothers had a low level of education, children from lone parent households, and children from non-working families.
- The evaluation assessed children's vocabulary and non-verbal reasoning. The children with the poorest scores were from low income households, had mothers who were poorly educated, from lone parent households, and non-working households.

Conclusions

When interpreting the findings of the evaluation it is important to bear in mind that this research has taken place during a time of changing policy and in a challenging economic climate. At the beginning of the evaluation children's centres delivered a core offer of services to their community, many with universal access. Therefore, the families who used children's centres at that time and were selected to take part in the evaluation had widely varying circumstances (e.g. while many families have low incomes, 15% had a household income over £50,000). Since then, children's centres have been directed away from services with universal access, towards a core purpose that focuses on disadvantaged families in an attempt to reduce inequality. This means that the more affluent families who used children's centres at the beginning of the evaluation are no longer a target for children's centre services, and this will have affected their level of service take-up. Alongside this shift in purpose, the model of delivery for children's centres has moved away from a single site model where an individual children's centre operates from a main site that is run by a dedicated manager, towards a multi-site or cluster model where leadership and service delivery is shared. As such, the range and location of services on offer to individual families is likely to have changed over the course of the evaluation.

When families first took part in the evaluation, take-up of services was high – only 15% of families hadn't used any services through the children's centre over the last year or so. In contrast, when the third interview took place, 46% of these same families had not used any services through the children's centre over the previous year. This drop off in service use could be simply be attributed to the natural maturation of families and their children, who no longer have a need for many of the services that they used initially such as antenatal classes, breast feeding support and midwife or health visitor clinics. However, the lower use of children's centres by age 3 could also suggest that children's centres offer less for families with older children. Perhaps there is an expectation that the needs of children aged 3-4 years old and their families are met primarily through early education services, although if this is the case, it raises a question as to whether the holistic needs of families are being met adequately. Alternatively, the lower use of children's centres by age 3 could represent a mark of success in directing resources most effectively towards the families that need children's centres most. For if centres are able to draw in families from across their catchment area early, and then focus on maintaining relationships with families who have the greatest need, then limited resources will be used to good effect. The evidence from this evaluation supports this hypothesis since it shows that the families most likely to have stopped using the children's centre over the course of the evaluation are the more affluent.

This research provides a swathe of evidence to show that children's centres are successfully targeting disadvantaged families. Over the course of the evaluation, disadvantaged families used more services through the children's centre than their more affluent counterparts, and they were more likely to use a wide range of services. In particular it was notable that disadvantaged families were more likely to use childcare and early education through the children's centre than more affluent families. This is in contrast to typical patterns of childcare use which tend to show greater use of formal childcare by higher income and working families (see Huskinson et al. 2014). The most likely explanation for this is that the childcare offered by children's centres focuses on delivering the free entitlement to early education for disadvantaged 2 year olds, which research

suggests will help centres meet the aims of their core purpose and reduce inequalities (see Smith et al. 2009).

The evidence in this report also helps justify the emphasis that centres are increasingly placing on disadvantaged families. Families in disadvantaged circumstances were shown to have poorer mental well-being, provide a poorer home learning environment, have more chaotic and disorganised households, and exhibit higher levels of parenting stress. These are all factors that research has shown to be associated with poorer child outcomes (Cummings and Davies 1994; Marryat and Martin 2010; Roberts et al. 2014; Deater-Deckard 2004; Deater-Deckard et al. 2009; Evans et al. 2005). In addition, the research shows that children from disadvantaged households are already performing more poorly in terms of vocabulary and non-verbal reasoning than their counterparts, and have poorer social behaviour.

The next stage of the evaluation will investigate potential associations between families' use of children's centre services, and child and family outcomes. It will therefore shed light on the extent to which children's centres have been successful in improving families' outcomes and reducing inequality.

1 Introduction

1.1 Background to the evaluation

This report presents findings from the longitudinal survey of parents that forms 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.

At the start of the evaluation children's centres that served the 30% most disadvantaged communities were required to deliver the following core offer of services:

- information and advice to parents on a range of subjects including looking after babies and young children, and the availability of local services such as childcare;
- drop-in sessions and activities for parents, carers and children;
- outreach and family support services, including visits to all families within two months of a child's birth;
- child and family health services, including access to specialist services for those who need them;
- links with Jobcentre Plus for training and employment advice;
- support for local childminders and a childminding network; and
- integrated early education and childcare places for a minimum of five days a week, 10 hours a day, 48 weeks a year.

More recently, the DfE has stated that ([Sure Start Children's Centres Statutory Guidance, April 2013](#)):

"The core purpose of children's centres is to improve outcomes for young children and their families and reduce inequalities between families in greatest need and their peers in:

- child development and school readiness;
- parenting aspirations and parenting skills; and
- child and family health and life chances."

As such, the political landscape has changed over the life of the evaluation, and while families' use of children's centres at the beginning of the evaluation coincided with children's centres' delivery of the core offer, their recent use of children's centres will have coincided with children's centres' core purpose.

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

- Strand 1: Survey of children's centre leaders. This report describes changes in children's centre provision since the baseline survey in 2011 (Tanner et al. 2012; Poole et al. 2014).
- Strand 2: Survey of families using children's centres. This is a longitudinal survey of families from a subsample of the centres interviewed for strand 1. The families interviewed consist of those who were registered with the strand 1 centre (referred to as the 'named children's centre' within this report), and had a 9-18 month old child at the time of the first interview. Families were then re-interviewed when their child was about 2 years and 3 years old creating a profile of service use and children's development (Maisey et al. 2013).
- Strand 3: Investigation of children's centres' service delivery, multiagency working and reach. The research team visited 121 centres in their first phase of work and 117 in their second phase of work, assessing:
 - the range of activities and service delivery;
 - leadership;
 - evidence-based practice;
 - parenting support services; and
 - partnership working (Goff et al. 2013; Evangelou et al. 2014; Sylva et al. 2014).

In addition, the research team profiled 117 children's centre areas to assess their reach by comparing information about the centres and the families that use them, to existing data on the demographic composition of the centres' catchment area (Smith et al. 2014).
- Strand 4: Impact. This strand of the evaluation aims to answer the question: "What aspects of children's centres (management structure, working practices, services offered, and services used) affect family, parent, and child outcomes when their child is aged 3?". This question will be explored by examining the information gathered from strands 1 to 3. Subsequently, these children's Foundation Stage Profiles will be used to explore the impact of children's centres on child school readiness at age 5.
- Strand 5: Cost benefit analysis. Lastly, the research team conducted economic case studies in 24 children's centres to find out about the costs of delivering different services. This information will be combined with data from other elements of the evaluation to assess the effectiveness and benefits of children's centres in relation to cost (Briggs et al. 2012).

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 children's centres' impact on child outcomes (strand 4).

The survey collected information about parents (including non-resident parents) and children in the household, with most child-related questions focusing on the child who was aged 9-18 months at

the time of the first interview (aged about 2 at the second interview, and about 3 at the third interview). Throughout the report, this child is referred to as the 'selected child'.

The areas covered in the questionnaire included:

- use of children and family services at the named children's centre and elsewhere,
- use of childcare and early education,
- parent, family and child health and diet
- parenting/ family functioning,
- children's social and cognitive development, and
- socio-demographic characteristics.

The measures chosen for the evaluation reflect the family outcomes that children's centres are intended to support, and cover a wide range of areas in order to capture the breadth of possible benefits that children's centres might have. For the purpose of reporting, these outcomes have been grouped into three areas: physical and mental wellbeing (e.g. healthy diet, see Chapter 3), parenting and family functioning (e.g. reading to the child, see Chapter 4) and child development (e.g. problematic behaviour, see Chapter 5).

We present the data in this report to show a picture of children's centre families: the extent to which they use different services and how they have been faring in relation to the outcome measures we have selected for the study. We also show how these statistics have changed over the three years that the study has followed these families and how they vary significantly by families' socio-economic circumstances.

The next stage of the evaluation (strand 4) will investigate potential associations between families' use of children's centre services, and child and family outcomes. One of the challenges for this strand is the wide variation in families' use of different combinations of services and the extent of changing service use over time. An initial stage of this work will therefore be to identify a number of measures of families' patterns of use and duration of engagement with their named children's centre (and equivalent services at other children's centres or elsewhere). The impact evaluation will then seek to test the effects of such variation in use of services on child and family outcomes. In particular it is hypothesised that:

- Certain patterns & combinations of service **use** may predict outcomes⁴
- Certain centre **characteristics (processes)** may be important as predictors (e.g. leadership, multiagency working, reach, quality (as measured by Ofsted), model of organisation (e.g. stand-alone centre, or hub and spoke model etc.)).

⁴ Some hypothesised links between services and outcomes can be found in Appendix Table C.1. However the measures of families' patterns of use and duration of engagement with their named children's centre that will be developed by strand 4 are unlikely to map to outcomes in the same way.

The conclusion of this work will ultimately shed light on the extent to which children's centres have been successful in improving families' outcomes and reducing inequality.

1.3 Methodology

This chapter describes the methodology of the longitudinal survey.

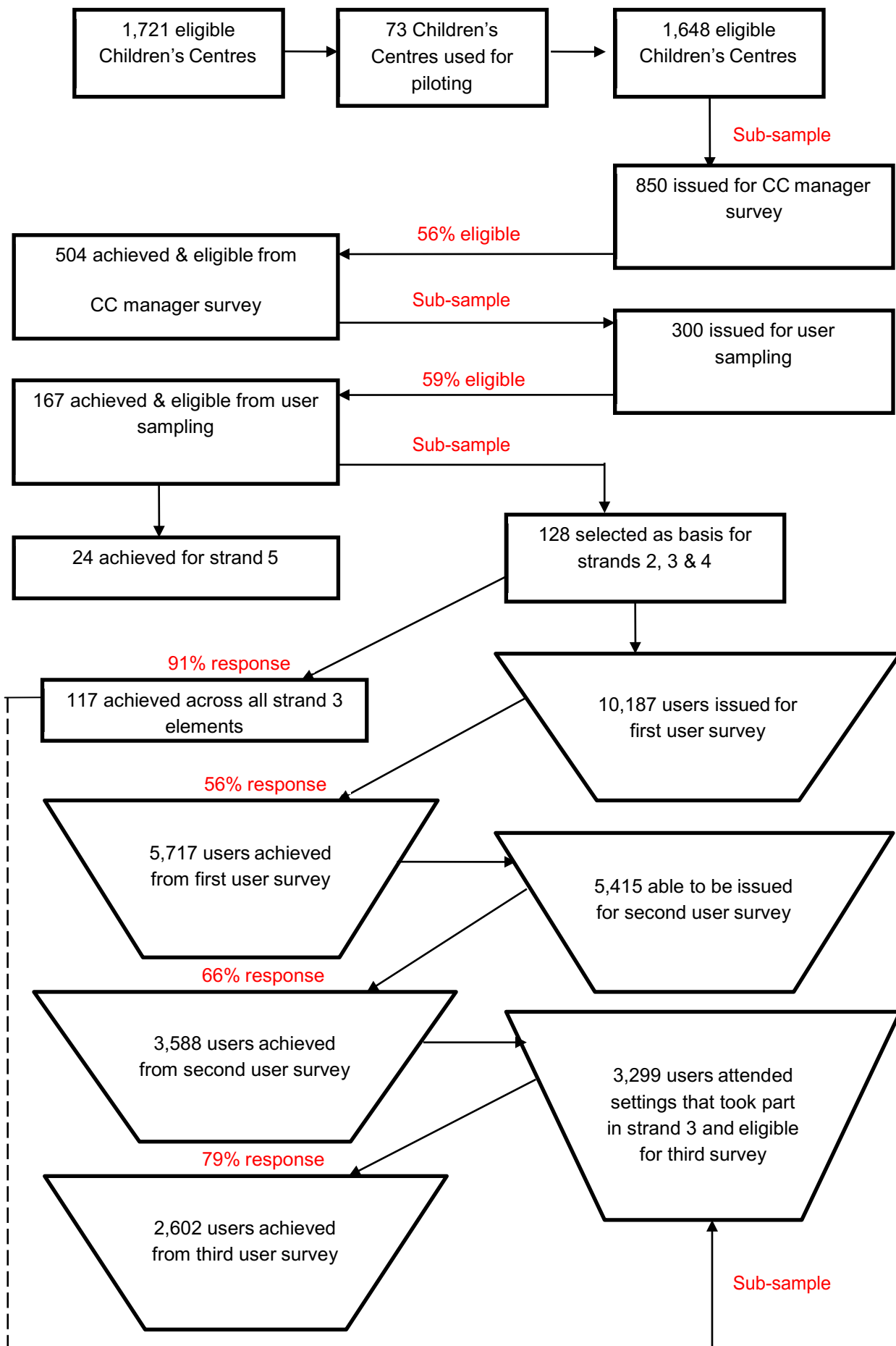
1.3.1 Sampling

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 (strand 1). 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 sub-sample of 128 centres were then selected from the centres that successfully recruited users for the evaluation. These centres formed the basis of strands 2, 3 to create a nested design that provides multi-level data to strand 4.
- A total of 10,187 parents were selected from these 128 centres and invited to take part in the longitudinal survey of users. This first survey of families with a 9-18 month old child resulted in 5,717 interviews.
- All parents who had agreed to be recontacted and provided a telephone number were invited to take part in the second survey. At the time of this survey the selected child was aged about 2 years old and 3,588 interviews were completed.
- For the third survey, families were only invited to take part if their centre had taken part in strand 3 of the evaluation. This was to ensure that the multi-level data available to strand 4's impact analysis would be as complete as possible. This survey took place when the selected child was aged about 3 year old and 2,602 interviews were completed.

The different stages in the process of sampling parents for the users' survey are shown in Figure 1.

Figure 1 ECCE Sample Design



1.3.2 Data collection

The first survey of parents was conducted face-to-face in 2012 when the selected child was aged 9-18 months. These families were followed up through a telephone survey in 2013 (when their child was aged about 2), and were interviewed for a third time face-to-face in 2014 (when their child was aged about 3). This section describes the data collection approaches for the second and third interviews (a description of the data collection approach for the first interview can be found in Maisey et al. 2013).

Second Interview

The second interview was undertaken with a parent or guardian of the child when they were about 2 years old. The interview was conducted by telephone using Computer Assisted Telephone Interviewing (CATI). The average length of the interview was 15 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 places from February through April 2013.

Third interview

The third survey was undertaken with a parent or guardian of the child when they were about 3 years old. The interview was conducted face-to-face in respondents' homes using Computer Assisted Personal Interviewing (CAPI) and show cards with answer options where appropriate⁵. Some sections of the questionnaire – those containing more sensitive questions – were completed by respondents on their own using Computer Assisted Self Interviewing (CASI).

Children took part in two British Ability Scale III (BAS) assessments to measure their cognitive functioning; Naming Vocabulary and Picture Similarities. The assessments were adapted for use via a Computer Assisted Interview, and conducted face-to-face by a trained interviewer (see section 1.3.3). Tasks included matching a picture to similar picture and naming a set of objects. After a certain number of wrong answers, the assessment automatically came to a stop. Due to the nature of the programme, assessment scores were locked into the computer and could not be accessed by interviews or parents/guardians.

The total average length of the parent interview and BAS assessment was 58 minutes. The BAS assessment itself took on average 14 minutes of the total interview time⁶.

The questionnaire and BAS assessment 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 from February through March 2014. All families received a letter informing them an interviewer would be in contact with them to ask them to take part in the final element of the study. Where possible interviewers contacted families face-to-face, and traced families who had moved.

⁵ The instruments and documentation supporting the survey can be provided upon request (see contact details at the foot of the report).

⁶ Both mean and median after the exclusion of outliers.

Verbal consent to take part in the study was obtained from parents before the first interview and confirmed prior to the second and third interviews. In addition, written parental consent for the child to take part in the BAS assessment was collected from the respondent for each assessment, and children's verbal consent was also sought prior to starting the BAS assessments. Children were able to refuse to take part in the assessments, or choose to stop taking part at any time.

Data processing

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 between surveys. The details of the weighting scheme are provided in Appendix B.

1.3.3 Interviewer training and quality assurance

Second interview

A total of 40 interviewers worked on the second interview that took place when the selected child was aged about 2. Before starting work interviewers received a face-to-face briefing on the project background, procedures, and protocols from a member of the research team.

NatCen is committed to monitoring the quality of interviews conducted by our telephone interviewers and ensuring that they adhere to project specific requirements as well as internal policies and procedures for interviewing. For each project, 5% of productive interviews are monitored through silent monitoring and we aim to monitor all interviewers working on a project at least once. Interviewers are provided with feedback on their monitoring and any training issues or areas of work that need development are identified and appropriate action taken.

Third interview

A total of 171 interviewers worked on the third interview when the selected child was aged about 3. Before starting work interviewers received a face-to-face briefing on the project background, procedures, and protocols from a member of the research team.

All interviewers received training on how to administer the BAS assessments. This included training on safety and consistency, how to respond to the child, and how to accurately and consistently ask questions and respond to queries.

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 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, 2,602 parents fully took part in the third survey – 80% of those who were eligible to take part. Table 1.2 shows details of how many families were in the original issued sample and the outcomes for all waves of the longitudinal survey.

Table 1.1 Detailed wave 3 survey response figures

Outcome	N	% of total	% of eligible
Issued	3288	100	-
Ineligible	18	1	-
Eligible	3270	99	100
Fully productive	2602	79	80
- <i>With full BAS assessment</i>	2398	73	73
- <i>Without full BAS assessment</i>	204	6	6
Partially productive	6	+	+
Non-contact	287	9	9
- <i>Moved (new address unknown)</i>	184	6	6
- <i>Other</i>	103	3	3
Refusal	328	10	10
- <i>Office refusal</i>	21	1	1
- <i>Refusal in person</i>	185	6	6
- <i>Other</i>	122	4	4
Other unproductive	46	1	1
Unknown eligibility	1	+	+

Base: All participants issued at Wave 3.

Table shows column %.

Table 1.2 shows the response rate for the three surveys.

Table 1.2 Longitudinal survey response figures

Outcome	Wave 1 (age 9-18 months)			Wave 2 (age 2)			Wave 3 (age 3)		
	N	% of total	% of eligible	N	% of total	% of eligible	N	% of total	% of eligible
Issued	10187	100	-	5415	100	-	3288	100	-
Ineligible	1041	10	-	22	+	-	18	1	-
Eligible	9146	90	100	5393	100	100	3270	99	100
Fully productive	5717	56	63	3588	66	67	2602	79	80
Partially productive	2	+	+	11	+	+	6	+	+
Non-contact	1697	17	19	1136	21	21	287	9	9
Refusal	1509	15	16	603	11	11	328	10	10
Other unproductive	153	2	2	37	1	1	46	1	1
Unknown eligibility	68	1	1	18	+	+	1	+	+

Base Wave 1: All participants issued at Wave 1.

Base Wave 2: All participants issued at Wave 2.

Base Wave 3: All participants issued at Wave 3.

Table shows column %.

1.4 Socio-demographic profile of families using children's centres

Appendix A shows distributions of the socio-demographic characteristics of respondents and their families.

- Ninety-five per cent of respondents were female (in most cases, mothers).
- Seventy-eight per cent of families were two parent households and 22% were lone parent households. Eighty-two per cent of households had at least one adult in work.
- Forty-one per cent of families had one child, whilst 39% had two children, and 20% had three or more children.
- Eighty per cent of children only spoke English, whilst 9% mainly spoke English, 7% spoke mainly another language, and 5% of children spoke two or more languages equally.
- Almost half of households were buying their house with the help of a loan or mortgage (46%). One quarter of families were renting from the local authority (24%), and a further fifth were renting from a private landlord (22%).
- Thirteen per cent of families had an income below £10,000, 22% earned £10,000-£19,999, 20% earned between £20,000 and £29,999, and 45% had an income above £30,000.⁷

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.
- 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 '+’.

⁷ This represent gross income from all sources.

2 Parents' use of children's centres

This chapter explores families' use of children's centres over the course of the evaluation. It looks at their take-up of different types of family service as well as patterns of using these services over time.

As discussed in Chapter 1, the sample for this survey constituted families 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), when the family had a child aged 9-18 months (the selected child). The longitudinal survey of families collected data on the extent of families' involvement with their named children's centre at three time points, as well as families' involvement with other children's centres and their take-up of services elsewhere. This data is necessary for providing estimates of the level of take-up of various family services and for monitoring changes in patterns of use over time. It will also be used in the impact analysis in strand 4.

2.1 Key findings

2.1.1 Family services

- The types of service that families had commonly used through the named children's centre were stay and play or play and learn groups (60%) and midwife/ health visitor drop in sessions or clinics (58%).⁸
- At the other end of the spectrum, some children's centre services were used by relatively few people. For instance, only 1% of families used relationship support, 2% used a psychologist or counsellor, 2% attended a basic IT or jobs skills course, 2% attended an English class for speakers of another language, and 2% attended a first aid course.
- A notable proportion of families had used the kinds of services that are offered by children's centres, but had done so through an organisation that was unrelated to a children's centre. This was particularly the case for the following services: a midwife or health visitor drop in session (31%); organised sport or exercise for babies or children (26%); stay and play or play and learn groups (25%); and antenatal classes (21%).
- Forty-five per cent of families reported that they had at some point received a home visit from someone at the named children's centre.
- There was a substantial reduction in families' use of the named children's centre over time. While 85% of families had used a service through the named children's centre when the selected child was aged about 1 year old, this had fallen to 54% when the selected child was aged about 3 years old.

⁸ At some point in the survey reference period which started three months prior to the birth of the selected child, and finished when the selected child was about three years old.

- There was a drop-off in use of most services over time. The only services that were used more when children were aged 3 than when they were aged 9-18 months were childcare and early education, and speech and language therapy.
- Affluent families were the most likely to have stopped using the named children's centre between waves one and three. Correspondingly, low income families and non-working families were least likely to have stopped using services through the named children's centre.
- Families' reasons for not using the named children's centre over this period were that they did not need any of the family services offered (43%), they had no time (29%) or that they preferred to use a different children's centre (23%).
- There was some evidence that disadvantaged families had used more services through the named children's centre than affluent families e.g. non-working families and parents with poorer mental well-being used a greater number of services that had been delivered or signposted by the named children's centre.
- Disadvantaged families were also more likely than affluent families to have used a number of targeted services through the named children's centre. Most notably they were more likely to have used childcare and early education which suggests that where children's centres offer childcare they are focusing on delivery of the free entitlement to disadvantaged 2 year olds.

2.1.2 Children's use of childcare

- Seventy-four per cent of the selected children had attended formal childcare between the ages of 0 and 3. However only 8% had attended formal childcare at the named children's centre.⁹
- The most common types of formal childcare provider that children had attended were day nurseries (34%) and play groups or pre-schools (21%).
- Take-up of the free entitlement to early education for disadvantaged 2 year olds amongst children of the appropriate age was low at 17%. However, although the evaluation focussed on disadvantaged areas, not all families would have met the income criteria for eligibility.¹⁰ Therefore this measure of take-up is likely to be lower than one would expect amongst the eligible population.
- Amongst children of the appropriate age, take-up for the entitlement for 3 year olds was much higher at 69%. This is lower than the national take-up figure of 79% reported by

⁹ Information on whether this childcare was signposted by the named children's centre was not collected.

¹⁰ Unfortunately the survey did not collect sufficiently detailed data on income and benefit receipt to allow us to identify the families that would have met the income criteria for eligibility.

Huskinson et al. 2014,¹¹ but their research also shows that take-up is lower for more disadvantaged families, so it is perhaps unsurprising to see lower take-up within this evaluation.

2.2 Family services

Here we look at families' take-up and use of services available at children's centres over the course of the evaluation. During the interview families were given a show card that listed each type of family service with appropriate examples. They were then 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 or since the date of the last interview.¹² 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, families 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.

2.2.1 Take-up of family services

From Table 2.1 we can see that from three months prior to the birth of the selected child, until the selected child was about 3 year old, the types of service that families most commonly used at the named children's centre were:

- 'stay and play' or 'play and learn' groups (60%); and
- midwife/ health visitor drop in sessions or clinics (58%).

These were also among the services that families were most commonly signposted to by the named children's centre, or that they used at a different children's centre. The higher use of these services reflects the high proportion of centres that offer these services. For instance, Poole et al. (2014) found that 99% of centres in disadvantaged areas offered 'stay and play' activities, while 85% had a health visitor clinic and 74% had a midwife clinic.

It is notable though that the kinds of services delivered by children's centres can also be delivered by other organisations, and many families did take-up these services elsewhere. For instance 21%

¹¹ The Department for Education Early Years Census and Schools Census take-up figure for 3 and 4 year olds is 97%. Provision for Children Under Five Years of Age in England: January 2014, Department for Education (June 2014).

¹² Although the reference period covered by the surveys was defined by the date of birth of the selected child, the services that a family used could have been for the respondent, their partner, or any child in the family.

of families had used an ante-natal class that was unrelated to the children's centre, 31% had used a midwife/ health visitor drop in session somewhere else, 26% had used organised sport or exercise for babies or children elsewhere and 25% had attended a stay and play group at a separate organisation. This could be because of parental preference or through lack of awareness or availability of children's centre services.

In addition to services offered at the children's centre, 63% offered home based services and 92% of children's centre offered home based outreach services (Poole et al. 2014). Correspondingly, 45% of families reported that they had at some point received a home visit from someone at the children's centre.

Finally, in some families, someone other than the selected child's parents took the child to the children's centre (14%). This might be another member of the family or a childminder.

Table 2.1 Take-up of family services at children's centres and elsewhere between 3 months before the birth of the selected child and age 3¹³ (%)

Family Service	Named SSCC	Sign posted by named SSCC	Another SSCC	Used somewhere unrelated to a SSCC	None	<i>Unweighted base</i>	<i>Weighted base</i>
Health							
Antenatal classes	14	9	5	21	56	2601	2598
Breastfeeding groups	15	10	3	6	70	2601	2601
Midwife/ health visitor drop in session or clinic	58	27	14	31	8	2599	2599
Speech and language therapy (SALT)	6	4	4	6	83	2601	2601
Psychologist or counsellor	2	1	1	8	88	2600	2600
Activities that parents and children do together							
Stay and play, or play and learn groups	60	43	12	25	15	2600	2600
Organised sport or exercise for babies or children	26	15	9	26	43	2601	2601
Toy library	13	8	4	6	75	2599	2598
Family and parenting support							
Peer support groups	8	4	1	3	86	2602	2602

¹³ Childcare and early education is not included in this table because the first and second surveys did not collect information about whether or not the childcare families used was linked to another children's centre.

Parenting classes	11	7	2	3	80	2601	2602
Organised activities, hobbies or sport for parents	8	4	3	11	77	2602	2602
Relationship support	1	1	+	2	97	2601	2601
Other specialist family or parenting support	4	2	1	2	92	2602	2602
Employment and benefits advice							
Benefits and tax credits advice	9	4	7	14	71	2597	2599
Housing or debt advice	4	1	3	7	86	2601	2602
Employment support	4	1	2	11	82	2598	2598
Adult education							
Basic IT or jobs skills course	2	1	1	6	90	2602	2602
Further education or adult learning courses	4	2	3	15	78	2602	2602
English classes for speakers of other languages	2	1	1	2	95	2602	2602
Other services							
Home safety advice or course	11	4	2	6	79	2601	2601
First aid	2	2	+	1	96	2601	2601
Other family services	3	2	1	2	93	2601	2601

Base: All participants interviewed at Wave 3.

Table shows row %.

While 60% of families used a stay and play, or play and learn service at the named children's centre, at the other end of the spectrum, some children's centre services were used by relatively few people. For instance, only 1% of families used relationship support, 2% used

a psychologist or counsellor, 2% attended a basic IT or jobs skills course, 2% attended an English class for speakers of another language, and 2% attended a first aid course.

2.2.2 Patterns of using children's centre services

This section explores change over time in families' take-up of services that were either delivered directly by the named children's centre, or that families had been signposted to by the named children's centre.

Number of family services used

Table 2.2 shows that there has been a notable reduction in the extent to which families used services through the named children's centre.

Table 2.2 Number of services received through the named children's centre over time (% & averages)

Number of services ¹⁴	Wave 1 (age 9-18 months)	Wave 2 (age 2)	Wave 3 (age 3)	Total
0	15	37	46	10
1	21	24	21	17
2	19	16	13	19
3	15	10	8	16
4	12	6	4	13
5	8	3	3	9
6	4	1	2	5
7	2	1	1	4
8	1	1	1	2
9	1	1	+	1
10+	1	1	+	3
Mean	2.7	1.6	1.4	3.2
Median	2	1	1	3
Standard deviation	2.3	2.0	1.9	2.6
<i>Unweighted base</i>	5717	3588	2602	2602
<i>Weighted base</i>	5717	3584	2602	2602

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 2: All participants interviewed at Wave 2.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

¹⁴ Includes any type of family service listed in Table 2.3 (whether delivered directly by the named children's centre, or signposted by the named children's centre), home visits, and instances where another adult took the selected child to the named children's centre.

On average, families used 3.2 services through the named children's centre over the course of the evaluation, falling from 2.7 services at wave one to 1.4 services at wave three.¹⁵ Likewise, while only 15% of families had used no services that were related to the named children's centre when the selected child was aged 9-18 months, this had increased to 46% when the selected child was aged 3 (this 46% is comprised of 9% who had never used services through the named children's centre and 37% who had stopped using these services, see Appendix Table C.2).

Much of this drop off will have occurred because the services that families needed when their children were very young were not all relevant when children were older (e.g. antenatal classes are only relevant before birth; breastfeeding support is typically relevant during the first few months or year of a child's life; midwife/ health visitor drop in sessions are more important for babies than toddlers). So, this drop off in the use of services through the named children's centre by families with older children might highlight an area of concern, suggesting that children's centres are failing to keep families engaged throughout their children's pre-school years. Indeed, Sylva et al. 2014 and Goff et al. 2013 found reductions over time in services aimed at older children (such as stay and play for older children).¹⁶ On the other hand, instead of highlighting an area of concern, there may be an expectation that the needs of children aged 3-4 years old and their families are met primarily through early education services, although if this is the case, it raises a question as to whether the holistic needs of families are being met adequately.

An alternative interpretation of the drop off in service use is that it could also reflect success in the evolving purpose of children's centres. As noted in Sylva et al. (2014), open access services provide an important gateway by which children's centres make contact with the families in their catchment area who are in particular need of their services. These open access services draw families in, in a non-stigmatising way and allow centre staff to refer them to other targeted services from which they might benefit. If centres are able to maintain a relationship with these families who have greatest need, while leaving better resourced families to their own devices, then limited resources can be directed to those who are most in need, and it is this latter group that policy has increasingly directed centres to focus upon. Indeed, within the evaluation it was low income families and non-working families who were least likely to have stopped using services through the named children's centre (33% of families whose household income was under £20,000 had stopped using these services compared with 39% of families whose income was £20,000 or more; and 34% of non-working couples had stopped using these services compared with 43% of working lone parents, and 42% of dual earning couples, see Appendix Table C.2).

Types of family services used

This drop off in service use can be seen across many different types of service (see Table 2.3). For instance there were significant reductions in take-up of:

¹⁵ The average for families who used children's centre was slightly higher at 3.6, and over the waves fell from 3.1 services at wave one to 2.5 services at wave three (see Appendix Table C.3).

¹⁶ Although Table 2.4 shows that only two per cent of families reported a lack of services for older children as being their reason for not using the named children's centre, this code arose out of the editing process and so was unprompted.

- Antenatal classes
- Breast feeding groups
- Midwife/ health visitor drop in sessions or clinics
- Stay and play, or play and learn groups
- Organised sport or exercise for babies or children
- Toy libraries
- Benefits and tax credits advice
- Housing and debt advice, and
- Home safety advice and courses.

As mentioned above, some of this reduction may have occurred because of the nature of the services (i.e. that the services are primarily suitable for families with very young children). However, it could also reflect changes in the services provided by children's centres (see Sylva et al. 2014 and Goff et al. 2013).

Table 2.3 Take-up of services through the named children's centre over time (%)

Family Service	Wave 1 (age 9-18 months)	Wave 2 (age 2)	Wave 3 (age 3)	Total
Health				
Antenatal classes	15	2	2	18
Breastfeeding groups	14	3	4	18
Midwife/ health visitor drop in session or clinic	53	26	21	66
Speech and language therapy (SALT)	3	4	5	9
Psychologist or counsellor	2	2	1	4
Activities that parents and children do together				
Stay and play, or play and learn groups	49	34	31	65
Organised sport or exercise for babies or children	21	9	8	32
Toy library	9	8	6	15
Family and parenting support				
Peer support groups	5	3	2	9
Parenting classes	6	6	4	12
Organised activities, hobbies or sport for parents	5	3	4	11
Relationship support	1	1	0	1
Other specialist family or parenting support	2	2	1	4
Employment and benefits advice				
Benefits and tax credits advice	9	5	3	14

Housing or debt advice	4	2	2	7
Employment support	3	2	2	6
Adult education				
Basic IT or jobs skills course	1	1	1	3
Further education or adult learning courses	3	3	2	7
English classes for speakers of other languages	1	2	1	2
Childcare and early education				
Childcare and early education (group settings)	7	11	16	25
Other services				
Home safety advice or course	9	4	2	12
First aid	1	1	1	2
Other family services	2	1	1	4
<i>Unweighted base</i>	5715	3588	2602	2602
<i>Weighted base</i>	5712	3584	2602	2602

Base Wave 1: All participants interviewed at Wave 1.

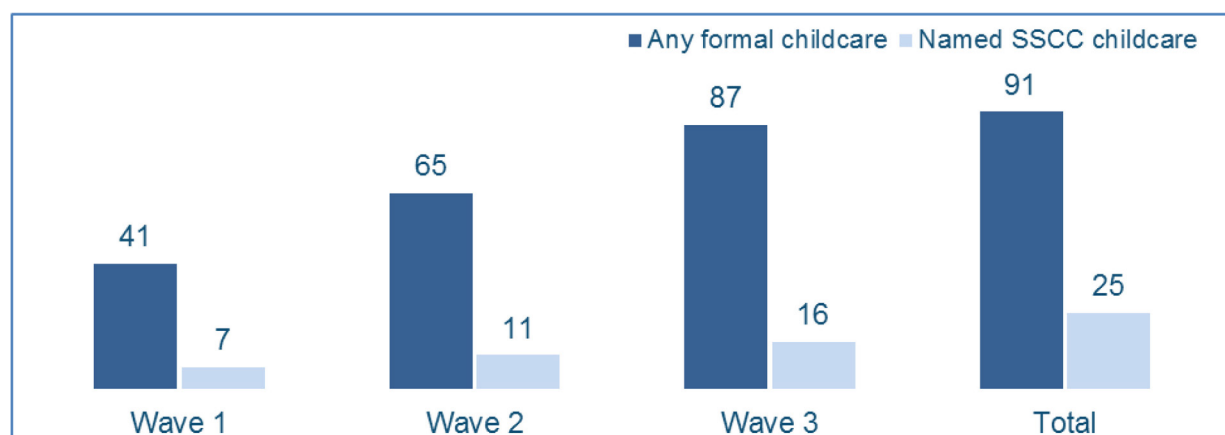
Base Wave 2: All participants interviewed at Wave 2.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

The only services showing an increase in take-up were childcare and early education (within group settings) where take-up increased from 7% at wave one to 16% at wave three (see Figure 2), and speech and language therapy (increasing from 3% at wave to 5% at wave three). However even though take-up of childcare and early education increased, overall children's centres represented a relatively minor source of childcare for families since. For over the course of the evaluation 91% of families had used formal childcare but only 25% had used childcare that was either run by, or signposted by, the named children's centre. This however, is not surprising because although children's centres were originally obliged to offer childcare as part of the core offer, this is not the case under children's centres core purpose (see Chapter 1 or Poole et al. 2014 for more detail).

Figure 2 Formal childcare overall and at the named children's centre



Base Wave 1: All participants interviewed at Wave 1.

Base Wave 2: All participants interviewed at Wave 2.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

Differences by socio-demographics

An exploration of service use by socio-demographic categories provides evidence that disadvantaged families are taking up a greater number of services through the named children's centre than more affluent families are (which may reflect centres targeting families most in need). For instance, non-working families were likely to use more services that were provided or signposted by the named children's centre than working families (e.g. dual earning couples used 3.1 services on average while non-working couples used 3.7, and working lone parents used an average of 3.1 services while non-working lone parents used an average of 3.9 services). Similarly, parents with poorer mental well-being used significantly more services than those with better mental well-being (4.0 compared with 3.0) see Appendix Table C.4.

Correspondingly, the differences in the take-up of different types of service were as follows (see Appendix Table C.5 - Appendix Table C.7):

- families with a lower household income were more likely to take-up the following services through the named children's centre: specialist family or parenting support; benefits and tax credit advice; housing or debt advice; basic IT or jobs skills courses; further education or adult learning; English classes for speakers of other languages; and childcare or early education.
- non-working families were more likely to take-up: speech and language therapy; parenting classes; specialist family or parenting support; benefits and tax credit advice; housing or debt advice; employment support; basic IT or jobs skills courses; further education or adult learning; English classes for speakers of other languages; home safety advice or a course; and childcare or early education.
- parents with poorer mental well-being were more likely to take up: speech and language therapy; a psychologist or counsellor; stay and play or play and learn groups; parenting

classes; specialist family or parenting support; benefits and tax credit advice; housing or debt advice; employment support; and childcare or early education.

The greater take-up of childcare and early education through the named children's centre is particularly striking given that overall affluent families are more likely to take-up formal childcare than disadvantaged families (Huskinson et al. 2014). This provides further evidence to suggest that where children's centres are offering childcare they are focusing on delivery of the free entitlement to early education for disadvantaged 2 year olds that was rolled out in September 2013 (see Poole et al. 2014 for further discussion of this issue).

2.3 Reasons for not using the children's centre

At the time of the first survey when the selected child was aged 9-18 months, the reasons families gave for not having used any services through the named children's centre were commonly that they preferred to use another children's centre, that they had general difficulties with distance and/or transport, or that they had no time or were too busy (see Maisey et al. 2013).

In Table 2.4 we look at the reasons families gave for not using services through the named children centre when the selected child was aged about 3.

Table 2.4 Reasons for not using the named children's centre (%)

Reasons	%
Does not need any of the family services offered	43
No time / too busy	29
Prefers another centre - closer/ more convenient	23
Distance/ transport difficulties	7
Prefers another centre - other/ unspecified	6
Doesn't like the named SSCC	5
Was not aware of named SSCC	5
Moved too far away	3
Have not used it yet, but plan to in future	2
Services are targeted families with younger children	2
Named SSCC has closed	+
Other	7
No reason	3
<i>Unweighted base</i>	<i>1119</i>
<i>Weighted base</i>	<i>1189</i>

Base: All participants interviewed at Wave 3 who did not use services through the named children's centre.

Table shows column %.

The most prevalent reason was a lack of need for the family services offered (43%). This could be because parents feel that they don't need any family services once their children are older (e.g. if

their needs are being met by universal free childcare for 3-4 year olds) or it could indicate that children's centres are not offering appropriate services to families with older children. Other common reasons for not using the named children's centre were a lack of time (29%) or a preference for using a different children's centre (23%). Other reasons were selected by a minority of parents (7% to less than half a per cent).

2.4 Children's use of childcare

There is a large body of research that shows that there is a 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. 2008; Smith et al. 2009a). This section therefore explores the childcare use in more detail, looking at the childcare attended by the selected child between the age of 0 and 3.¹⁷

Almost three-quarters of children had received some formal childcare at some point between the ages of 0 and 3 (74%, see Table 2.5).¹⁸ The most common type of childcare provider that they had attended was a day nursery (34%) while 21% had attended a play group or pre-school. It was less common for children to have gone to a childminder (12%). Likewise, attendance at nursery schools and nursery classes was lower (14% and 10% respectively) which will partly reflect the fact that nursery schools and classes typically cater for children aged 3 and 4, and that over one-fifth of the children in the evaluation were aged under 3 at the time of interview (see Appendix Table A.1).

Table 2.5 Children's take-up of formal childcare providers from birth to 3(%)

Childcare provider type	%
Formal childcare	74
Nursery school	14
Nursery class attached to a primary/ infant school	10
Day nursery	34
Play group or pre-school	21
Childminder	12
Other	2
<i>Unweighted base</i>	<i>2602</i>
<i>Weighted base</i>	<i>2602</i>

Base: All participants interviewed at Wave 3.

Table shows column %.

¹⁷ Since this evaluation focused on children's centres in disadvantaged areas the figures reported within this section are likely to differ systematically from national averages.

¹⁸ Please note that children may have attended more than one type of childcare provider.

Although 74% of children had used some formal childcare between the ages of 0 and 3, only 8% had attended formal childcare at the named children's centre over that time.¹⁹ As mentioned earlier, this may reflect the fact that although children's centres were originally obliged to offer childcare as part of the core offer, this is no longer the case.

Government funded early education and childcare for 2 year olds

Only a small proportion of children had received free childcare as part of the free entitlement to early education that is available to disadvantaged 2 year olds (17% of those whose date of birth meant that they would have been eligible for at least part of the offer). This might seem surprising given that the evaluation focused on children's centres in disadvantaged areas. However, although the evaluation focussed on disadvantaged areas, not all families would have met the income criteria for eligibility.²⁰ Furthermore, the 2 year old offer only became available in September 2013 and so only 18% of children within the evaluation would have been eligible for the full offer (those born in April – August 2011, see Appendix Table A.2), while 30% would only have been eligible for two terms (those born January – March 2011) and 45% would only have been eligible for one term (those born September – December 2010). Since it can take a while for people to become aware of entitlements once they become available and for local authorities to build capacity (see Dickens et al. 2012), this could have dampened take-up by the children in this evaluation.

The free entitlement to early education for 3 year olds is universal and a more established offer. As such, take-up of that offer was much higher at 69% of those who were eligible.²¹ Although this is lower than the national take-up figure of 79% reported by Huskinson et al. 2014,²² their research also shows that take-up is lower for more disadvantaged families and so it is perhaps unsurprisingly to see lower take-up within this evaluation.

¹⁹ Information on whether this childcare was signposted by the named children's centre was not collected.

²⁰ Unfortunately the survey did not collect sufficiently detailed data on income and benefit receipt to allow us to identify the families that would have met the income criteria for eligibility.

²¹ The free entitlement to early education is universally available to three and four year olds. However some children in the evaluation were still too young to qualify.

²² The Department for Education Early Years Census and Schools Census take-up figure for 3 and 4 year olds is 97%. Provision for Children Under Five Years of Age in England: January 2014, Department for Education (June 2014).

3 Physical and mental well-being

Parental health is very important for children's outcomes, and aspects of children's health such as diet have been consistently linked with children's development. It is unsurprising to see that health services are among those offered by the vast majority of children's centres (Tanner et al. 2012; Poole et al. 2014). For both of these reasons, this chapter examines various aspects of children's and parents' health and health behaviours²³. In particular it focuses on the following areas:

- The family diet
- Children's accidents, illness and disability
- Parental illness and disability
- Parental mental well-being
- Parental smoking, drinking and drug use

3.1 Key findings

3.1.1 Family diet

- Parents generally had positive attitudes towards the time and expense of preparing meals from fresh ingredients, and these attitudes had not changed over time.
- Families generally reported eating a healthy diet; the vast majority of families (77%) and children (80%) were eating meals cooked from fresh ingredients most days with only a small minority eating ready meals, junk food or takeaways this often.
- Most children ate fresh fruit (72%) and fresh vegetables (52%) every day, though a minority had less healthy diets; 4% of children ate fresh fruit and 9% of children ate fresh vegetables or salad just once a week, less often or never.

3.1.2 Accidents, illness and disability

- Most children had had an accident or injury in the past year: 72% at wave one and 95% at wave three.
- The most frequent accidents parents reported at wave three were minor cuts or grazes (83%), minor bruising (73%) and children banging their heads (62%). However a minority had had more serious accidents such as breaking a bone (3%) or swallowing something poisonous (2%).

²³ Questions about parents' mental health, physical health and their smoking, drinking and drug use were asked in a self-completion part of the questionnaire due to their sensitivity.

- Most children had no long-standing health problem: 67% of children at wave one and 58% at wave three.
- Where children did have a long-standing health problem, the most common at wave three were skin problems (16%) and breathing problems (14%). For 56% of children with long-standing health problems at wave three their issues were severe enough to have involved visits to the hospital or regular visits to the GP.
- Six per cent of parents at wave three reported that their child had developmental or behavioural problems, with speech problems being by far the most frequently reported issue. Nine in ten of these parents had sought professional help for their child's developmental or behavioural problem (91%).
- A minority of children were living in a household where at least one parent had a long-standing illness or disability (15% at wave one and 16% at wave three).

3.1.3 Parental mental well-being

- Fourteen per cent of respondents had poor mental well-being at wave three which represents a reduction since wave one (where it was 18%).
- Poor mental well-being was most common amongst:
- Parents whose household income was under £10,000 (19% compared with 11% of those whose household income was £40,000 or more).
- Parents from households where no one was in work (26% compared with 12% of parents from working households).
- Lone parents (21% compared with 13% of those in two-parent households).

3.1.4 Smoking, drinking and drugs

- Parents' responses show that on the whole their drinking was moderate (being lower than the general population, ONS 2013). At wave three 30% said that they never drank alcohol and 27% said that they drank at least once a week or more often.
- The majority of parents were non-smokers at wave three (81%) and only 13% smoked every day.
- The majority of parents and their partners had never tried drugs at both waves, with only 1% reporting that they are currently using drugs.

3.2 Family Diet

The link between diet and various aspects of child development are well documented and children maintaining a healthy weight is a key policy issue. For instance, monitoring children's weight

through The National Child Measurement Programme (NCMP)²⁴ is a key element of the Government's work programme on child obesity and 'Fewer children with high or low Body Mass Index (BMI)' has been identified as one of the measurable outcomes for children's centres (Roberts et al, 2014). In addition, Lambert et al. (2004) found that diet is important not just for child health and weight but also to avoid deficiencies in those nutrients that are essential for children's cognitive development. In the short term the effects of poor diet have been linked with an increase in behavioural issues and poorer concentration levels (Sorhaindo and Feinstein 2006). In the longer term the links between children's diets and IQ levels have been well publicised (Northstone et al. 2011).

This section looks at some of the key determinants of healthy eating in household. Firstly it examines attitudes towards food preparation and then attitudes towards convenience food.

3.2.1 Food preparation

Respondents were asked whether they felt that preparing meals from fresh ingredients took too long and whether they felt it was too expensive.

Table 3.1 Attitudes to preparing meals from fresh ingredients over time(%)

It takes too long	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Agree strongly	2	1
Agree	9	8
Neither agree or disagree	9	9
Disagree	47	46
Disagree strongly	33	36
<i>Unweighted base</i>	<i>5,714</i>	<i>2,599</i>
<i>Weighted base</i>	<i>5,715</i>	<i>2,600</i>
It is too expensive	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Agree strongly	2	1
Agree	13	11
Neither agree or disagree	10	12

²⁴ The NCMP was established in 2006. As part of the NCMP every year children in Reception (aged 4 to 5 years) and Year 6 (aged 10-11 years) have their height and weight measured. The NCMP aims to inform local planning and delivery of services for children, help increase public and professional understanding of weight issues in children and engage children and families about healthy lifestyles and weight issues.

Disagree	46	49
Disagree strongly	29	27
<i>Unweighted base</i>	5,712	2,600
<i>Weighted base</i>	5,713	2,601

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

Table 3.1 shows that the majority of respondents disagreed with both statements at both time points. For example, 80% disagreed that it took too long to prepare fresh meals at wave one and 82% at wave three. Views on how long it takes to prepare meals from fresh ingredients and the expense of preparing such meals have remained stable across the waves.

As a general indicator of healthy eating, respondents were asked how often they added salt when cooking. Table 3.2 shows a large minority of respondents reported never adding salt at both wave one (41%) and at wave three (40%).

Table 3.2 How often salt is added to food whilst cooking over time (%)

How often salt is added to cooking	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Always	18	17
Usually	12	13
Sometimes	14	15
Rarely	14	15
Never	41	40
<i>Unweighted base</i>	5,714	2,600
<i>Weighted base</i>	5,715	2,600

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

3.2.2 Eating fresh and convenience food

This section examines the types of foods which families and children eat, focussing on information collected at wave three when the selected child was around 3 years old.

How often families and children ate fresh and convenience foods is shown in Table 3.3. The vast majority of families reported eating meals prepared from fresh ingredients most days (77%). A higher proportion of children were eating fresh meals than families, for example 46% of selected children ate a meal from fresh ingredients every day compared with 37% of families more generally. Only 1% of families and 2% of children were eating ready meals every day, with just over a third of families (35%) and nearly half of children (48%) never eating them.

Table 3.3 Consumption of fresh and convenience foods (%)

How often eats meals from fresh ingredients	Family	Child
Every day	37	46
Most days	39	34
A few times a week	17	14
Once or twice a week	5	5
Less often	1	1
Never	+	+
<i>Unweighted base</i>	2,601	2,600
<i>Weighted base</i>	2,601	2,601
How often eats ready meals	Family	Child
Every day	1	2
Most days	1	1
A few times a week	5	4
Once or twice a week	19	15
Less often	40	30
Never	35	48
<i>Unweighted base</i>	2,600	2,601
<i>Weighted base</i>	2,600	2,601

Base: All participants interviewed at Wave 3.

Table shows column %.

How often families and children ate junk food, fried food and fast food is shown in Table 3.4. Around a quarter of respondents said that their family ate crisps, fizzy drinks or sweets most or every day (25%) with a slightly higher proportion reporting that the child ate these food most days or every day (28%). However around a quarter of families (26%) and one in five children (19%) ate these food less than once a week or never. The majority of families did not eat fried food or fast food and takeaways regularly; 66% of families ate fried food less than once a week and 73% ate fast food or takeaways every now and then, hardly ever or never. Children ate these types of food less frequently than their family, 75% and 84% respectively.

Taken together these findings suggest that within the family the child's diet tends to be healthier than that of the family overall. Despite being more likely to eat junk food, overall children are eating more fresh meals and fewer ready meals, fried foods and fast food.

Table 3.4 Consumption of junk food, fried food and fast food (%)

How often eats crisps, fizzy drinks or sweets	Family	Child
Every day	13	14
Most days	12	14
A few times a week	23	26
Once or twice a week	26	26
Less often	20	15
Never	6	4
<i>Unweighted base</i>	2,600	2,601
<i>Weighted base</i>	2,600	2,601
How often eats fried food	Family	Child
Every day	1	1
Most days	1	1
A few times a week	8	5
Once or twice a week	24	18
Less often	44	32
Never	22	43
<i>Unweighted base</i>	2,599	2,601
<i>Weighted base</i>	2,599	2,601
How often fast food or takeaways	Family	Child
Every day or nearly every day	+	+
A few times a week	3	2
About once a week	25	14
Every now and then	45	27
Hardly ever	23	34
Never	5	23
<i>Unweighted base</i>	2,600	2,601
<i>Weighted base</i>	2,600	2,601

Base: All participants interviewed at Wave 3.

Table shows column %.

Table 3.5 shows the frequency with which children ate fresh fruit and vegetables or salad. Most children ate fresh fruit and vegetables every day (72% and 52% respectively)²⁵. A minority had

²⁵ Please note that the survey did not collect information on the number of portions of fruit and vegetables children consumed per day because of the length of time it takes to collect this information accurately within a survey. As such we cannot compare children's consumption of fruit and vegetables to national targets in this regard.

less healthy diets, 4% of children ate fresh fruit and 9% of children ate fresh vegetables or salad just once a week, less often or never.

Table 3.5 How often child eats fresh fruit and vegetables (%)

How often eats fresh fruit or vegetables	Fresh fruit	Vegetables or salad
Never	1	2
Once a week or less often	3	7
A few times a week	8	16
Most days	16	23
Every day	50	43
More than once a day	22	9
<i>Unweighted base</i>	2,601	2,601
<i>Weighted base</i>	2,601	2,601

Base: All participants interviewed at Wave 3.

Table shows column %.

3.3 Accidents, illness and disability

This section starts by examining the physical health of children across the waves of this study, focussing on their accidents, illness and development. The section then provides an overview of parental illness and disability across the waves.

3.3.1 Children's accidents and injuries

A number of families had received home safety advice, attended a home safety course at a children's centre or attended a first aid course (see Chapter 2). As home safety is an area that children's centres aim to influence this section looks at the types of accidents and injuries that children have experienced.

Parents were asked about the accidents and injuries which their child had experienced²⁶; children were more likely to have experienced an accident or injury at wave three, when aged around 3 years old, than at wave one when aged around 1 year old. This is unsurprising as children are likely to be more mobile and prone to accidents when age 3 than when age 1. Table 3.6 shows that whereas one in four children had experienced no accident or injury at wave one (28%), this was true of just one in twenty children at wave three (5%). The most frequent accidents parents reported at wave three were minor cuts or grazes (83%), minor bruising (73%) and children banging their heads (62%). However a minority had had more serious accidents such as breaking a bone (3%) or swallowing something poisonous (2%).

²⁶ At wave 1 the parents were asked about any accidents or injuries experienced since birth and at wave 3 they were asked about accidents or injuries experienced in the past year.

Table 3.6 Accidents and injuries over time (%)

Accidents and injuries	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Minor cut or graze	37	83
Minor bruising of a part of the body	44	73
Bang on head	45	62
Crushing of a part of the body (e.g. getting fingers stuck in door)	9	20
Animal or insect bite or sting	4	18
Cut needing stitches, staples or steri-strips	1	8
Burn or scald	3	7
Something stuck in their eye, throat, nose, ear or other part of the body	1	6
Major bruising of a part of the body	1	3
Broken bone	1	3
Swallowed household cleaner/pills/something poisonous	+	2
Dislocated joint	+	2
Loss of consciousness	+	1
Other	+	1
None	28	5
<i>Unweighted base</i>	<i>5,714</i>	<i>2,601</i>
<i>Weighted base</i>	<i>5,712</i>	<i>2,601</i>

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

As an indication of the number of more serious accidents children have had, Table 3.7 shows the number of times that the child has been taken to the Accident and Emergency department at a hospital (A&E) or to a Minor Injuries Unit (MIU) because they had an accident or injury. At both wave one and wave three the majority of respondents had never taken their child there (72% at wave one and 74% at wave three). This suggests that although children have had more accidents and injuries at wave three than at wave one (as seen in Table 3.6), many of these are of a less serious nature and did not require emergency medical attention.

Table 3.7 Visits to A&E or MIU over time (%)

Visits to A&E or MIU	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Never	72	74
Once	19	20
Twice or more	8	6
<i>Unweighted base</i>	<i>5,713</i>	<i>2,601</i>
<i>Weighted base</i>	<i>5,712</i>	<i>2,601</i>

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

3.3.2 Children's illness and development

Some children are born with more long-standing health problems, such as allergies or breathing problems like asthma. Other children develop these health problems later on and some problems only become apparent at later stages of development, for example those relating to speech or movement. Table 3.8 shows the long-standing health problems of children in the study at wave one and at wave three. As we would expect children were more likely to be suffering from a long-standing health problem when aged around 3 years old (wave three) than when they were around 1 year old (wave one); 67% of children had no longstanding health problem at wave one compared with 58% at wave three. The most common health problems reported at wave three were skin problems (16%) and breathing problems (14%).

Table 3.8 Nature of long-standing health problems over time (%)

Long-standing health problem	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Skin problems	14	16
Breathing problems (including wheezing and asthma)	10	14
Allergies	5	8
Ear, nose and throat or hearing problems	2	6
Eye/sight problems	3	4
Stomach problems	4	3
Heart problems	2	1
Urinary and kidney problems	1	1
Bone problems	1	1
Epilepsy	+	1
Developmental problems	1	+
Blood disorders	+	+
Diabetes	+	+
Cerebral Palsy	+	+
Other	1	2
None	67	58
<i>Unweighted base</i>	<i>5,714</i>	<i>2,602</i>
<i>Weighted base</i>	<i>5,712</i>	<i>2,602</i>

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

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 3.9 shows that a large minority of children had regularly been to their GP (48% at wave one and 42% at wave three) or been to hospital concerning this issue (43% at wave one and 39% at wave three). As children were less likely to regularly visit the GP or hospital at wave three than at wave one, and given the increased number of children with health issues (Table 3.8), this suggests that the more recently identified health issues may be of a less serious nature than those which were apparent at wave one.

Table 3.9 Visits to the hospital or the GP over time (%)

Visits to the hospital or the GP	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Has visited the hospital	43	39
Has visited the GP	48	42
Has visited either GP or hospital	66	56
<i>Unweighted base</i>	<i>1,851</i>	<i>1,049</i>
<i>Weighted base</i>	<i>1,878</i>	<i>1,084</i>

Base Wave 1: All participants interviewed at Wave 1 whose child had a long-standing health problem.

Base Wave 3: All participants interviewed at Wave 3 whose child had a long-standing health problem.

Table shows column %.

At wave three respondents were asked whether their child had any developmental or behavioural problems. Six per cent of parents reported that their child did and Table 3.10 shows the nature of the child's developmental or behavioural problem. Speech and language issues were by far the most commonly reported problem (57%), followed by general bad behaviour or anti-social behaviour (18%) and general developmental delay (14%).

Table 3.10 Nature of developmental or behavioural problem (%)

Developmental or behavioural problem	Wave 3 (age 3)
Speech and language problems	57
General bad behaviour or anti-social behaviour	18
General developmental delay	14
Autism or suspected autism	11
Hyperactivity or ADHD	4
Other	7
<i>Unweighted base</i>	<i>154</i>
<i>Weighted base</i>	<i>165</i>

Base: All participants interviewed at wave 3 whose child had a developmental or behavioural problem.

Table shows column %.

The vast majority of parents whose child had a developmental or behavioural problem reported that they had sought help in this regard (91%).

3.3.3 Parental illness and disability

Having a parent with a long-standing illness or disability is associated with poorer child outcomes. Often this is because disabled parents are less likely to be in employment than those without a disability, and therefore more likely to be living in low income households (ONS 2013).

Table 3.11 shows that a minority of children were living in a household where at least one parent had a long-standing illness or disability (15% at wave one and 16% at wave three).²⁷

Table 3.11 Whether parent/carer has a long-standing illness or disability over time (%)

Long-standing illness or disability	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Respondent	11	12
Partner	7	8
Respondent and/or partner	15	16
<i>Unweighted base</i>	5,574	2,589
<i>Weighted base</i>	5,586	2,590

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

3.4 Parents' mental well-being

An association between poor maternal mental health and adverse child development outcomes, such as increased behavioural issues or increased risk of clinical depression, has been well established by research (Cummings and Davies 1994; Marryat and Martin 2010; Roberts et al. 2014). Parental mental well-being was assessed in this study through the use of the short form of the General Health Questionnaire (GHQ12, Goldberg and Williams 1988).

The GHQ12 is an established measure of psychosocial well-being measuring participants' levels of happiness; depression and anxiety; sleep disturbance and ability to carry over the last few weeks. The GHQ12 comprises of 12 items that are measured on a four-point response scale. It was scored according to whether or not the participant felt that the symptom was present, i.e. if a respondent felt that over the past four weeks they had lost sleep 'rather more than usual' or 'much more than usual' they were given a score of one point. The points for each question were summed and grouped according to the recommended GHQ thresholds:

- A score of 0 represents good mental well-being
- A score of one to three represents moderate mental well-being
- A score of four or more indicates probable psychological disturbance or mental ill health.

²⁷ This compares with 21.3% of English mothers and fathers in the Millennium Cohort Study (Hansen and Joshi 2007). However the questions were slightly different, the Millennium Cohort study asked whether parents had a longstanding illness, disability or infirmity that had troubled them over a period of time or was likely to affect them over a period of time. The Evaluation of Children's Centres in England asked whether parents had any long-standing physical or mental impairment, illness, or disability that they expect to last for at least 12 months.

Table 3.12 shows the results of the GHQ12 score by different demographic characteristics. In terms of income, those in the lower income brackets were more likely to have psychological disturbances or mental ill health than those with higher incomes. For example 19% of those in households earning less than £10,000 per year had a GHQ12 score of four or more compared with 11% in households earning £40,000 or more.

Poor mental well-being was also more likely in parents in households where no one was in work (26%) than in households where at least one person works (12%). Lone parents (21%) were more likely than parents in couple households (13%) to have poor mental well-being.

Table 3.12 GHQ12 scores, by demographics (%)

Income	GHQ12 score 0 (good)	GHQ12 score 1-3 (moderate)	GHQ12 score 4+ (poor)	<i>Unweighted base</i>	<i>Weighted base</i>
Under £10,000	54	27	19	266	321
£10,000 to £19,999	52	28	20	477	531
£20,000 to £29,999	56	29	14	485	487
£30,000 to £39,999	64	24	12	382	355
£40,000 +	61	28	11	844	761
Mother's education					
Masters degree/ Doctorate/ NVQ 5 - 6/ BTEC 7 - 8	59	29	12	391	361
Honours Degree/ NVQ 4*/ BTEC 6	59	27	14	532	481
Foundation Degree or Cert Ed/ NVQ 4/ BTEC 4-5	58	31	11	285	271
A-level/ NVQ 3/ BTEC 3	58	26	16	485	484
GCSE A*-C/ NVQ 2/ BTEC 2	60	25	15	524	562
GCSE D-F/ NVQ 1/ BTEC 1	59	21	20	120	145
No qualifications	51	33	16	138	163
Household type					
Couple households	60	27	13	2,104	2,037
Lone parents	51	28	21	489	557
Household economic status					
Working	61	28	12	2,215	2,144
Not working	46	28	26	378	450

Base: All participants interviewed at Wave 3.

Table shows row %.

Table 3.13 shows the results of the GHQ12 score across the waves. A smaller proportion of respondents had a score of four or more at wave three (14%) than at wave one (18%); this may be related to post-partum depression which is more likely to have been present at wave one when the child was aged around 1 year than at wave three when the child was aged around 3 years.

Table 3.13 GHQ12 scores over time (%)

Average GHQ12 score	Wave 1 (age 9-18 months)	Wave 3 (age 3)
0 (good)	53	58
1-3 (moderate)	29	28
4+ (poor)	18	14
<i>Unweighted base</i>	5,572	2,589
<i>Weighted base</i>	5,583	2,590

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

3.5 Smoking, drinking and drugs

This section focuses on the extent to which parents reported smoking, drinking alcohol and taking drugs. In addition to indicating general poor physical health, these behaviours are important because of they are linked with children's health. For example, smoking has been found to have strong associations with children's physical health and behaviour problems (Kahn et al.2002).

Table 3.14 Alcohol consumption over time (%)

Alcohol consumption	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Every day	1	1
5-6 times per week	1	1
3-4 times per week	5	5
1-2 times per week	18	20
1-2 times per month	19	19
Less than once a month	24	25
Never	32	30
Don't know	+	+
<i>Unweighted base</i>	5,574	2,590
<i>Weighted base</i>	5,584	2,591

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

Table 3.14 shows how often respondents drank alcohol. Similar drinking behaviour was reported at wave one and wave three with the most frequent response being ‘never’ (32% at wave one and 30% at wave three). A minority of respondents at both waves reported that they drank alcohol at least once a week (25% at wave one and 27% at wave three). It appears that the level of alcohol consumption among parents in the study was substantially lower than in the general population. Despite trends which show a reduction in alcohol consumption in the general population, 66% of male and 54% of female respondents to the General Lifestyle Survey 2011 reported drinking on at least one day in the week prior to the interview (ONS 2013).

To assess respondents’ smoking patterns, they were asked which of the statements outlined in Table 3.15 best described them. Similar smoking patterns were reported at wave one and wave three; nearly half of respondents said that they had never smoked (47% at both waves) and a small minority reported that they smoke every day (16% wave one and 13% wave three).

Smoking prevalence amongst parents in this study is similar to that of the general population; at wave three 19% of respondents stated that they smoke, even if this is less than once a week, compared with 20% of the general population who identified themselves as smokers in the General Lifestyle Survey 2011.

Table 3.15 Smoking over time (%)

Smoking	Wave 1 (age 9-18 months)	Wave 3 (age 3)
I have never smoked cigarettes or roll-ups	47	47
I have tried smoking, but I don’t smoke now	14	15
I used to smoke regularly, but I don’t smoke now	18	19
I do smoke, but less than once a week	1	3
I smoke at least once a week	2	2
I smoke everyday	16	13
Don’t know	1	1
<i>Unweighted base</i>	5,576	2,590
<i>Weighted base</i>	5,587	2,591

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

Respondents were asked about their drug use, and where relevant the drug use of their partner. Table 3.16 shows similar reporting of drug use at both time points; the vast majority of respondents said that they have never tried drugs (80% wave one and 77% wave three) and that their partners have never tried drugs (76% wave one and 74% wave three). Only 1% of respondents and their partners reported that they were currently using drugs.

Table 3.16 Drug use over time (%)

Respondent's drug use	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Has never tried drugs	80	77
Has tried drugs, but doesn't use them now	16	19
Used to use drugs quite often, but doesn't use them now	3	3
Uses drugs (any frequency)	+	+
Don't know	1	1
<i>Unweighted base</i>	<i>5,571</i>	<i>2,590</i>
<i>Weighted base</i>	<i>5,582</i>	<i>2,591</i>
Partner's drug use	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Has never tried drugs	76	74
Has tried drugs, but doesn't use them now	18	18
Used to use drugs quite often, but doesn't use them now	3	3
Uses drugs (any frequency)	1	1
Don't know	3	4
<i>Unweighted base</i>	<i>4,460</i>	<i>2,150</i>
<i>Weighted base</i>	<i>4,533</i>	<i>2,086</i>

Base for respondent's drug use: Wave 1 – all participants interviewed at Wave 1; Wave 3 – all participants interviewed at Wave 3.

Base for partner's drug use: Wave 1 – all participants interviewed at Wave 1 who had a partner; Wave 3 – all participants interviewed at Wave 3 who had a partner.

Table shows column %.

4 Parenting and Family Functioning

This chapter examines parents' answers to questions about parenting and family functioning and, where possible, compares changes over time since the baseline survey. This chapter focuses on the following areas:

- The home learning environment
- Order and chaos at home
- Parents' and children's relationships with non-resident parents
- Quality of the respondent's relationship with their partner
- Fathers' involvement in child rearing
- Parenting stress

These measures were included in the first survey (when the selected child was aged 9-18 months), and followed up in the third survey when the children were aged 3 years old. They were included on the basis of evidence from other studies, which show that parenting and family functioning experienced by children affect their outcomes.

4.1 Key findings

4.1.1 Home learning environment

- Three quarters of parents reported someone reading to their child daily or more than once a day at home, an increase from two-thirds of parents when the selected child was aged 9-18 months.
- Over half of parents reported someone teaching their child songs, poems or nursery rhymes seven times a week or constantly, while a similar proportion reported someone at home trying to teach child numbers or counting equally often.
- About half of children watched TV for between one and three hours per day and a further 15% watched TV for more than three hours per day.
- Higher income families, families with highly educated mothers, working families and couple families engaged in the most learning activities with their children at home.

4.1.2 Order and chaos at home

- There was a small but significant increase in reported confusion, hubbub and disorder between wave one and wave three.
- In both waves, more disadvantaged families tended to have slightly (but significantly) more chaotic and less organised homes than those in more advantaged circumstances.

4.1.3 Relationship with non-resident parent

- Among children in lone parent families, the prevalence of contact with the non-resident parent remained relatively stable between the two waves.
- The frequency of contact reduced over time with the proportion of children who saw their non-resident parent every day decreasing from a quarter at wave one to 14% at wave three.
- There was also a reduction in the proportion of lone parents describing their own relationship with their child's non-resident parent as fairly or very good.

4.1.4 Quality of relationship with partner

- There was little change in the reported quality of parental relationships. Over nine in 10 respondents in each wave reported being quite or very satisfied with their relationship.
- Levels of criticism, and violence in the relationship remained stable and at a low level. Partner violence was significantly more common among the poorest households in both waves.

4.1.5 Fathers' involvement in child rearing

- In couple families, fathers were less frequently involved in child rearing activities when their child was aged about 3 years old, than they had been when their child was about 9-18 months.
- Playing with the child remained the most common fathering activity asked about, although the proportion of fathers playing with their child daily declined between wave one and wave three.
- Father involvement at bedtime increased somewhat (but significantly) over time with a higher proportion of fathers ever getting their child ready for bed in the evening in wave three.

4.1.6 Parenting stress index (PSI)

- The overall mean parental distress score remained stable over time, with higher average levels of parental stress among more disadvantaged families in both waves.
- On average there was a small but statistically significant increase in stress associated with parents' and children's interactions over time.

4.2 Home learning environment

This section describes the 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 first survey and about 3 years old at the time of the third

survey). As noted in the baseline report (Maisey et al. 2013), 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 home learning activities in the families taking part in the evaluation.

The home learning activities asked about in the third survey differ from those asked about in the first survey because the types of home learning activities that are age-appropriate change as children grow. The overall home learning environment (HLE) score and most of the individual activities are therefore not comparable between the two waves.

4.2.1 Frequency of different home learning activities

Respondents were asked about a range of activities that they do with their child at home, or that their child does at home. These included: how often someone at home reads to the child; takes the child to the library; helps the child to learn the alphabet, numbers, or songs, poems or nursery rhymes; and how often the child plays with letters or does drawing at home. The most frequent home learning activities parents engaged in with their 3 year olds were reading to the child, and teaching the child numbers or counting and teaching songs, nursery rhymes or poems.

Books and the alphabet

Three quarters (75%) of parents reported someone reading to their child daily or more than once a day at home (Table 4.1). This compares with 65% of parents from the first survey who reported reading to their 9-18 month old child at least daily. The proportion of parents reporting never or rarely (less than weekly) reading to their child has also fallen from 12% to 4% between wave one and wave three.

As shown in Table 4.3, playing with letters and learning the alphabet were somewhat less frequent activities, in comparison with reading to the child.

- Eighteen per cent of children did not (yet) play with letters at home; 28% played occasionally or once or twice a week, 32% played three to six times a week and 21% played seven times a week or all the time.
- Just over a quarter (27%) of parents helped their child with learning the alphabet occasionally or once or twice a week, 35% three to six times a week and 26% did this seven times a week or constantly. Twelve per cent of respondents reported that no one at home had helped their child to learn the ABC or alphabet yet.

Table 4.1 Reading at home over time (%)

Frequency of someone at home reading to child	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Never	6	2
Occasionally or less than once a week	5	2
Once a week	5	3
Several times a week	19	18
Once a day	34	41
More than once a day	30	34
<i>Unweighted base</i>	<i>5,713</i>	<i>2,602</i>
<i>Weighted base</i>	<i>5,710</i>	<i>2,602</i>

Base Wave 1: All participants interviewed at Wave 1

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

The least commonly reported learning activity was visits to the library (Table 4.2). Forty-six per cent of parents reported that the child had not (yet) been taken to the library by someone at home, although 12% reported the child being taken to the library on a weekly basis by someone at home.

Table 4.2 Visiting the library (%)

Frequency of someone at home taking child to the library	%
Never	46
On special occasions	9
Once a month	23
Once a fortnight	10
Once a week	12
<i>Unweighted base</i>	<i>2,601</i>
<i>Weighted base</i>	<i>2,601</i>

Base: All participants interviewed at Wave 3.

Table shows column %.

Numbers and other learning at home

Over half of parents (55%) reported someone teaching their child songs, poems or nursery rhymes seven times a week or constantly, while a similar proportion (54%) reported someone at home trying to teach the child numbers or counting equally often (Table 4.3). A further 41% of parents did counting with their children and 39% did songs or nursery rhymes with their child between one and six times weekly.

Another common home learning activity children engaged in was painting and drawing, with 74% of children doing this three or more times a week.

Table 4.3 Frequency of home learning activities: Letters, numbers, singing and drawing (%)

	Child plays with letters at home	Someone at home helps child to learn the ABC or alphabet	Someone at home tries to teach child numbers or counting	Someone teaches child songs, poems or nursery rhymes	Child painting or drawing at home
Never	18	12	1	4	3
Occasionally or less than once a week	9	9	3	3	6
1 or 2 days a week	19	18	9	8	17
3 times a week	13	13	9	9	15
4 times a week	9	11	9	8	13
5 times a week	6	7	9	9	12
6 times a week	4	4	5	5	6
7 times a week/constantly	21	26	54	55	28
<i>Unweighted base</i>	2,602	2,601	2,602	2,601	2,601
<i>Weighted base</i>	2,602	2,602	2,602	2,601	2,601

Base: All participants interviewed at Wave 3.
Table shows column %.

Screen time

In addition to home learning activities, parents were also asked how much time their child spends watching TV or playing computer games (including games on tablets such as iPads). TV time was both more common and more intense than gaming time, with almost all (98%) of children watching TV daily compared with half (49%) of children playing computer games (see Table 4.4).

Table 4.4 Children's screen time (%)

	How many hours a day child watches television, videos or DVDs	How many hours a day child plays computer games
Not at all	2	51
Up to 1 hour	31	41
More than 1 hour, less than 3 hours	52	6
More than 3 hours	15	1
<i>Unweighted base</i>	2,602	2,602
<i>Weighted base</i>	2,602	2,602

Base: All participants interviewed at Wave 3.
Table shows column %.

- About half (52%) of children watched TV for between one and three hours per day and a further 15% watched TV for more than three hours per day.
- Most of the children who played computer games spent less than an hour per day doing so; 41% of children overall.

4.2.2 Overall home learning environment

A home learning index was developed by adding together the frequency of each of the activities (excluding TV watching and video gaming), ranging from 0, for those who never did any of the activities, to 44 for those who gave the most frequent answer for all of the activities. Higher scores thus indicate a more enriched or favourable home learning environment with more frequent and varied activities.

Table 4.5 Home learning environment (HLE) score, by demographics (averages)

	Mean	Median	SD	Unweighted base	Weighted base
Total					
All	27.3	28	8.4	2,598	2,598
Household income					
Under £10,000	26.6	26	8.8	268	322
£10,000-£19,999	26.4	26	8.3	478	533
£20,000-£29,999	27.3	28	8.2	484	486
£30,000-£39,000	26.7	28	8.6	383	356
£40,000+	28.6	29	8.1	846	762
Household work status					
Working household	27.5	28.0	8.3	2,217	2,144
Non-working household	26.4	26.0	8.7	381	454
Whether a couple household					
No	26.4	26	8.5	490	560
Yes	27.5	28	8.3	2,108	2,038
Mother's highest level of qualification					
Masters+, NVQ 5+, BTEC 7+	29.0	30	7.9	390	360
Honours Degree NVQ 4* BTEC 6	28.3	29	8.4	534	482
Foundation Degree Certification of Higher Ed NVQ 4 BTEC 4-5	29.5	30	8.3	286	272
A-level NVQ 3 BTEC 3	27.2	27	7.4	484	483
GCSE A*-C NVQ 2 BTEC 2	25.8	26	7.9	524	561
GCSE D-F NVQ 1 BTEC 1	25.2	25	8.9	123	148
None	23.3	23	9.5	140	166

Base Wave 1: All participants interviewed at Wave 1

Base Wave 3: All participants interviewed at Wave 3.

The average HLE score was 27.3 and the median score was 28 (see Table 4.5), and as in wave one the scores varied significantly by family socio-demographic characteristics. The home learning environment score was highest in families with the highest household income and lowest in families with incomes below £20,000 a year. Families where the mother had a post-school leaving

qualification (a qualification higher than A-levels) reported the highest scores on average, while the lowest scores on average were found in families where the mother had no qualifications. In addition, working families reported higher HLE scores than non-working families.

Couple families also reported higher HLE scores than lone parents, although it is not possible to tell whether lone parents do less home learning activities with their children than couple mothers do (i.e. most of the questions were about how often 'someone in the home' so this finding may simply be a reflection of there being one less parent available to engage in home learning with the child in lone parent families).

4.3 Order and chaos at home

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 the home environment as disorganised or chaotic, and the other two, focused on a calm atmosphere and predictable routine:

- 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.

Parents responded very similarly in wave one and wave three to the statement about their home being disorganised, with the majority disagreeing or strongly disagreeing (74% in wave one and 73% in wave three). Equally there were no significant differences in responses to the statement about having a regular routine at home between the two waves.

However, at wave three parents were more likely to feel that it was difficult to hear themselves think in their home and less likely to feel that the atmosphere in their home was calm. At wave three parents were less likely to disagree or strongly disagree (67% compared with 75% at wave one) that "you can't hear yourself think" in their home, and fewer parents agreed or strongly agreed that the atmosphere in their home was calm at wave three (66% compared with 74% at wave one).

Table 4.6 Confusion, hubbub and order in the home over time (%)

	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	
	Wave 1 (age 9-18 months)	Wave 3 (age 3)	Wave 1 (age 9-18 months)	Wave 3 (age 3)	Wave 1 (age 9-18 months)	Wave 3 (age 3)	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Strongly agree	2	2	2	2	16	11	46	44
Agree	9	9	10	12	58	55	47	49
Neither agree nor disagree	14	16	13	18	18	23	3	4
Disagree	53	52	54	51	7	10	3	3
Strongly disagree	21	21	21	16	1	1	1	0
<i>Unweighted base</i>	<i>5,703</i>	<i>2,599</i>	<i>5,705</i>	<i>2,599</i>	<i>5,710</i>	<i>2,600</i>	<i>5,712</i>	<i>2,601</i>
<i>Weighted base</i>	<i>5,699</i>	<i>2,597</i>	<i>5,702</i>	<i>2,597</i>	<i>5,708</i>	<i>2,601</i>	<i>5,709</i>	<i>2,601</i>

Base Wave 1: All participants interviewed at Wave 1

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

A composite score was calculated from these four questions (two of the questions had the scores reversed before inclusion in the total CHAOS score). The range of valid values for the CHAOS scale ranged from four to 20 points, with higher values indicating more chaotic and disorganised homes. The mean CHAOS score was 8.2 at wave one and 8.5 at wave three, a small but statistically significant increase in overall CHAOS scores (see Table 4.7).

In both waves, families with a 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.

Table 4.7 Confusion, hubbub and order scale (CHAOS), by demographics(averages)

	Wave 1 (age 9-18 months)					Wave 3 (age 3)				
	Mean	Median	SD	Unw. base	Wtd base	Mean	Median	SD	Unw. base	Wtd base
Total										
All	8.2	8	2.3	5,696	5,692	8.5	8	2.5	2,597	2,594
Household income										
Under £10,000	8.6	8	2.4	942	890	8.7	8	2.7	269	323
£10,000-£19,999	8.6	8	2.5	1,194	1,142	9.0	9	2.6	477	530
£20,000-£29,999	8.4	8	2.3	955	972	8.6	8	2.4	485	486
£30,000-£39,000	7.9	8	2.1	760	771	8.6	8	2.4	383	356
£40,000+	7.6	8	2.1	1,335	1,423	8.1	8	2.2	845	761
Household work status										
Working household	8.0	8.0	2.2	4,386	4,471	8.3	8.0	2.3	2,218	2,145
Non-working household	8.9	9.0	2.6	1,310	1,222	9.5	9.0	3.0	379	450
Whether a couple household										
Yes	8.1	8	2.3	4,564	4,622	8.4	8	2.4	2,108	2,038
No	8.6	8	2.5	1,132	1,071	8.8	8	2.8	489	556
Mother's highest level of qualification										
Masters+, NVQ 5+, BTEC 7+	7.4	8	2.1	637	708	8.0	8	2.1	389	359
Honours Degree NVQ 4* BTEC 6	7.9	8	2.2	996	1,022	8.2	8	2.2	534	482
Foundation Degree Certification of Higher Ed NVQ 4 BTEC 4-5	8.0	8	2.2	543	543	8.7	8	2.4	287	273
A-level NVQ 3 BTEC 3	8.1	8	2.2	1,001	999	8.5	8	2.4	485	484
GCSE A*-C NVQ 2 BTEC 2	8.4	8	2.4	1,364	1,335	8.8	8	2.6	525	563
GCSE D-F NVQ 1 BTEC 1	9.2	9	2.5	407	381	9.1	9	2.8	123	148
None	9.1	9	2.6	512	476	9.4	9	2.9	138	161

Base Wave 1: All participants interviewed at Wave 1

Base Wave 3: All participants interviewed at Wave 3.

4.4 Relationship with non-resident parent

Lone parent respondents were asked about the selected child's relationship with their non-resident natural parent (the father in most cases).²⁸ They were asked how frequently the child had contact with their non-resident parent, if at all, and also about their own relationship with the child's non-resident parent.

Table 4.8 shows that the proportion of children in lone parent families who had contact with their non-resident parent remained relatively stable between wave one (77%) and wave three²⁹ (75%) but the frequency of contact varied significantly over time with less frequent contact at wave three. The proportion of children who saw their non-resident parent every day had decreased from 25% at wave one to 14% at wave three.

Table 4.8 How often selected child usually sees their natural non-resident parent over time (%)

	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Every day	25	14
5-6 times a week	7	4
3-4 times a week	12	15
1-2 times a week	20	24
Less than once a week but at least once a month	8	11
Less often than once a month	5	6
Never	23	25
<i>Unweighted base</i>	<i>1,123</i>	<i>439</i>
<i>Weighted base</i>	<i>1,059</i>	<i>504</i>

Base Wave 1: All participants interviewed at Wave 1 who were lone parents.

Base Wave 3: All participants interviewed at Wave 3 who were lone parents.

Table shows column %.

Perhaps related to the frequency of contact, a deterioration in the relationship between the resident and non-resident parents was also apparent over time (as reported by the resident parent). While 60% of lone parents described their relationship with the child's non-resident parent as fairly or very good at wave one, at wave three less than half of lone parents (48%) described the relationship as fairly or very good. A minority of lone parents described the relationship as fairly or very bad (17% at wave one and 21% at wave three).

²⁸ In the vast majority of these families the lone parent was the natural mother of the selected child (98% at wave 1 and 96% at wave 3).

²⁹ This level of contact with non-resident parents is higher than in the Millennium Cohort Study (Hansen and Joshi 2007) where only 32.7% of children in English children had contact with their non-resident parent. However the Millennium Cohort Study analysis was based on all households where the natural father was non-resident whilst the Evaluation of Children's Centres in England analysis was based on all lone parent households.

Table 4.9 Nature of respondent's relationship with selected child's natural non-resident parent over time (%)

	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Very good	31	24
Fairly good	29	24
Neither good nor bad	23	31
Fairly bad	5	5
Very bad	12	16
<i>Unweighted base</i>	<i>1,105</i>	<i>416</i>
<i>Weighted base</i>	<i>1,040</i>	<i>480</i>

Base Wave 1: All participants interviewed at Wave 1 who were lone parents.

Base Wave 3: All participants interviewed at Wave 3 who were lone parents.

Table shows column %.

4.5 Quality of relationship with partner

Evidence from other studies shows that parental relationships affect child outcomes (Jones 2010), which is why the first survey asked about three aspects of the parental relationship in couple households, which were followed up at wave three:

- 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 ensure maximum disclosure of potentially sensitive information.

Table 4.10 Respondent's satisfaction with the relationship with their partner over time (%)

	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Very satisfied	71	67
Quite satisfied	22	26
Neither satisfied nor dissatisfied	4	4
Quite dissatisfied	2	2
Very dissatisfied	0	0
Don't know	0	0
<i>Unweighted base</i>	<i>4,393</i>	<i>2,125</i>
<i>Weighted base</i>	<i>4,465</i>	<i>2,067</i>

Base Wave 1: All participants interviewed at Wave 1 who were in couples.

Base Wave 3: All participants interviewed at Wave 3 who were in couples.

Table shows column %.

While over nine in 10 respondents in both waves reported being quite or very satisfied with their relationship (93% at each wave), there was a significant reduction in the proportion reporting that they were very satisfied (from 71% in wave one to 67% in wave three, see Table 4.11).

Respondents were asked two questions about the level of criticism in the relationship: rating on a 10-point scale how critical they felt their partner was of them, and how critical they themselves were of their partner. In both waves the level of criticism in the parental relationships appeared to be relatively low and there were no significant differences over time in the ratings. Fifty-six per cent of respondents at wave one and 53% at wave three reported a low level of criticism of their partner, giving ratings between one (never critical) and three on the scale. Even more respondents reported a low level of criticism from their partner: 64% of respondents at wave one and 62% at wave three reported giving ratings of three or below.

Table 4.11 Level of criticism in the relationship over time (%)

	Respondent critical of partner		Partner critical of respondent	
	Wave 1 (age 9-18 months)	Wave 3 (age 3)	Wave 1 (age 9-18 months)	Wave 3 (age 3)
1 - never critical	18	18	22	20
2	19	16	23	23
3	19	19	19	19
4	10	10	9	10
5	15	16	13	13
6	5	7	4	4
7	6	7	3	4
8	4	4	3	3
9	1	1	1	1
10 - very critical	3	2	3	2
<i>Unweighted base</i>	<i>4,380</i>	<i>2,120</i>	<i>4,384</i>	<i>2,121</i>
<i>Weighted base</i>	<i>4,450</i>	<i>2,060</i>	<i>4,454</i>	<i>2,063</i>

Base Wave 1: All participants interviewed at Wave 1 who were in couples.

Base Wave 3: All participants interviewed at Wave 3 who were in couples.

Table shows column %.

A small minority of respondents reported that their partner had ever been violent³⁰ towards them (3% in both waves; see Table 4.12). However, in both waves, the partner violence was more common in poor families. Six per cent of respondents at wave one, and 5% of respondents at wave three, in families with a household income below £10,000 a year reported that their partner had ever been violent towards them. This compares with 1% of respondents in the most affluent families (with a household income of £40,000 a year or above) at each time point (See Appendix Table C.8).

³⁰ Partner violence was defined in the question as grabbing, pushing, shaking, hitting or kicking. The 3% includes respondents who answered that they don't know how frequently their partner is violent (1% of respondents in each wave) but excludes the very small number of respondents who refused to answer the question.

Table 4.12 Frequency of partner violence towards respondent over time(%)

	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Don't know	1	1
Once a month or more often	0	1
Less often than once a month	2	1
Never	97	97
<i>Unweighted base</i>	<i>4,405</i>	<i>2,133</i>
<i>Weighted base</i>	<i>4,482</i>	<i>2,070</i>

Base Wave 1: All participants interviewed at Wave 1 who were in couples.

Base Wave 3: All participants interviewed at Wave 3 who were in couples.

Table shows column %.

4.6 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). Respondents in couple households were therefore asked several questions about the fathers' involvement in child rearing. The questions were included in the self-completion part of the questionnaire and were reported by the respondent about the male parent in the home, who could be the selected child's biological, adoptive, step or foster father. In the majority of couple families the questions were answered by the natural mother about the child's natural father (94% of couple families at wave one and 91% at wave three).³¹

Respondents were asked how often the child's father (or father figure) did the following things:

- Looked after the child on his own;
- Played with the child;
- Dressed the child, and
- Got the child ready for bed in the evening.

Table 4.13 shows that, on three of the four measures father involvement had decreased significantly over time. While playing with the child was the most common involvement fathers had with their child at both waves, the frequency of father-child play decreased significantly from 77% playing every day in wave one to 66% playing daily in wave three. Similarly, while 22% of fathers looked after their child daily on his own at wave one this was 18% at wave three and while 20% of fathers dressed their child daily at wave one this was 16% at wave three.

Conversely, father involvement at bedtime increased somewhat (but significantly) over time. While the proportion of fathers who got their child ready for bed every evening remained stable between waves, overall the proportion of fathers who ever did this increased from 92% in wave one to 96% in wave three.

³¹ In small proportion of couple families, (5% in wave 1 and 6% in wave 3), the natural father was the main respondent and he answered these questions about his own involvement.

Table 4.13 Frequency of father's involvement in child rearing over time(%)

	Looks after child on his own		Plays with child		Dresses child		Gets child ready for bed	
	Wave 1 (age 9-18 months)	Wave 3 (age 3)	Wave 1 (age 9-18 months)	Wave 3 (age 3)	Wave 1 (age 9-18 months)	Wave 3 (age 3)	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Every day	22	18	77	66	20	16	17	16
Almost every day (5-6 times a week)	11	11	13	20	15	14	17	19
A few times a week (3-4 times a week)	20	22	6	9	29	30	32	34
Once or twice a week	29	32	3	4	21	25	17	19
Less than once a week	15	14	1	1	10	11	10	8
Never	3	2	0	0	5	4	8	4
<i>Unweighted base</i>	4,361	2,105	4,384	2,113	4,368	2,111	4,369	2,110
<i>Weighted base</i>	4,437	2,039	4,459	2,047	4,444	2,045	4,437	2,044

Base Wave 1: All participants interviewed at Wave 1 who were in couples.

Base Wave 3: All participants interviewed at Wave 3 who were in couples.

Table shows column %.

Based on these four questions on father involvement a composite scale was constructed ranging from 0 to 20 with higher scores indicating higher involvement. Overall, the father involvement score decreased slightly between waves (from a mean score of 13.4 and a median of 14 to a mean score of 13.2 and a median of 13 at wave three), indicating fathers being less (frequently) involved in child rearing activities when their child was aged about 3 years old than when their child was about 9-18 months.

In apparent difference in father involvement between working and non-working families was not statistically significant at either wave.

Table 4.14 Father's involvement score, by demographics(averages)

	Wave 1 (age 9-18 months)					Wave 3 (age 3)				
	Mean	Median	SD	Unw. base	Wtd base	Mean	Median	SD	Unw. base	Wtd base
Total										
All	13.4	14	3.9	4,338	4,409	13.2	13	3.6	2,101	2,035
Household income										
Under £10,000	13.5	14	4.5	396	381	13.7	15	4.4	110	119
£10,000-£19,999	13.7	14	3.9	780	751	13.0	13	3.7	313	352
£20,000-£29,999	13.0	13	3.9	845	870	13.2	14	3.7	413	413
£30,000-£39,000	13.4	14	3.5	716	726	13.1	13	3.4	357	330
£40,000+	13.5	14	3.7	1,282	1,373	13.2	13	3.3	811	730

Household work status										
Working household	13.4	14	3.8	3,922	4,023	13.2	13	3.5	1,982	1,891
Non-working household	13.8	14	4.2	416	386	13.5	14	4.3	119	144
Mother's highest level of qualification										
Masters+, NVQ 5+, BTEC 7+	14.1	14	3.7	594	663	13.4	13	3.3	366	336
Honours Degree NVQ 4* BTEC 6	13.2	13	3.7	905	943	13.0	13	3.5	470	428
Foundation Degree Certification of Higher Ed NVQ 4 BTEC 4-5	13.4	14	3.8	446	451	13.4	13	3.3	241	227
A-level NVQ 3 BTEC 3	13.3	13	3.6	789	803	13.3	14	3.5	384	374
GCSE A*-C NVQ 2 BTEC 2	13.2	13	4.0	929	913	12.9	13	3.8	394	399
GCSE D-F NVQ 1 BTEC 1	13.4	14	4.3	232	220	13.1	13	3.4	77	88
None	13.0	13	4.6	270	254	13.5	14	4.0	89	98

Base Wave 1: All participants interviewed at Wave 1 who were in couples.

Base Wave 3: All participants interviewed at Wave 3 who were in couples.

The child's mother was asked about how often she felt she could count on the father (her partner) to take care of the child if she needed him to. Table 4.15 shows that the majority of mothers at both waves (70% in wave one and 69% at wave three) reported that they were always able to count on their partner to take care of the child if they needed him to.

Table 4.15 How often mother can count on father to take care of child (if needed) over time (%)

	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Never	2	1
Sometimes	8	9
Usually	16	18
Rarely	3	3
Always	70	69
<i>Unweighted base</i>	<i>4,166</i>	<i>2,012</i>
<i>Weighted base</i>	<i>4,233</i>	<i>1,932</i>

Base Wave 1: All female participants interviewed at wave 1 who were in couples.

Base Wave 3: All female participants interviewed at wave 3 who were in couples.

Table shows column %.

Almost all respondents in both waves thought the father had a close relationship with the child (Table 4.16), with 86% in wave one and 85% in wave three describing the relationship as extremely close. Less than half a per cent in each wave described the relationship as not very close.

Table 4.16 Overall how close father in household is to the child (%)

	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Not very close	0	0
Fairly close	3	3
Quite close	11	11
Extremely close	86	85
<i>Unweighted base</i>	<i>4,372</i>	<i>2,107</i>
<i>Weighted base</i>	<i>4,448</i>	<i>2,045</i>

Base Wave 1: All participants interviewed at Wave 1 who were in couples.

Base Wave 3: All participants interviewed at Wave 3 who were in couples.

Table shows column %.

4.7 Parenting stress index (PSI)

Parenting stress was measured using the short form of the Parenting Stress Index (Abidin 1995) questionnaire which consists of three subscales, two of which were repeated in the wave three follow up and are discussed in this section:

- Parental distress subscale
- Parent-child dysfunctional interaction subscale.³²

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

Parental distress

The overall mean parental distress score remained stable over time (45.8 in wave one and 46.0 in wave three). However, levels of parental distress varied significantly by socio-demographic characteristics, with more social disadvantage linked with higher levels of distress, on average.

³² The third subscale, difficult child, was included in the first survey (see Maisey et al., 2013 for results).

Table 4.17 Parenting Stress Index (PSI): parental distress subscale, by demographics (averages)

	Wave 1 (age 9-18 months)					Wave 3 (age 3)				
	Mean	Median	SD	Unw. base	Wtd base	Mean	Median	SD	Unw. base	Wtd base
Total										
All	45.8	46	8.0	5,455	5,475	46.0	47	7.9	2,550	2,549
Household income										
Under £10,000	44.1	45	8.6	902	852	44.4	46	9.5	259	312
£10,000-£19,999	44.9	46	8.4	1,124	1,084	45.1	46	7.8	464	518
£20,000-£29,999	45.7	47	8.0	932	955	45.9	47	8.1	479	481
£30,000-£39,000	47.0	47	7.2	747	759	46.4	47	7.7	379	354
£40,000+	46.9	47	7.4	1,320	1,410	46.9	47	7.2	841	759
Household work status										
Working household	46.4	47	7.6	4,228	4,328	46.5	47	7.5	2,191	2,122
Non-working household	43.3	44	9.0	1,227	1,147	43.5	45	9.1	359	427
Whether a couple household										
Yes	46.3	47	7.8	4,375	4,453	46.4	47	7.6	2,074	2,005
No	43.6	45	8.7	1,080	1,022	44.7	46	8.8	476	545
Mother's highest level of qualification										
Masters+, NVQ 5+, BTEC 7+	46.3	46	7.6	624	695	45.6	46	7.5	387	358
Honours Degree NVQ 4* BTEC 6	45.7	46	7.4	977	1,008	45.9	46	7.3	524	474
Foundation Degree Certification of Higher Ed NVQ 4 BTEC 4-5	45.6	46	8.4	535	536	46.6	47	7.9	282	269
A-level NVQ 3 BTEC 3	46.2	47	8.2	986	985	46.2	47	8.4	484	482
GCSE A*-C NVQ 2 BTEC 2	46.3	47	7.8	1,325	1,302	46.8	48	7.7	520	558
GCSE D-F NVQ 1 BTEC 1	45.0	46	8.8	388	362	45.5	48	9.1	117	143
None	43.3	44	9.1	414	388	43.6	44	8.4	123	142

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

In both waves, parental distress was highest among the poorest families and reduced steadily along the income distribution with the lowest parental distress, on average, reported by parents in

families with a household income of £40,000 a year or above. Lower levels of parental distress was also reported by respondents in working families, compared with non-working families, and in couple households, compared with lone parent households. Respondents in families where the mother lacked any formal qualifications reported the highest levels of parental distress on average (see Table 4.17).

Parent-child dysfunctional interaction

The mean value for the parent-child dysfunctional interaction subscale was 54.1 in wave one and 53.2 in wave three, indicating a small but statistically significant increase stress associated with parents' and children's interactions (Table 4.18). As with the parental distress subscale there was a clear association in the relationship between family socio-demographic characteristics and the parent-child dysfunctional interaction score such that more advantaged families reported lower levels of stress, on average.

Table 4.18 Parenting Stress Index (PSI): parent-child dysfunctional interaction subscale, by demographics (averages)

	Wave 1 (age 9-18 months)					Wave 3 (age 3)				
	Mean	Median	SD	Unw. base	Wtd base	Mean	Median	SD	Unw. base	Wtd base
Total										
All	54.1	56	5.8	5,479	5,502	53.2	55	6.2	2,564	2,564
Household income										
Under £10,000	53.0	54	6.3	905	857	52.3	54	7.0	265	319
£10,000-£19,999	53.4	55	6.0	1,132	1,090	51.5	53	7.2	468	523
£20,000-£29,999	53.7	55	6.0	938	959	53.3	55	5.9	477	479
£30,000-£39,000	54.9	57	5.2	750	761	53.7	55	5.3	379	354
£40,000+	55.5	57	4.7	1,325	1,415	54.6	56	5.2	842	759
Household work status										
Working household	54.3	56	5.7	4,396	4,477	53.5	55	5.7	2,079	2,011
Non-working household	53.3	55	6.0	1,083	1,025	52.2	54	7.7	485	553
Whether a couple household										
Yes	54.3	56	5.7	4,396	4,477	53.5	55	5.7	2,079	2,011
No	53.3	55	6.0	1,083	1,025	52.2	54	7.7	485	553
Mother's highest level of qualification										
Masters+, NVQ 5+, BTEC 7+	55.1	57	5.0	624	695	54.2	56	5.5	387	358
Honours Degree NVQ 4* BTEC 6	54.9	57	5.0	978	1,008	53.9	55	5.4	525	476
Foundation Degree Certification of Higher Ed NVQ 4 BTEC 4-5	54.6	56	5.6	537	540	53.6	55	6.2	283	270
A-level NVQ 3 BTEC 3	54.6	57	5.6	986	986	53.9	56	5.7	485	484
GCSE A*-C NVQ 2 BTEC 2	53.9	56	5.6	1,327	1,304	53.4	55	5.9	522	560
GCSE D-F NVQ 1 BTEC 1	52.8	55	6.5	387	361	50.6	50	7.7	120	145
None	51.4	52	7.2	426	401	49.3	49	8.7	129	149

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

5 Child development

This chapter examines children's development at wave three, when the child was aged around 3 years old. Children's socio-behavioural development was assessed using the Strengths and Difficulties Questionnaire and two aspects of cognitive development, vocabulary and non-verbal reasoning, were assessed using two scales of the British Ability Scales III³³.

5.1 Key findings

5.1.1 The Strengths and Difficulties Questionnaire

Overall 4% of children had a very high and 6% had a high Total Difficulties Score, indicating problematic behaviour. Those more likely to have a very high Total Difficulties Score included:

- Children living in households with an income less than £10,000 per year (7% compared with 2% in households with an income over £40,000).
- Children whose mothers had no qualification (9% compared with 2% for mothers with high qualifications).
- Lone parent families (6% compared with 4% for children living in two-parent households).

In terms of pro-social behaviour, overall 7% of children had a very low score on the pro-social scale of the Strengths and Difficulties Questionnaire. Children were more likely to have a very low pro-social score if their mothers had no qualifications (21% compared with 5% for mothers with high qualifications).

5.1.2 The British Ability Scales

The naming vocabulary assessment measures children's vocabulary. Focussing on children aged 36 months or more at the time of the assessment, the average age standardised test score was 51.4. Some children were notably more likely to score highly on the naming vocabulary assessment, these included:

- Children with more highly educated mothers (55.4 where mothers had achieved post-graduate level qualifications compared with 41.1 where the mother had no qualifications).
- Children living in higher income households (56.2 in households with an income of at least £40,000 per year compared with 48.1 for households with an income of less than £10,000).
- Children living in working households (52.3 compared with 47.0 for children in non-working households).

³³ The Strengths and Difficulties Questionnaire was completed by parents in the self-completion section of the questionnaire. The two BAS III assessments were administered to the children themselves by trained interviewers.

- Children living in two-parent households (51.8 compared with 50.2 for children in lone parent households).

The child's non-verbal reasoning was measured by the picture similarities assessment. Focussing on children aged 36 months or more at the time of the assessment, the average age standardised test score was 47.7. Children more likely to score highly on the picture similarities assessment included:

- Children with a more highly educated mother (50.7 where mothers had achieved post-graduate level qualifications compared with 43.1 where the mother had no qualifications).
- Children living in higher income households (50.7 in households with an income of at least £40,000 per compared with 45.3 for households with an income of less than £10,000).
- Children living in two-parent households (48.2 compared with 45.8 for children in lone parent households).
- Children living in working households (48.4 compared with 44.4 for children in non-working households).

5.2 Strengths and Difficulties Questionnaire

To provide an insight into the selected child's behaviour, and as an indicator of possible mental health issues, parents were asked to complete the Strengths and Difficulties Questionnaire (SDQ, Goodman 1997). The SDQ is a brief behavioural screener questionnaire asking about a range of both positive and negative attributes and behaviours which the child may display, for example whether the child has many worries or whether the child is kind to others. A version of the SDQ suitable for use with 2 to 4 year olds was used in this study.

An extended version of the SDQ was used (Goodman 1999); in addition to the standard 25 item questionnaire the extended SDQ asks about 15 extra pro-social items, for example whether the child volunteers to help others or is calm and easy going.

5.2.1 The Total Difficulties Score

The Total Difficulties Score (TDS) is a composite score of answers to 20 questions assessing the child's behaviour and attributes, as reported by the parent. The TDS is comprised of four sub-scales examining different aspect of the child's behaviour:

- The Emotional Symptoms Scale – for example, this scale asks about whether the child seems worried or if the child is nervous or clingy.
- The Conduct Problems Scale – asks about how the child interacts with adults and children, such as whether the child is argumentative with adults or bullies other children.
- The Hyperactivity Scale – this scale includes questions about whether the child is restless or constantly fidgeting.

- The Peer Problems Scale – this scale asks about relationships with peers, for example whether the child has a good friend.

The TDS and the sub-scale scores are shown in Table 5.1. According to the proposed banding of SDQ scores for 2-4 year olds³⁴, overall 4% of children had a very high TDS, with a further 6% having a high score, indicating problematic behaviour. Sub-scale scores were slightly more variable; whereas 13% of children had a high or very high score on the Conduct Problems Scale and the Peer Problems scale 8% exhibited a high or very high score on the Emotional Symptoms Scale.

Table 5.1 Total Difficulties Score and subscales (%)

Scale	Close to average	Slightly raised	High	Very high	Unweighted base	Weighted base
Total Difficulties Score (TDS)	79	10	6	4	2,536	2,531
Emotional Symptoms Scale	84	8	4	4	2,561	2,560
Conduct Problems Scale	77	10	7	6	2,553	2,550
Hyperactivity Scale	79	10	5	6	2,549	2,544
Peer Problems Scale	75	11	7	6	2,551	2,547

Base: All participants interviewed at Wave 3.
Table shows row %.

However, as is clear from Table 5.2, children's TDS differed depending on the demographics of the family. High TDS scores are associated with household income; 7% of children in the lowest income households (less than £10,000 per annum) had a very high TDS score compared with just 2% in the highest earning households (more than £40,000 per annum). There is also a clear pattern relating to mother's qualifications; whereas 2% of children of highly educated mothers had very high TDS scores, this increased to 8% for mothers with low qualifications and 9% for those with no qualifications.

Children living in lone parent households were more likely to have very high TDS scores compared with those in couple households (6% and 4% respectively). There was also a difference in TDS by the working status of the household; children living in non-working households were more likely to have a high or very high TDS scores (19%) than those living in households where at least one parent worked (8%).

³⁴The SDQ was scored according to 'Scoring the Strengths and Difficulties Questionnaire for 2-4 year olds' (2014) available at <http://www.sdqinfo.com/py/sdqinfo/c0.py>.

Table 5.2 Total Difficulties Score, by demographics (%)

Income	Close to average	Slightly raised	High	Very high	Unweight ed base	Weighted base
Under £10,000	67	16	10	7	262	314
£10,000 to £19,999	72	12	8	7	460	515
£20,000 to £29,999	78	12	6	4	475	477
£30,000 to £39,999	86	9	4	1	375	347
£40,000 +	88	7	3	2	838	755
Mother's qualifications	Close to average	Slightly raised	High	Very high	Unweight ed base	Weighted base
Masters degree/ Doctorate/ NVQ 5 - 6/ BTEC 7 - 8	87	7	3	2	368	357
Honours Degree/ NVQ 4*/ BTEC 6	85	10	3	2	523	474
Foundation Degree or Cert Ed/ NVQ 4/ BTEC 4-5	83	8	6	3	283	270
A-level/ NVQ 3/ BTEC 3	81	10	4	5	482	480
GCSE A*-C/ NVQ 2/ BTEC 2	74	11	9	5	518	555
GCSE D-F/ NVQ 1/ BTEC 1	70	10	12	8	115	139
No qualifications	63	22	6	9	122	140
Household type	Close to average	Slightly raised	High	Very high	Unweight ed base	Weighted base
Couple households	81	10	5	4	2,059	1,988
Lone parents	72	12	9	6	479	545
Household economic status	Close to average	Slightly raised	High	Very high	Unweight ed base	Weighted base
Working	82	10	5	3	2,177	2,106
Not working	67	15	8	11	361	427

Base: All participants interviewed at Wave 3.

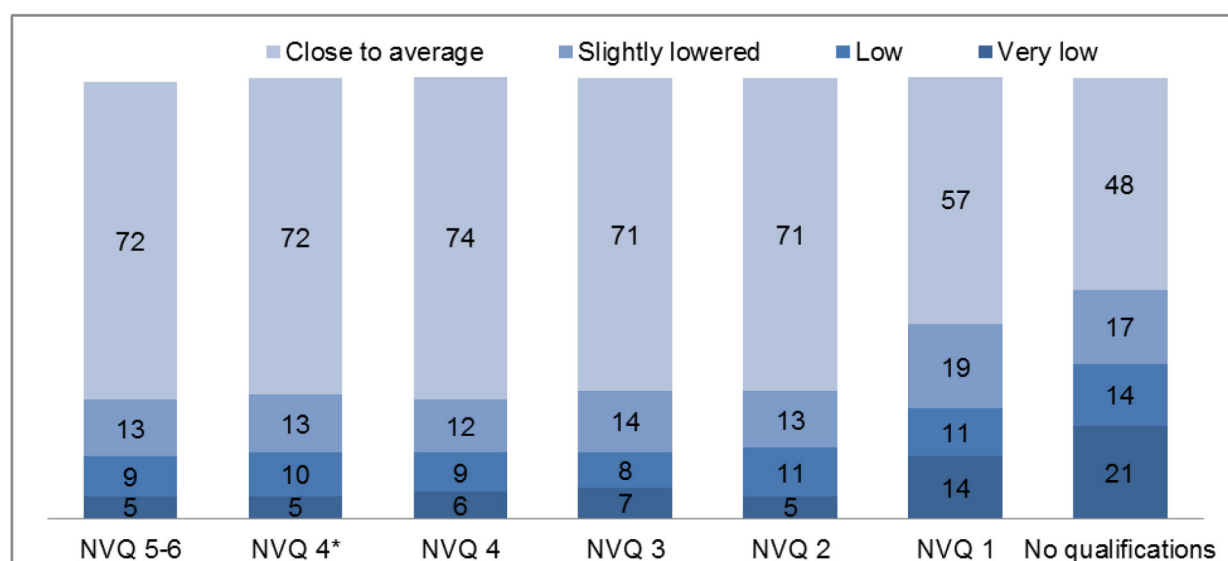
Table shows row %.

5.2.2 The pro-social scale

The pro-social scale asks questions such as whether the child is kind to young children or shares their possessions. Overall 7% of children had a very low score in the pro-social scale with a further 10% having a low score (Appendix Table C.9 in Appendix C).

There were clear differences in pro-social scale scores by mother's educational attainment. Figure 3 shows that a child is more likely to have a very low pro-social scale score if their mother has no or low qualifications; 21% of children with mothers who have no qualifications had a very low pro-social score compared with 5% of mothers with NVQ 5-6 or post-graduate qualifications. There was no significant difference in pro-social scores by household income, household type or household working status (Appendix Table C.7 in Appendix C).

Figure 3 Pro-social scale scores, by mother's educational attainment(%)



Base: All participants interviewed at Wave 3.

5.2.3 Additional pro-social scales

An extended version of the SDQ was used so that additional positive behaviours and attributes of the child could be measured. The extended SDQ includes three additional scores: the Cooperation score looks at behaviours such as whether the child is calm or waits their turn; the Behavioural self-regulation score is concerned with things such as whether the child can choose activities or move on to new tasks and the Emotional self-regulation score measures behaviours such as whether the child has mood-swings or is impulsive.

Cooperation, Behavioural self-regulation and Emotional self-regulation are measured as continuous scales from a minimum score of zero to a maximum score of ten (Appendix Table C.11 in Appendix C). Average scores for these scales were:

- the Cooperation scale – mean 7.1 and median 7
- the Behavioural self-regulation scale – mean 6.9 and median 7
- the Emotional self-regulation scale – mean 5.4 and median 6

Scores to the additional pro-social scales varied by household characteristics, children more likely to score highly on the additional scales included (tables not shown):

- Children living in higher income households.

- Children whose mothers had higher educational qualifications.
- Children living in two-parent households, compared with children in lone parent households³⁵.
- Children who are living in a household where at least one adult was in paid employment.

5.3 British Ability Scales

The British Ability Scales (BAS-III) is a developmental psychology tool that provides a reliable measure of children's cognitive functioning, and has been adapted for use by survey interviewers. This study used two subscales of the BAS assessments – 'naming vocabulary' and 'picture similarity' - the first being a measure of vocabulary and the second being a measure of non-verbal reasoning ability.

Table 5.3 shows the raw BAS III scores for all children who completed the assessments and the age standardised test-scores for those children aged at least 36 months³⁶. Focussing on the test-scores, on average children scored 51.4 on the naming vocabulary scale³⁷ and 47.7 on the picture similarities scale³⁸.

Table 5.3 BAS III scores (averages)

BAS III Raw Score	Min	Max	Mean	Median	SD	<i>Unweighted base</i>	<i>Weighted base</i>
Naming vocabulary	0	33	18.3	20	6.08	2,398	2,390
Picture similarities	0	34	15.5	16	5.20	2,398	2,390
BAS III Standardised Test Score	Min	Max	Mean	Median	SD	<i>Unweighted base</i>	<i>Weighted base</i>
Naming vocabulary	27	80	51.4	54	12.14	1,888	1,899
Picture similarities	24	80	47.7	49	10.35	1,888	1,899

Raw score base: All children who completed both BAS III tests at Wave 3.

Standardised test score base: All children who completed both BAS III tests at Wave 3 who were aged 36 months or more.

³⁵ There was no significant difference in Behavioural self-regulation scores by whether or not children were living in a two-parent or a lone parent household.

³⁶ In total 2,398 children completed both BAS III assessments. Unlike previous versions, BAS III does not produce standardised scoring for children aged under 36 months. As a result it is only possible to show the age standardised test-scores for the 1,888 children who completed both BAS assessment and were aged 36 months or older.

³⁷ The mean naming vocabulary score is slightly higher than the mean of 50.4 in the Millennium Cohort Study (Hansen and Joshi 2007). However, the Millennium Cohort Study assessed children using BAS II whereas the Evaluation of Children's Centres in England used BAS III.

³⁸ To interpret the BAS test scores, please note that a difference of one point represents a difference of 0.1 standard deviations (where the population mean is 50, the population standard deviation is 10, and 95% of the population of similarly aged children lie within +/-2 standard deviations of the mean).

5.3.1 Naming vocabulary

Table 5.4 shows that there are clear differences in children's naming vocabulary test scores by household characteristics (raw scores are available in Appendix Table C.12 in Appendix C).

Table 5.4 Naming vocabulary standardised test scores, by demographics (averages)

Income	Mean	Median	Unweighted base	Weighted base
Under £10,000	48.1	47	202	251
£10,000 to £19,999	47.5	46	346	384
£20,000 to £29,999	50.9	52	342	348
£30,000 to £39,999	52.2	54	286	265
£40,000 +	56.2	58	617	554
Mother's qualifications	Mean	Median	Unweighted base	Weighted base
Masters degree/ Doctorate/ NVQ 5 - 6/ BTEC 7 – 8	55.4	58	288	268
Honours Degree/ NVQ 4*/ BTEC 6	54.2	58	385	343
Foundation Degree or Cert Ed/ NVQ 4/ BTEC 4-5	53	55	214	202
A-level/ NVQ 3/ BTEC 3	51.5	54	363	360
GCSE A*-C/ NVQ 2/ BTEC 2	50.8	52	386	430
GCSE D-F/ NVQ 1/ BTEC 1	47.2	45	81	99
No qualifications	41.1	38	96	112
Household type	Mean	Median	Unweighted base	Weighted base
Couple households	51.8	54	1,546	1497
Lone parents	50.2	52	342	402
Household economic status	Mean	Median	Unweighted base	Weighted base
Working	52.3	55	1,621	1577
Not working	47.0	45	267	322

Base: All children who completed both BAS III tests at Wave 3 who were aged 36 months or more.

On average children scored more highly on the naming vocabulary assessment if:

- They lived in a household with a high income - the average score for children in households with an income of at least £40,000 per year was 56.2 compared with 48.1 for children in households with an income of less than £10,000.

- Their mother was more highly educated – where mothers had achieved post-graduate level qualifications the average naming vocabulary test score was 55.4 compared with 41.1 where the mother had no qualifications.
- They lived in a two-parent household – children who lived with two parents scored 51.8 on average compared with 50.2 for children in lone parent households.
- They lived in a working household – on average children in households where at least one parent is working scored 52.3 compared with an average naming vocabulary score of 47.0 for children in non-working households.

5.3.2 Picture similarities

As was seen with naming vocabulary test scores (Table 5.4), average test scores to the picture similarities assessment varied by household characteristics (raw scores are available in Appendix Table C.13 in Appendix C).

Table 5.5 shows that on average children scored more highly on the picture similarities assessment if:

- They lived in a household with a high income – on average children living in households with an annual income of at least £40,000 per year scored 50.7 compared with 45.3 for children in households with an income of less than £10,000.
- Their mother was more highly educated – children had an average picture similarities score of 50.7 where mothers had achieved post-graduate level qualifications and 43.1 where the mother had no qualifications.
- They lived in a two-parent household – children who lived with two parents scored 48.2 on average compared with 45.8 for children in lone parent households.
- They lived in a working household – where at least one parent in the household was working on average children scored 48.4 compared with an average picture similarities score of 44.4 for children in non-working households.

Table 5.5 Picture similarities standardised test scores, by demographics (averages)

Income	Mean	Median	<i>Unweighted base</i>	<i>Weighted base</i>
Under £10,000	45.3	45	202	251
£10,000 to £19,999	45.1	47	346	384
£20,000 to £29,999	47.3	47	342	348
£30,000 to £39,999	48.2	49	286	265
£40,000 +	50.7	52	617	554
Mother's qualifications	Mean	Median	<i>Unweighted base</i>	<i>Weighted base</i>
Masters degree/ Doctorate/ NVQ 5 - 6/ BTEC 7 - 8	50.7	50	288	268
Honours Degree/ NVQ 4*/ BTEC 6	49.5	50	385	343
Foundation Degree or Cert Ed/ NVQ 4/ BTEC 4-5	48.2	49	214	202
A-level/ NVQ 3/ BTEC 3	47.3	48	363	360
GCSE A*-C/ NVQ 2/ BTEC 2	46.9	48	386	430
GCSE D-F/ NVQ 1/ BTEC 1	43.1	45	81	99
No qualifications	43.1	45	96	112
Household type	Mean	Median	<i>Unweighted base</i>	<i>Weighted base</i>
Couple households	48.2	49	1,546	1497
Lone parents	45.8	47	342	402
Household economic status	Mean	Median	<i>Unweighted base</i>	<i>Weighted base</i>
Working	48.4	49	1,621	1577
Not working	44.4	45	267	322

Base: All children who completed both BAS III tests at Wave 3 who were aged 36 months or more.

6 Conclusions

To date the Evaluation of Children's Centres in England has provided rich data on the types of services that children's centres have offered between 2011 and 2014 (Poole et al. 2014), and detailed information on service delivery, multi-agency working, and reach (Sylva et al. 2014). This report adds to the research evidence on children's centres by providing valuable insight from the perspective of families. The longitudinal nature of the survey is a particular strength because it provides a baseline assessment of families alongside early outcome measures from which to assess impact, and allows us to explore how families' use of children's centres changed overtime.

When interpreting the findings of the evaluation it is important to bear in mind that this research has taken place during a time of changing policy and in a challenging economic climate. At the beginning of the evaluation children's centres delivered a core offer of services to their community, many with universal access. Therefore, the families who used children's centres at that time and were selected to take part in the evaluation had widely varying circumstances (e.g. while many families have low incomes, 15% had a household income over £50,000). Since then, children's centres have been directed away from services with universal access, towards a core purpose that focuses on disadvantaged families in an attempt to reduce inequality. This means that the more affluent families who used children's centres at the beginning of the evaluation are no longer a target for children's centre services, and this will have affected their level of service take-up. Alongside this shift in purpose, the model of delivery for children's centres has moved away from a single site model where an individual children's centre operates from a main site that is run by a dedicated manager, towards a multi-site or cluster model where leadership and service delivery is shared. As such, the range and location of services on offer to individual families is likely to have changed over the course of the evaluation.

When families first took part in the evaluation, they all had a child aged 9-18 months old, and were registered with a children's centre in one of the 30% most disadvantaged areas of the country. These centres were all delivering a core offer of services and so as expected take-up of services was high – only 15% of families hadn't used any services through the children's centre over the last year or so. When the third interview took place, these same families had a child aged about 3 years old, and the children's centres that they were registered with were working to a new core purpose. The take-up of services at this point in time was much lower, and 46% of families had not used any services through the children's centre over the previous year.

There are a number of possible explanations for this drop off in service use. It could be attributed simply to natural maturation of families and their children, who no longer have a need for many of the services that they used initially such as antenatal classes, breast feeding support and midwife or health visitor clinics. While this is almost certainly a factor, the lower use of children's centres by age 3 could suggest that children's centres offer less for families with older children. This could have arisen unintentionally as a consequence of recent service loss (see Sylva et al. 2014) or intentionally through an expectation that the needs of children aged 3-4 years old and their families are met primarily through early education services, although if this is the case, it raises a question as to whether the holistic needs of families are being met adequately.

Alternatively, the lower use of children's centres by age 3 could represent a mark of success in directing resources most effectively towards the families that need children's centres most. For, as noted by Sylva et al. 2014, open access services draw in families in a non-stigmatising way and allow centre staff to refer them to other targeted services from which they might benefit. If centres are able to maintain a relationship with these families who have the greatest need, while leaving better resourced families to their own devices, then limited resources will be used to good effect. The evidence from this evaluation supports this hypothesis since it shows that the families most likely to have stopped using the children's centre over the course of the evaluation are the more affluent.

This research provides a swathe of evidence to show that children's centres are successfully targeting disadvantaged families. Over the course of the evaluation, disadvantaged families used more services through the children's centre than their more affluent counterparts, and they were more likely to use a wide range of services. In particular it was notable that disadvantaged families were more likely to use childcare and early education through the children's centre than more affluent families. This is in contrast to typical patterns of childcare use which tend to show greater use of formal childcare by higher income and working families (see Huskinson et al. 2014). The most likely explanation for this is that the childcare offered by children's centres focuses on delivering the free entitlement to early education for disadvantaged 2 year olds, which research suggests will help centres meet the aims of their core purpose and reduce inequalities (see Smith et al. 2009).

The evidence in this report also helps justify the emphasis that centres are increasingly placing on disadvantaged families. Families in disadvantaged circumstances were shown to have poorer mental well-being, provide a poorer home learning environment, have more chaotic and disorganised households, and exhibit higher levels of parenting stress. These are all factors that research has shown to be associated with poorer child outcomes (Cummings and Davies 1994; Marryat and Martin 2010; Roberts et al. 2014; Deater-Deckard 2004; Deater-Deckard et al. 2009; Evans et al. 2005). In addition, the research shows that children from disadvantaged households are already performing more poorly in terms of vocabulary and non-verbal reasoning than their counterparts, and have poorer social behaviour.

The next stage of the evaluation (strand 4) will investigate potential associations between families' use of children's centre services, and child and family outcomes. It will therefore shed light on the extent to which children's centres have been successful in improving families' outcomes and reducing inequality.

References

- Abidin, R. R. (1995). *Parenting Stress Index: Professional Manual (3rd ed.)*. Odessa, FL: Psychological Assessment Resources, Inc.
- Belsky, J. (2001) 'Emanuel Miller lecture - Developmental risks (still) associated with early child care', *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 42 (7), 845-859.
- Briggs, N., Kurtz, A., and Paull, G. (2012). *Evaluation of Children's Centres in England (ECCE). Strand 5: Case studies on the costs of centres in the most deprived areas*. DfE Report No. DFE-RR256
- CMPO Research Team (2006) *Up to 7: Family Background and Child Development Up to Age 7 in the Avon Longitudinal Survey of Parents and Children (ALSPAC)*, University of Bristol.
- Cummings. E. and Davies. P. (1994) *Maternal depression and child development*. *Journal of Child Psychology and Psychiatry* Volume 35 (1) pp. 73-122.
- Deater-Deckard, K. 2004. *Parenting stress*. New Haven, CT: Yale Univ. Press.
- Deater-Deckard K., Mullineaux P., Beekman C., Petrill S., Schatschneider C., and Thompson L. (2009). Conduct problems, IQ, and household chaos: A longitudinal multi-informant study. *Journal of Child Psychology and Psychiatry*, 50, 1301–1308
- Dickens, S., Wollny, I. and Ireland, E. (2012) *Childcare Sufficiency and Sustainability in Disadvantaged Areas*. DfE Research Report DFE-RB246.
- Evangelou, M., Goff, J., Hall, J., Sylva, K., Eisenstadt, N., Paget, C., Tracz, R. and Davis, S., with Parkin, T., Sammons, P. and Smith, T. (2014) *Evaluation of Children's Centres in England (ECCE): Strand 3: Parenting Services in Children's Centres*. DfE Research Report No. DfE-RR368
- Evans G., Gonnella C., Marcynyszyn L., Gentile L., and Salpekar N. (2005). The role of chaos in poverty and children's socioemotional adjustment. *Psychological Science*, 16, 560–565
- Flouri, E. (2005) *Fathering and Child Outcomes*, New York: John Wiley & Sons Ltd.
- Goff, J., Hall, J., Sylva, K., Smith, T., Smith, G., Eisenstadt, N., Sammons, P., Evangelou, M., Smees, R. and Chu, K. (2013). *Evaluation of Children's Centre's in England (ECCE) – Strand 3: Delivery of Family Services by Children's Centre's Research Report*. DfE Research Report No. DFE-RR297.
- Goldberg, D., & Williams, P. (1988). *A user's guide to the General Health Questionnaire*. Windsor, UK: NFER-Nelson.
- Goodman R (1997) *The Strengths and Difficulties Questionnaire: A Research Note*. *Journal of Child Psychology and Psychiatry*, 38, 581-586.
- Goodman R. *The extended version of Strengths and difficulties Questionnaire as a guide to child Psychiatric caseness and consequent burden*. *J Child Psychol Psychiatry* 1999;40:791-801.

- Hall, J. Sylva, K. Sammons, P. Melhuish, E. Siraj-Blatchford, I. Taggart, B. (2013). *Can pre-school protect young children's cognitive and social development? Variation by center quality and duration of attendance*. *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice*, 24(2), 155-176
- Hansen, K. and Joshi, H. (2007) *Millennium Cohort Study Second Survey – A User's Guide to Initial Findings*. Centre for Longitudinal Studies.
- Hansen, K. (2010) 'Teacher assessments in the first year of school', in Hansen, K., Joshi, H., and Dex, S. (eds.) *Children of the 21st Century: The First Five Years*. Bristol: The Policy Press.
- Huskinson, T., Kostadintcheva, K., Greevy, H., Salmon, C., Dobie, S., and Medien K., with Gilby, N., Littlewood, M., and D'Souza J. (2014) *Childcare and early years survey of parents 2012-2013*. Department for Education SFR 06/2014
- Jones, E. (2010) 'Parental relationships and parenting', in Hansen, K., Joshi, H., and Dex, S. (eds.) *Children of the 21st Century: The First Five Years*. Bristol: The Policy Press.
- Jones, E., Gutman, L., and Platt, L. (2013) *Family stressors and children's outcomes*. Research Report DfE-RR254.
- Lamb, M. (2010, ed.) *The Role of the Father in Child Development* (5th ed.), Hoboken, NJ: John Wiley and Sons.
- Lambert. J., Agostoni, C., Elmadfa, I., Hulsof, K., Krause, E., Livingstone, B., Socha, P., Pannemans, D. and Samartins, S. (2004) *Dietary intake and nutritional status of children and adolescents in Europe*. *British Journal of Nutrition*, 92.
- Maisey R, Speight S, Haywood S with Hall J, Sammons P, Hussey D, Goff J, Evangelou M & Sylva K. (2013) *Evaluation of Children's Centres in England (ECCE): Baseline Survey of Families Using Children's Centres in the Most Disadvantaged Areas*. DfE RR260
- Marryat, L., and Martin, C. (2010) *Growing Up in Scotland: Maternal mental health and its impact on child behaviour and development*. The Scottish Government, Edinburgh.
- Matheny, A.P.Jr., Wachs, T.D., Ludwig, J.L., and Phillips, K. (1995) Bringing Order Out of Chaos: Psychometric Characteristics of the Confusion, Hubbub, and Order Scale. *Journal of Applied Developmental Psychology*, vol. 16, pp. 429-444.
- Mathers, S., and Sylva, K. (2007) *National Evaluation of the Neighbourhood Nurseries Initiative: The Relationship between Quality and Children's Behavioural Development*. SureStart Research Report SSU/2007/FR/0222.
- Melhuish, E. C., Phan, M. B., Sylva, K., Sammons, P., Siraj-Blatchford, I., and Taggart, B. (2008) *Effects of the home learning environment and preschool centre experience upon literacy and numeracy development in early primary school*, *Journal of Social Issues*, 64 (1): 95-114.

Northstone, K., Joinson, C., Emmett, P. et al. (2011) *Are dietary patterns in childhood associated with IQ at 8 years of age?* A population-based cohort study. *Epidemiol Community Health*.

ONS (2013) General Lifestyle Survey 2011. <http://www.ons.gov.uk/ons/rel/ghs/general-lifestyle-survey/2011/index.html>

Poole, E., Fry, A., and Tanner, E. (2014) Evaluation of Children's Centres in England: Follow-up Survey of Centre Leaders. DfE Research Report. No. DfE-XXX

Roberts, J. and Donkin, A. with Pillas, D. (2014) *Measuring what matters: A guide for children's centres*. UCL Institute of Health Equity.

Sammons, P., Elliot, K., Sylva, K., Melhuish, E., Siraj-Blatchford, I., Taggart, B. (2004) *The impact of pre-school on young children's cognitive attainments at entry to reception*. British Educational Research Journal 30 (5): 691-712.

Sammons, P., Anders, Y., Sylva, K., Melhuish, E., Siraj-Blatchford, I., Taggart, B., & Barreau, S. (2008). *Children's cognitive attainment and progress in English primary schools during Key Stage 2: investigating the potential continuing influences of pre-school education*. Zeitschrift für Erziehungswissenschaft [Special Issue 11/2008], 179-198.

Sarkadi, A. et al. (2008) 'Fathers' involvement and children's developmental outcomes: a systematic review of longitudinal studies', *Acta Paediatrica*, 97: 153-158.

Smith, R., Purdon, S., Schneider, V., La Valle, I., Wollny, I., Owen, R., Bryson, C., Mathers, S., Sylva, K. and Lloyd E. (2009a) *Early Education Pilot for Two Year Old Children Evaluation*. DCSF Research Report No. DCSF-RR134.

Smith G, Noble S, Smith T, Plunkett E, Field K and Smith T (2014) *Evaluation of Children's Centres in England (ECCE): The extent to which centres 'reach' eligible families, their neighbourhood characteristics and levels of use*. DfE Research Report. No. DfE-RR358.

Sorhaindo, A. and Feinstein, L. (2006). *What is the relationship between child nutrition and school outcomes?* London: Centre for Research on the Wider Benefits of Learning.

Sylva, K., Melhuish, E. C., Sammons, P., Siraj-Blatchford, I. and Taggart, B. (2004) *The Effective Provision of Pre-School Education (EPPE) Project: Final Report – A Longitudinal Study Funded by the DfES 1997-2004*, SureStart Research Report SSU/FR/2004/01. Nottingham: DfES Publications.

Sylva, K., Goff, J., Hall, J., Eisenstadt, N., Smith, T., Evangelou, M., Smith, G., and Sammons, P. (2014) Evaluation of Children's Centres in England (ECCE) - *Strand 3: The Organisation, Services and Reach of Children's Centres in England*. DfE Research Report No. DfE-XXX

Tanner, E., Agur, M., Hussey, D., and Hall, J., with Sammons, O., Sylva, K., Smith, T., Evangelou, M. and Flint, A. (2012) Evaluation of Children's Centres in England (ECCE) – Strand 1: First Survey of Children's Centre Leaders in the Most Deprived Areas. DfE Research Report No. DfE-RR230.

Appendix A – Socio-demographics & changes in household structure

This appendix presents the socio-demographic characteristics of the families who took part in the Evaluation of Children’s Centres in England, and how these characteristics changed overtime.

The majority of respondents who took part in the survey were female (95%) and in 97% of cases the respondent at wave three was the same person who had taken part in the wave one interview.

Children’s ages ranged between 31 and 46 months. The majority of children were between 34 and 42 months.

Appendix Table A.1 Age of the selected child (%)

Age in months	%
31	+
32	+
33	3
34	9
35	10
36	11
37	10
38	10
39	11
40	12
41	11
42	10
43	4
44	+
46	+
<i>Unweighted base</i>	2602
<i>Weighted base</i>	2602

Base: All participants interviewed at Wave 3.

Table shows column %.

Children’s term of birth can be seen in Appendix Table A.2. Most children were born in the academic year starting September 2010. However, 7% were born earlier in the summer term the previous year.

Appendix Table A.2 Children's term of birth (%)

Term of Birth	%
April – August 2011 (summer 2011)	18
January – March 2011 (spring 2011)	30
September – December 2010 (autumn 2010)	45
April – August 2010 (summer 2010)	7
<i>Unweighted base</i>	<i>2601</i>
<i>Weighted base</i>	<i>2602</i>

Base: All participants interviewed at Wave 3.

Table shows column %.

Most of the children in the survey only spoke English (80%). A small percentage spoke mainly another language or two or more languages equally.

Appendix Table A.3 Language spoken by the selected child (%)

Language	%
English only	80
Mainly English	9
Mainly another language	7
Two or more languages spoken equally	5
<i>Unweighted base</i>	<i>2601</i>
<i>Weighted base</i>	<i>2602</i>

Base: All participants interviewed at Wave 3.

Table shows column %.

There has been an increase in the proportion of lone parents over the course of the evaluation (19% to 22%), and in particular amongst working lone parents (5% to 9%). In parallel there has been a decrease in non-working couples (8% to 5%).

Appendix Table A.4 Household type and work status (%)

Household work status	Wave 1 (age 9-18 months)	Wave 2 (age 2)	Wave 3 (age 3)
Lone parent – Working	5	7	9
Lone parent – Not working	14	13	12
Couple – Both working	41	44	44
Couple – One working	32	30	29
Couple – Neither working	8	7	5
<i>Unweighted base</i>	<i>5717</i>	<i>3588</i>	<i>2602</i>
<i>Weighted base</i>	<i>5717</i>	<i>3584</i>	<i>2602</i>

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 2: All participants interviewed at Wave 2.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

There has been an increase in families with two or three children, whilst there has been a decrease in families with only one child.

Appendix Table A.5 Number of children in the household (%)

Number of children	Wave 1 (age 9-18 months)	Wave 2 (age 2)	Wave 3 (age 3)
1	46	48	41
2	34	33	39
3	13	13	14
4	5	4	4
5	1	1	1
6	1	1	1
7	+	+	+
8	+	+	+
9	+	+	+
<i>Unweighted base</i>	<i>5171</i>	<i>3588</i>	<i>2602</i>
<i>Weighted base</i>	<i>5717</i>	<i>3584</i>	<i>2602</i>

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 2: All participants interviewed at Wave 2.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

The percentage of families receiving an income from employment has increased from wave one to three which reflects the increase in employment levels. There has been a drop in the number of

families claiming Child Benefit and Child Tax Credit as might be expected given the changes to eligibility for Child Benefit since 2012 when the wave one fieldwork was carried out.

Appendix Table A.6 Sources of income (%)

Income source	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Employment or self-employment	76	84
Child benefit	95	90
Child tax credit	58	52
Working tax credit	22	23
Jobseekers allowance (JSA)	5	1
Income support	15	11
Housing benefit/ council tax benefit	23	23
Incapacity benefit/ Employment and support allowance	2	1
Disability living allowance	5	6
Other state benefit	1	2
Interest from savings and investment)	4	3
Private or state pension	1	1
Child Maintenance	4	5
Student grant	1	1
Employment and support allowance	N/A	2
Personal independence payment	N/A	5
Universal Credit	N/A	3
Other regular allowance from outside the household	1	1
None	+	+
<i>Unweighted base</i>	5683	2596
<i>Weighted base</i>	5682	2596

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

There has been a slight decrease in households earning less between £5,000 and £9,999 (from 14% to 11%) and a small increase in households earning more than £50,000 (from 15% to 18%).

Appendix Table A.7 Level of income (%)

Income band	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Less than £4,999	4	2
£5,000 - £9,999	14	11
£10,000 - £19,999	22	22
£20,000 - £29,999	19	20
£30,000 - £39,999	15	14
£40,000 - £49,000	12	12
£50,000 or more	15	18
<i>Unweighted base</i>	<i>5199</i>	<i>2463</i>
<i>Weighted base</i>	<i>5215</i>	<i>2464</i>

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

Almost half of households were buying their house with the help of a loan or mortgage (46%). Almost one quarter were renting from the local authority (24%), and a further fifth were renting from a private landlord (22%).

Appendix Table A.8 Tenure of household (%)

Tenure	%
Own it outright	4
Buying with the help of a mortgage or loan	46
Shared ownership (pay part rent and part mortgage)	1
Rent from the local authority or housing association	24
Rent from a private landlord	22
Living rent free	1
<i>Unweighted base</i>	<i>2604</i>
<i>Weighted base</i>	<i>2604</i>

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

At wave one, respondents were asked if any of the following events happened since the birth of the selected child because stressful events have been shown to have a detrimental effect on children's outcomes (e.g. Jones, Gutman and Platt 2013). Then at wave three they were asked whether any of the events had happened since they were last interviewed:

- 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.

There was no significant difference between the two time points in the prevalence of major life changes (see Appendix Table A.9).³⁹

Appendix Table A.9 Major life changes over time (%)

	Wave 1 (age 9-18 months)	Wave 3 (age 3)
Death of a close family member	17	18
Close family member went to prison	2	1
Someone in the household got divorced or separated (including temporarily)	5	5
Someone in the household lost their job	9	6
None	71	73
<i>Unweighted base</i>	5,713	2,601
<i>Weighted base</i>	5,707	2,601

Base Wave 1: All participants interviewed at Wave 1

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

³⁹ 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).

Appendix B – Weighting Strategy

This appendix provides details of the weighting strategy used for waves two and three of the longitudinal survey of families. For details of the weighting strategy used at wave one, see Maisey et al. 2013.

Wave 2

The aim of wave two weighting strategy was to make the responding sample representative of all parents and thereby minimise any bias resulting from non-response.

Parents from 128 centres took part in wave one and all parents who agreed to be re-contacted were invited to take part at wave two. At least one parent from each of the centres responded to the follow-up survey.

Univariate non-response

Response to wave two was examined by a selection of characteristics collected at wave one (after removing those who were not eligible to take part at wave two). The results of this univariate analysis were as follows:

- Amongst women, the likelihood of response increased with age. Amongst men, there was no statistically significant difference between the age groups examined.
- Respondents with one child in the household more likely to respond than those with two children who in turn were more likely to respond than those with three or more children.
- Response varied by work status of respondents with those working full or part-time being most likely to respond and those who were unemployed the least likely to respond. A similar pattern was evident by partner's work status.
- Response varied by income with higher income groups more likely to respond.
- Response varied by ethnicity of the mother. Response rates were highest where the mother's ethnicity was classified as mixed and lowest where the mother's ethnicity was Chinese or other.
- Response varied by the mother's highest qualification. Generally the more qualified the mother the greater the likelihood of response.
- Response varied by tenure, with response rates highest in households with a mortgage and lowest in households that were renting.
- The greater the number of family services used the greater the likelihood of response. The same pattern was apparent when looking at the number of services used at the named children's centre.
- Response was higher amongst married people (including those in civil partnerships) than amongst single people and those who were separated, divorced or widowed.

Non-response modelling

Having looked at response rates to the follow-up survey at a univariate level, non-response was then modelled using multivariate logistic regression. The dependent variable denoted response to the survey (1=responded; 0=did not respond) and the above characteristics were used as predictors. The model was weighted by the wave one weight.

Two variables were forced into the model:

- age by sex (11 categories after some small cells were merged appropriately);
- a variable representing the combination of lead organisation type (private/ voluntary/ independent (PVI); NHS; school; LA/ other/ unknown; multi lead) and child age (less than one year old; more than one year old; unknown) at the time of sampling for wave one (13 categories after some small cells were merged appropriately).

The latter variable was included to reflect the weighting approach to wave one where non-response weights were calculated within each of these categories; its inclusion in the non-response model ensured that the wave two survey would also be representative of centres with these characteristics.

The remaining variables (all from the wave one survey) were entered into a stepwise procedure. The following variables were entered into the model as a result:

- Partner's work status
- Mother's highest qualification
- Tenure
- Number of services used at named children's centre
- Mother's ethnicity

Non-response weights were then calculated as the inverse of the predicted probability of response from the model. The largest of these were trimmed at the 99.5th percentile to avoid excessive values. The resulting weights were then multiplied by the wave one weights to produce a final weight for wave two. The final weights were then scaled to have a mean of 1.

Bias reduction

In order to gauge the success of this weighting strategy in reducing non-response bias, a selection of wave one outcomes were examined. Estimates based on the wave two weights were, on the whole, very close to wave one weighted estimates. It was therefore concluded that the additional weighting was successful in minimising bias resulting from non-response.

Wave 3

As with the wave two weighting strategy, the aim of the wave three weighting strategy was to make the responding sample representative of all parents and thereby minimise any bias resulting from non-response.

Non-response modelling

Like wave two, non-response was modelled using multivariate logistic regression. The dependent variable denoted response to the survey (1=responded; 0=did not respond) and the above characteristics were used as predictors. The model was weighted by the wave two weight.

The same two variables were forced into the model:

- age by sex (eight categories after some small cells were merged appropriately);
- a variable representing the combination of lead organisation type (private/ voluntary/ independent (PVI); NHS; school; LA/ other/ unknown; multi lead) and child age (less than one year old; more than one year old; unknown) at the time of sampling for wave one (nine categories after some small cells were merged appropriately).

The latter variable was included to reflect the weighting approach at wave one and wave two where non-response weights were calculated within each of these categories; its inclusion in the non-response model ensured that the wave three survey would also be representative of centres with these characteristics.

The remaining variables (all from the wave one survey) were entered into a stepwise procedure. The following variables were entered into the model as a result:

- Partner's work status
- Income
- Mother's highest qualification
- Tenure

Non-response weights were then calculated as the inverse of the predicted probability of response from the model. The largest of these were trimmed at the 99.5th percentile to avoid excessive values. The resulting weights were then multiplied by the wave two weights to produce a final weight for wave three. The final weights were then scaled to have a mean of 1.

Bias reduction

In order to gauge the success of this weighting in reducing non-response bias, a selection of outcomes from wave two were examined. Estimates based on the wave three weights were, on the whole, very close to weighted estimates from wave two. It was therefore concluded that the additional weighting was successful in minimising bias resulting from non-response.

Appendix C – Additional Tables

Chapter 1

Appendix Table C.1 Hypothesised links between services and outcomes

Chapter 3					
Family diet	Accidents, illness and disability	Parental mental wellbeing	Smoking, drinking and drugs		
midwife/ health visitor drop in sessions or clinics	breast feeding groups	stay and play or play and learn groups	specialist family or parenting support		
peer support groups	home safety course	peer support groups	midwife/ health visitor drop in sessions or clinics		
stay and play or play and learn groups	first aid course	psychologist or counsellor	ante-natal classes		
parenting classes	stay and play or play and learn groups	organised activities/ hobbies/ sport for parents	home visits		
	parenting classes	specialist family or parenting support			
	home visits				
Chapter 4					
Home learning environment	Order and chaos at home	Relationship with non-resident parents	Quality of relationship with partner	Father's involvement in child rearing	Parenting stress index
parenting classes	parenting classes	specialist family or parenting support	relationship support	ante-natal classes	stay and play or play and le
childcare and early education	home visits		specialist family or parenting support	peer support groups	peer support groups
stay and play or play and learn groups				parenting classes	parenting classes
					specialist family or parenting
					childcare and early education

Chapter 5					
Strengths and difficulties	British Ability Scales				
stay and play or play and learn groups	speech and language therapy				
parenting classes	parenting classes				
organised sport or activities for babies/children	toy library				
	childcare and early education				
	stay and play or play and learn groups				

Chapter 2

Appendix Table C.2 **Change in use of services through the named children's centre from wave one to wave three (%)**

GHQ12 score	Never used	Started using	Stopped using	Continued using	<i>Unweighted base</i>	<i>Weighted base</i>
0 (good)	10	4	38	48	1519	1502
1-3 (moderate)	9	4	36	50	699	716
4+ (poor)	7	7	35	52	371	372
Household work	Never used	Started using	Stopped using	Continued using	<i>Unweighted base</i>	<i>Weighted base</i>
Couple – both working	10	3	42	46	1259	1141
Couple – one working	9	7	31	53	744	767
Couple – neither working	11	2	34	53	107	132
Lone – working	14	4	43	40	217	239
Lone – not working	6	7	30	57	275	324
Income	Never used	Started using	Stopped using	Continued using	<i>Unweighted base</i>	<i>Weighted base</i>
Under £10,000	12	7	35	46	270	325
£10,000-£19,999	8	6	32	55	479	534
£20,000-£29,999	8	4	39	49	485	486
£30,000-£39,000	11	3	39	48	383	356
£40,000+	9	3	40	47	846	762
Total	Never used	Started using	Stopped using	Continued using	<i>Unweighted base</i>	<i>Weighted base</i>
Total	9	4	37	49	2602	2602

Base: All participants interviewed at Wave 3.

Table shows row %.

Appendix Table C.3 Number of services received through the named children's centre over time, for families who used the children's centre (averages)

Number of services⁴⁰	Wave 1 (age 9-18 months)	Wave 2 (age 2)	Wave 3 (age 3)	Total
Mean	3.1	2.5	2.5	3.6
Median	3	2	2	3
Standard deviation	2.1	1.9	1.9	2.5
<i>Unweighted base</i>	4920	2337	1466	2383
<i>Weighted base</i>	4862	2256	1397	2336

Base Wave 1: All participants interviewed at Wave 1.

Base Wave 2: All participants interviewed at Wave 2.

Base Wave 3: All participants interviewed at Wave 3.

Table shows column %.

Appendix Table C.4 Number of services used through the named children's centre by family characteristics (averages)⁴¹

GHQ12 score	Mean	Median	SD	<i>Unweighted base</i>	<i>Weighted base</i>
0 (good)	3.0	3	2.3	1519	1502
1-3 (moderate)	3.4	3	2.8	699	716
4+ (poor)	4.0	4	3.0	371	372
Household work status	Mean	Median	SD	<i>Unweighted base</i>	<i>Weighted base</i>
Couple – both working	3.1	3	2.3	1259	1141
Couple – one working	3.2	3	2.6	744	767
Couple – neither working	3.7	3	3.2	107	132
Lone – working	3.1	3	2.8	217	239
Lone – not working	3.9	3	3.0	275	324
Income	Mean	Median	SD	<i>Unweighted base</i>	<i>Weighted base</i>

⁴⁰ Includes any type of family service listed in Table 2.3 (whether delivered directly by the named children's centre, or signposted by the named children's centre), home visits, and instances where another adult took the selected child to the named children's centre.

⁴¹ From three months before the birth of the selected child until the child was aged about 3.

Under £10,000	3.4	3	2.8	270	325
£10,000-£19,999	3.4	3	2.8	479	534
£20,000-£29,999	3.3	3	2.6	485	486
£30,000-£39,000	3.2	3	2.6	383	356
£40,000+	3.0	3	2.2	846	762

Base: All participants interviewed at Wave 3.

Appendix Table C.5 Take-up of services through the named children's centre by income (%)⁴²

Family Service	Up to £9,999	£10,000 - £19,999	£20,000 - £29,999	£30,000 - £39,000	£40,000 +
Health					
Antenatal classes	19	17	16	22	18
Breastfeeding groups	16	14	18	20	22
Midwife/ health visitor drop in session or clinic	67	67	68	68	64
Speech and language therapy (SALT)	10	12	10	7	6
Psychologist or counsellor	4	5	5	3	2
Activities that parents and children do together					
Stay and play, or play and learn groups	58	65	67	64	67
Organised sport or exercise for babies or children	26	24	30	39	41
Toy library	19	14	17	17	14
Family and parenting support					
Peer support groups	9	10	12	6	7
Parenting classes	15	14	11	10	11
Organised activities, hobbies or sport for parents	10	9	12	13	11
Relationship support	1	3	1	1	1
Other specialist family or parenting support	4	8	5	6	1
Employment and benefits advice					
Benefits and tax credits advice	19	20	16	10	8

⁴² From three months before the birth of the selected child until the child was aged about 3.

Housing or debt advice	14	11	8	2	1
Employment support	6	9	7	7	2
Adult education					
Basic IT or jobs skills course	5	3	4	3	1
Further education or adult learning courses	7	10	7	6	3
English classes for speakers of other languages	4	4	4	1	+
Childcare and early education					
Childcare and early education (group settings)	33	30	22	25	20
Other services					
Home safety advice or course	16	15	12	11	10
First aid	2	1	1	2	3
Other family services	4	3	5	4	4
None	14	7	8	10	9
<i>Unweighted base</i>	270	479	485	383	846
<i>Unweighted base</i>	325	534	486	356	762

Base: All participants interviewed at Wave 3.

Table shows column %.

Appendix Table C.6 Take-up of services through the named children's centre by household type (%)⁴³

Family Service	<i>Couple – both workin g</i>	<i>Couple – one workin g</i>	<i>Couple – neither workin g</i>	<i>Lone parent – workin g</i>	<i>Lone parent – not workin g</i>
Health					
Antenatal classes	18	19	17	16	17
Breastfeeding groups	22	16	9	16	15
Midwife/ health visitor drop in session or clinic	67	66	67	58	69
Speech and language therapy (SALT)	6	10	15	4	17

⁴³ From three months before the birth of the selected child until the child was aged about 3.

Psychologist or counsellor	3	4	10	3	5
Activities that parents and children do together					
Stay and play, or play and learn groups	66	68	61	55	66
Organised sport or exercise for babies or children	39	29	22	28	25
Toy library	15	16	17	14	16
Family and parenting support					
Peer support groups	8	8	13	9	12
Parenting classes	9	13	14	10	23
Organised activities, hobbies or sport for parents	9	13	13	9	11
Relationship support	1	1	1	3	3
Other specialist family or parenting support	2	4	13	3	11
Employment and benefits advice					
Benefits and tax credits advice	11	12	21	23	23
Housing or debt advice	3	5	17	14	15
Employment support	4	6	12	8	12
Adult education					
Basic IT or jobs skills course	1	3	10	4	4
Further education or adult learning courses	4	7	14	8	10
English classes for speakers of other languages	+	5	5	1	4
Childcare and early education					
Childcare and early education (group settings)	21	24	38	26	36
Other services					
Home safety advice or course	11	12	14	8	21
First aid	1	2	2	2	4
Other family services	4	4	2	6	5
None	9	9	12	15	7
<i>Unweighted base</i>	<i>1259</i>	<i>744</i>	<i>107</i>	<i>217</i>	<i>275</i>
<i>Unweighted base</i>	<i>1141</i>	<i>767</i>	<i>132</i>	<i>239</i>	<i>324</i>

Base: All participants interviewed at Wave 3.

Table shows column %.

Appendix Table C.7 Take-up of services through the named children's centre by mental well-being (%)⁴⁴

Family Service	GHQ12 score 0 (good)	GHQ12 score 1-3 (moderate)	GHQ12 score 4+ (poor)
Health			
Antenatal classes	17	20	18
Breastfeeding groups	18	16	22
Midwife/ health visitor drop in session or clinic	67	65	66
Speech and language therapy (SALT)	7	10	12
Psychologist or counsellor	3	4	8
Activities that parents and children do together			
Stay and play, or play and learn groups	63	67	72
Organised sport or exercise for babies or children	32	31	36
Toy library	15	17	14
Family and parenting support			
Peer support groups	8	9	12
Parenting classes	10	14	17
Organised activities, hobbies or sport for parents	9	14	13
Relationship support	1	2	2
Other specialist family or parenting support	3	5	10
Employment and benefits advice			
Benefits and tax credits advice	12	15	24
Housing or debt advice	4	9	13
Employment support	5	7	12
Adult education			
Basic IT or jobs skills course	2	3	6

⁴⁴ From three months before the birth of the selected child until the child was aged about 3.

Further education or adult learning courses	5	9	9
English classes for speakers of other languages	2	3	2
Childcare and early education			
Childcare and early education (group settings)	24	24	32
Other services			
Home safety advice or course	13	12	12
First aid	2	2	4
Other family services	4	2	6
None	10	9	8
<i>Unweighted base</i>	1519	699	371
<i>Unweighted base</i>	1502	716	372

Base: All participants interviewed at Wave 3.

Table shows column %.

Chapter 4

Appendix Table C.8 Frequency of partner violence towards respondent by household income(%)

	Under £10,000	£10,000- £19,999	£20,000- £29,999	£30,000- £39,000	£40,000+
Wave 1 (age 9-18 months)					
Don't know	3	1	1	1	1
Once a month or more often	1	1	0	0	0
Less often than once a month	3	2	2	1	1
Never	94	96	97	97	99
Wave 3 (age 3)					
Don't know	1	1	1	2	1
Once a month or more often	1	1	1	0	-
Less often than once a month	3	3	-	1	1
Never	95	96	98	98	99
Bases					
<i>Wave 1 Unweighted base</i>	409	794	856	722	1,295
<i>Wave 1 Weighted base</i>	396	765	881	733	1,387
<i>Wave 3 Unweighted base</i>	111	318	420	363	822
<i>Wave 3 Weighted base</i>	120	359	421	339	738

Base: All participants interviewed at Wave 1 who were in couples.

Base: All participants interviewed at Wave 3 who were in couples.

Table shows column %.

Chapter 5

Appendix Table C.9 Pro-social scale scores (%)

Pro-social Scale	%
Close to average	69
Slightly lowered	14
Low	10
Very low	7
<i>Unweighted base</i>	2,552
<i>Weighted base</i>	2,550

Base: All participants interviewed at Wave 3.

Table shows column %.

Appendix Table C.10 Pro-social scale scores, by demographics (%)

Income	Close to average	Slightly lowered	Low	Very low	<i>Unweighted base</i>	<i>Weighted base</i>
Under £10,000	69	15	9	7	264	317
£10,000 to £19,999	60	16	15	9	465	520
£20,000 to £29,999	70	15	6	8	478	481
£30,000 to £39,999	70	12	12	5	377	350
£40,000 +	72	14	9	5	841	759
Mother's qualifications	Close to average	Slightly lowered	Low	Very low	<i>Unweighted base</i>	<i>Weighted base</i>
Masters degree/ Doctorate/ NVQ 5 - 6/ BTEC 7 - 8	72	13	9	5	388	359
Honours Degree/ NVQ 4*/ BTEC 6	72	13	10	5	524	475
Foundation Degree or Cert Ed/ NVQ 4/ BTEC 4- 5	74	12	9	6	284	270
A-level/ NVQ 3/ BTEC 3	71	14	8	7	485	483
GCSE A*-C/ NVQ 2/ BTEC 2	71	13	11	5	521	560

GCSE D-F/ NVQ 1/ BTEC 1	57	19	11	14	117	141
No qualifications	48	17	14	21	126	144
Household type	Close to average	Slightly lowered	Low	Very low	Unweighted base	Weighted base
Couple households	69	13	10	8	2,071	2,001
Lone parents	67	18	9	6	484	552
Household economic status	Close to average	Slightly lowered	Low	Very low	Unweighted base	Weighted base
Working	69	14	10	7	2,189	2,120
Not working	64	17	10	9	366	432

Base: All participants interviewed at Wave 3.

Table shows row %.

Appendix Table C.11 Additional scores in the Strengths and Difficulties Questionnaire (averages)

Additional score	Min	Max	Mean	Median	SD	Unweighted base	Weighted base
Cooperation	0	10	7.1	7	1.78	2,558	2,556
Behavioural self-regulation	0	10	6.9	7	1.79	2,550	2,544
Emotional self-regulation	0	10	5.4	6	1.61	2,553	2,549

Base: All participants interviewed at Wave 3.

Appendix Table C.12 Naming vocabulary raw scores, by demographics (averages)

Income	Mean	Median	Unweighted base	Weighted base
Under £10,000	16.9	18	250	303
£10,000 to £19,999	16.6	18	437	483
£20,000 to £29,999	18.0	20	437	437
£30,000 to £39,999	18.6	20	361	337
£40,000 +	20.4	21	799	716
Mother's qualifications	Mean	Median	Unweighted base	Weighted base

Masters degree/ Doctorate/ NVQ 5 - 6/ BTEC 7 - 8	20.1	21	372	341
Honours Degree/ NVQ 4*/ BTEC 6	19.5	21	498	453
Foundation Degree or Cert Ed/ NVQ 4/ BTEC 4-5	19.1	20	267	251
A-level/ NVQ 3/ BTEC 3	18.5	20	454	447
GCSE A*-C/ NVQ 2/ BTEC 2	18.2	20	484	529
GCSE D-F/ NVQ 1/ BTEC 1	15.8	18	108	128
No qualifications	13.1	14	114	131
Household type	Mean	Median	Unweighted base	Weighted base
Couple households	18.4	20	1,960	1885
Lone parents	18.0	20	438	506
Household economic status	Mean	Median	Unweighted base	Weighted base
Working	18.7	20	2,060	1992
Not working	16.2	18	338	399

Base: All children who completed both BAS III tests at Wave 3.

Appendix Table C.13 Picture similarities raw scores, by demographics (averages)

Income	Mean	Median	Unweighted base	Weighted base
Under £10,000	14.5	15	250	303
£10,000 to £19,999	14.2	15	437	483
£20,000 to £29,999	15.4	16	437	437
£30,000 to £39,999	15.5	16	361	337
£40,000 +	16.9	17	799	716
Mother's qualifications	Mean	Median	Unweighted base	Weighted base
Masters degree/ Doctorate/ NVQ 5 - 6/ BTEC 7 - 8	17	17	372	341
Honours Degree/ NVQ 4*/ BTEC 6	16.2	17	498	453
Foundation Degree or Cert Ed/ NVQ 4/ BTEC 4-5	15.7	16	267	251

A-level/ NVQ 3/ BTEC 3	15.6	16	454	447
GCSE A*-C/ NVQ 2/ BTEC 2	15.3	16	484	529
GCSE D-F/ NVQ 1/ BTEC 1	12.9	14	108	128
No qualifications	13.2	15	114	131
Household type	Mean	Median	<i>Unweighted base</i>	<i>Weighted base</i>
Couple households	15.7	16	1,960	1885
Lone parents	14.8	15	438	506
Household economic status	Mean	Median	<i>Unweighted base</i>	<i>Weighted base</i>
Working	15.8	16	2,060	1992
Not working	13.9	15	338	399

Base: All children who completed both BAS III tests at Wave 3.



Department
for Education

© NatCen Social Research 2015

Reference: DFE-RR434

ISBN: 978-1-78105-531-1

The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education.

Any enquiries regarding this publication should be sent to us at:

Michael.Dale@education.gsi.gov.uk or www.education.gov.uk/contactus

This document is available for download at www.gov.uk/government/publications