



Understanding lives –
now and for the future

Birth Component Pilot: Face-to-face fieldwork

EDITORS

Carol Dezateux
Peter Elias

AUTHORS

Ipsos MORI

Forward

Life Study, a new and multidisciplinary birth cohort for the UK, was developed by the Life Study scientific leadership team together with experts from a wide range of disciplines drawn from the biomedical, clinical and social science research communities who formed part of a wider affiliated scientific network. It was designed to reflect the key research themes of the study, capitalise on the unique opportunities afforded, and to enable a wide range of research questions and policy issues relevant to children to be explored.

The design of Life Study incorporated two integrated yet methodologically distinct components – the recruitment of pregnant women to the study in the second trimester of their pregnancy via hospital-based centres (the pregnancy component) and a national probability sample of babies at the corrected postnatal age of six months, identified from linked NHS/birth registration records held by the UK national statistical authorities (the birth component).

To progress the birth component, the research team at UCL tendered for fieldwork assistance. Ipsos MORI won this competitive tendering process and were duly appointed to undertake work associated with a pilot study for the birth component survey, collecting information from the mothers and fathers of babies, selected from birth registration records in England, Wales and Scotland to participate voluntarily in the study. Ipsos MORI worked closely with the Life Study team from the date of their appointment in December 2014 until December 2015.

Three reports from Ipsos MORI form part of the preparatory work undertaken for the Life Study birth component. This report focuses on the face-to-face fieldwork for the pilot, including interviewer briefing procedures. Other reports describe design of the sample and the collaboration with the statistical authorities in this process of drawing a sample of mothers for participation in the pilot¹, and qualitative work with lone mothers, exploring options for contacting non-resident fathers².

The pilot study and associated activities demonstrate emphatically that an ‘opt-in’ approach, whereby mothers are invited by the statistical authorities to participate before their names and addresses are released to the researchers, is no longer an option. The identification of an appropriate legal gateway for an ‘opt-out’ approach (the option to refuse to participate when approached by researchers) is now of paramount importance.

A second important feature of the pilot was that it tested a process through which birth registration records could be selected and linked to the equivalent NHS record, utilising information on prematurity to ensure interviews with mothers could take place when the

¹ <http://discovery.ucl.ac.uk/1485698/>

² <http://discovery.ucl.ac.uk/1485696/>

child was at the same developmental age. But it is not just the sampling procedures that underpin the value of this work. A new technique for the integration of a database management system used for the construction of questionnaires with the scripting of questionnaires for use by interviewers, proved the accuracy and efficiency of this approach to the design and management of questionnaires. An experimental design to the contact made with potential participants showed how a more engaging design can enhance participation. The qualitative work reveals how important it is to gain the confidence of lone mothers when attempting to engage non-resident fathers with the study.

The Life Study Scientific Steering Committee (members listed below) is responsible for the birth component, having approved its final design and piloting.

Professor Peter Brocklehurst
Professor Simon Burgess
Professor Carol Dezateux
Professor Peter Elias
Professor Paul Elliott
Professor Alan Emond

Professor Hilary Graham
Professor Frank Kelly
Professor Kathleen Kiernan
Professor David Leon
Professor Diane Reay
Professor Anna Vignoles (chair)

Acknowledgements

The Life Study team would like to record its appreciation for the technical and managerial assistance which was so ably provided by Ipsos MORI. While many people within this organisation contributed to the work detailed in this report, Nick Gilby and Sam Clemens warrant special mention. At all times they responded efficiently to our queries and advised on matters relating to the design and conduct of the pilot study and associated qualitative work in a most professional manner.

The authors acknowledge with gratitude the contributions made by members of the many advisory and working groups and individual experts to the development of the Life Study, all of whom gave generously of their time, expertise and advice. We would also to thank all who contributed to the opt-in study, the pilot study and to the qualitative research with lone mothers, those who worked tirelessly within the Life Study team, and also the members of the Scientific Steering Committee. We are particularly grateful for the cooperation and assistance we received from the staff at the Office for National Statistics and National Records Scotland. Without their help and expertise, sampling for a pilot study of this complexity could not have been undertaken

Carol Dezateux
Peter Elias

May 2016

This work was supported by the Economic and Social Research Council [Grant numbers ES/J007501/1, ES/L002507/1, ES/L002353/1, ES/L012871/1, ES/N007549/1] and the Nuffield Foundation.

The Nuffield Foundation is an endowed charitable trust that aims to improve social well-being in the widest sense. It funds research and innovation in education and social policy and also works to build capacity in education, science and social science research. The Nuffield Foundation has funded this project, but the views expressed are those of the authors and not necessarily those of the Foundation. More information is available at www.nuffieldfoundation.org.



ISSN 2398-1652. DOI: 10.14324/000.wp.1485697

URL: <http://discovery.ucl.ac.uk/1485697/>



Life Study Working Papers are licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/)

November 2015

Life Study: Birth Component

Pilot: Face-to-face fieldwork



Contents

Acknowledgements.....	
Part A: Before fieldwork	1
1 Introduction	1
1.1 Background	1
1.2 The pilot.....	3
1.3 The opt-in approach.....	3
1.4 Objectives of the pilot.....	4
2 Sampling.....	6
2.1 Sampling procedures.....	6
2.2 The opt-in fieldwork.....	7
2.3 The face-to-face sample for the pilot.....	7
2.4 The issued face-to-face sample.....	8
3 Instrument development	9
3.1 Computed Assisted Interviewing (CAI) scripts	9
3.2 Development of survey materials.....	9
3.3 Ethics approval.....	11
4 Interviewer training.....	12
4.1 The practice interview	12
4.2 The briefing.....	12
4.3 The interviewer manual.....	13
Part B: During fieldwork.....	15
5 Summary of the interviewer task	15
5.1 Delivering the advance mailing	15
5.2 Eligibility rules.....	15
5.3 Overview of the interviewer assignment.....	16
5.4 The mother interview.....	16
5.5 The resident partner interview.....	19
5.6 The non-resident father interview.....	20
Part C: After fieldwork.....	23
6 Response.....	23
6.1 Sample coverage.....	23
6.2 Response	24
6.3 Call analysis	28
6.4 Quality of the opt-in information	30
6.5 Sample composition	31
6.6 Interviewer feedback.....	31
6.7 Quality considerations.....	33
7 The consent process	34
7.1 Reconciliation of consent forms and interview consent data	34
7.2 Interviewer feedback about the consent process	36

7.3	Interviewer feedback about the information linkage process	37
7.4	Quality considerations.....	40
8	The interview	41
8.1	Interviewer perceptions of the materials.....	41
8.2	Overall interview length.....	42
8.3	Analysis of module lengths	46
8.4	Main interview 1.....	47
8.5	Self-completion.....	52
8.6	Main interview 2.....	55
8.7	Non-resident fathers	57
8.8	The ASQ-3 questionnaire.....	59
8.9	Other issues.....	60
8.10	Quality considerations.....	60
9	Conclusions.....	62
9.1	Recommendations.....	66

Acknowledgements

This work was supported by the Economic and Social Research Council [Grant numbers ES/J007501/1, ES/L002507/1, ES/L002353/1, ES/L012871/1, ES/N007549/1] and the Nuffield Foundation [Grant numbers CPF 41196, KID 42046.]

Creative Commons Licence and ISSN/DOI to be added

Part A: Before fieldwork

1 Introduction

1.1 Background

A baby's development is shaped by many influences, from the most immediate ones such as his/her parents, wider family and home environment; to the local environment, schools and services; as well as more distant influences such as government policies.

The overall aim of Life Study was to understand how the family, social and physical environment in very early life influences child development, health and wellbeing in the children being born in the UK today.

Life Study intended to follow up to 80,000 UK babies and their families, with three-quarters of this number to be followed from pregnancy onwards, examining the relationship with social, economic and environmental influences. Collecting information at different time points in a child's early life would allow researchers to identify important pathways to health and wellbeing and the timing and sequence of different events and experiences early in life. As well as mothers, Life Study also involved fathers or other partners, recognising their important role in a child's development and later life.

Funding for the part of Life Study described in this report (the Birth Component) was provided through the UK Government Department of Business Innovation and Skills (BIS) Large Facilities Capital Fund (LFCF), with additional contributions from the Economic and Social Research Council (ESRC), Medical Research Council (MRC) and University College London (UCL). Funding for the work with resident and non-resident fathers and partners was provided by the Nuffield Foundation.

Life Study had an integrated design comprising two samples of the population – one recruited in pregnancy, referred to as the Pregnancy Component, and the other recruited after birth, referred to as the Birth Component. Following a tendering competition managed by UCL, in December 2014 Ipsos MORI was appointed as the fieldwork contractor to deliver the first two waves of the Birth Component.

The overall design of the Birth Component was that a nationally representative sample of c. 20,000 children living throughout the UK would be recruited into Life Study via birth registration records, with mothers and fathers/partners interviewed when the sampled baby was six months old (six-month interview) and mothers interviewed again when the sampled baby was one year old (12-month interview). The intention was to follow babies throughout their lives with future waves of Life Study being commissioned at a later date.

In July 2015 the ESRC and the MRC agreed that their funding for Life Study would be discontinued from early 2016 due to the serious challenges encountered in recruiting participants. This decision was announced publicly on 22 October 2015. The work described in

this report was already underway prior to this decision and has progressed to completion in December 2015.

1.2 The pilot

During the tendering process Ipsos MORI proposed a large-scale pilot of the six-month and 12-month waves of the Birth Component before the main stage was commissioned. Aside from the general desirability of extensive piloting before beginning a large-scale cohort study, there was uncertainty about the viability of the new sampling frame and opt-in approach Life Study proposed to use for the Birth Component.

The Child Benefit Register, which is held and maintained by Her Majesty's Revenue and Customs (HMRC), used to be the default sampling frame to obtain samples that involved children and young people in the UK. Indeed it was the sampling frame used for the UK's most recent cohort study – the Millennium Cohort Study. However, on 7 January 2013, the rules for claiming child benefit changed and the government estimated that around 11 per cent of higher income families would no longer be eligible. Therefore, any sample for a cohort study based on Child Benefit records might be biased away from higher-income households.

UCL's specification required the Birth Component to use birth registration records as the sampling frame. UCL entered into discussions with the three Statistical Authorities – the Office for National Statistics (ONS), National Records of Scotland (NRS), and the Northern Ireland Statistics and Research Agency (NISRA). The ONS and NRS agreed to take part in the pilot. NISRA indicated that they could not participate in a pilot study prior to July 2015 and would only have capacity to undertake an opt-in process over a two month timeframe, not a four month timeframe as we envisaged. As a result NISRA did not take part in the pilot.

1.3 The opt-in approach

By law all births in England, Wales and Northern Ireland must be registered within 42 days of the child being born. In England and Wales, the General Register Office, which is part of Her Majesty's Passport Office, is responsible for collating birth registrations and it shares birth registration information with the ONS on the basis that it is not disclosed to anyone in an identifiable format without the individual's specific permission. In Scotland, all births must be registered within 21 days of the child being born by a Registrar of Births, Deaths and Marriages. NRS are responsible for collating birth registrations.

In many surveys which use Child Benefit Records, an "opt-out" approach is used. This is usually carried out by post and is an opportunity for parents to remove themselves from the sample – effectively, it is in lieu of seeking permission from parents for their details to be passed onto a fieldwork contractor. The Life Study team were informed that, under the Statistics and Registration Service Act 2007, birth registration records can currently only be used for a research study if an "opt-in" approach is used. Accordingly, an opt-in approach was developed for the Life Study Birth Component. In this approach, potential respondents are notified that a study is taking place, and have to give consent for their contact details to be passed to a fieldwork contractor before they can be approached.

Opt-out approaches have been used successfully for previous cohort studies such as the Millennium Cohort Study; using an opt-in approach was therefore a departure from the usual design and hence a pilot was required to test its feasibility fully.

As this opt-in approach was untried, and as the Infant Feeding Survey 2010 had successfully used a questionnaire as the opt-in instrument, Ipsos MORI proposed that an experiment was carried out during the opt-in approach. Mothers of sampled babies were randomly allocated a two-page or eight-page opt-in questionnaire, depending on whether the serial number of the sampled baby was an odd or even number.

While the two-page questionnaire asked mothers to participate and send their contact details to Ipsos MORI, it was decided that the eight-page questionnaire should, in addition, comprise as its core two instruments which had been validated in other studies: the Brief Infant Sleep Questionnaire (BISQ) and the Baby Eating Behaviour Questionnaire (BEBQ).

1.4 Objectives of the pilot

The primary objective of the pilot of the Birth Component was to test response rates and all survey processes by achieving a minimum of 400 interviews with mothers of babies born over two months. In the event we achieved 100 complete interviews with mothers, and two partial interviews with mothers (where not all elements had been completed). Of the 102 mothers, 99 had a resident partner who was eligible for Life Study; 49 complete interviews were achieved with resident partners. We were unable to interview any of the three non-resident fathers.

This report covers the face-to-face fieldwork of the pilot; a separate report looked at the sampling and the opt-in approach which preceded the face-to-face fieldwork. This report relies on a number of data sources:

- The interview data including timestamps.
- The paradata generated by Ipsos MORI's Electronic Contact Sheet (ECS) system.
- Feedback received from interviewers in a de-briefing held at Ipsos MORI's offices at Thomas More Square, London, on 3 November 2015, as well as written feedback provided via an extensive feedback form issued to interviewers during the pilot fieldwork.
- Observations made by a member of UCL's Life Study team who attended two interviews (accompanying an Ipsos MORI interviewer).

The objectives relating to the face-to-face fieldwork were as follows:

- Ensuring that the opted in cases could be batched up and passed to interviewers in a timely manner at the end of the opt-in period (including any necessary sub-sampling).
- Ensuring that we could send the interviewers the information that they needed about each case to help them when making contact and scheduling appointments.
- Assessing training of interviewers and whether this was effective in equipping them to do what was required.
- Assessing response to the study in the field.

- Gaining feedback on how the interview works within a home setting and highlighting any issues that caused problems.
- Assessing response among partners and how the partner interview worked in practice.
- Gauging the length of the interview (both main and partner).
- Checking the questionnaire was working as it should (routing made sense etc.).
- Assessing the number of visits required for a full response.
- Assessing the length of the fieldwork period and whether this was sufficient to allow for full call backs and chasing.
- Assessing the level of movers, and how effective tracing attempts were.
- Checking all administrative procedures (ECS and return of work) were working.
- Checking data returned were as expected (routing checks, basic edit checks).
- Ensure the processes for passing data to UCL worked effectively.
- Obtaining feedback from (some) participants to assess their views on taking part, their levels of engagement and their ideas for any improvements or changes.
- Gaining feedback from interviewers on the fieldwork processes and the interview, and whether there were suggested improvements and changes.

2 Sampling

The agreed approach for the Birth Component was that the Statistical Authorities would sample babies from birth registration records and recruit mothers via the opt-in approach. Subsequently Ipsos MORI interviewers would attempt to interview those mothers that opted-in, along with (where applicable) resident partners or non-resident fathers.

2.1 Sampling procedures

A full description of the sampling procedures for the pilot is included in our separate report describing the opt-in fieldwork. A brief description is provided here to familiarise the reader with the key points.

The pilot sample was selected in a purposive manner (that is, not to be nationally representative), designed to generate sufficient sample sizes over the proposed pilot sampling period. It was intended that the sample for the first two months would be used for piloting the procedures for interviewing mothers, resident partners and non-resident fathers; and two further months would be used for piloting the procedures for the non-resident fathers (although we would need to interview lone mothers¹ to establish the identity of the non-resident fathers).

Ipsos MORI agreed with UCL that the target number of interviews for the pilot would be 480 mothers (400 mothers in the first two months; 80 in the final two months), 220 partners (first two months only) and 80 non-resident fathers (across all four months). Construction of the pilot areas was undertaken by Ipsos MORI, using counts of live births for each postcode sector for the years 2011 to 2013 supplied by the three Statistical Authorities (the ONS, NRS and NISRA).

We decided to aim for a target number of 25 mothers in total over the two months to allocate to each interviewer for the pilot. This implied we needed to construct 32 pilot areas for interviewers to work in. The potential pilot areas were built up around the home addresses of the available interviewers to save on travel costs. We selected 32 pilot areas that gave a good geographical spread (22 in England and five in each of Wales and Scotland).

In England and Wales, it was agreed that, where babies were born more than one month prematurely, the sampling reference date needed to be based on the expected delivery date rather than the actual date of birth. The reason for this was to facilitate the study of the impact of developmental age on child development. In Scotland the sampling reference date was actual date of birth because NRS were unable to use the expected date for the sampling reference date in the pilot.

For each monthly sample run, all babies registered as living in the selected pilot areas were selected for inclusion in the pilot, in accordance with the procedure outlined above.

¹ We use the term "lone mothers" throughout this report to mean mothers who were not living with someone in their household as a couple. A lone mother might or might not have a (non-resident) partner, and any such partner might or might not be the natural father of the cohort baby.

The role of the Statistical Authorities in the pilot was to draw the sample of babies on our behalf, and administer the opt-in approach.

2.2 The opt-in fieldwork

The opt-in fieldwork began on 26 May 2015 and lasted until 2 October 2015. It was apparent from an early stage that the response rate to the opt-in approach was much lower than anticipated.

Overall 18.9 per cent of mothers invited to opt-in returned a questionnaire. A very small proportion refused directly to Ipsos MORI (0.2%) and 2.2 per cent had gone away. If one defines net response as those opt-in *and* providing useable contact details, then the net opt-in response rate was 15.4 per cent (735 valid responses).

Ipsos MORI prepared a paper analysing the progress of the Birth Component in detail and, among other things, recommended cancelling the fourth sample run and carrying out a more limited pilot, while attempts were made to access other sampling frames which would result in a viable data collection method for the Birth Component. At a meeting on 8 July 2015, UCL agreed with Ipsos MORI's proposal to cancel the fourth sample run and Ipsos MORI informed the Statistical Authorities accordingly. At that meeting it was decided to issue mothers opting-in from six of the 32 pilot areas only for pilot fieldwork, as it looked at that stage as if we would have insufficient numbers of mothers opting-in in the other pilot areas.

2.3 The face-to-face sample for the pilot

It was decided to issue opting-in mothers living in six of the 32 pilot areas to interviewers. Areas experiencing relatively good opt-in response rates were selected in mid-July 2015. A cut-off date of 28 August 2015 was set for inclusion of opting-in mothers in the face-to-face sample.

2.4 The issued face-to-face sample

Table 2.1 shows the number of opting-in mothers issued to interviewers by pilot area, along with some demographic information available from the opt-in questionnaire.

Table 2.1: Number of opting-in mothers by pilot area and selected answers to the opt-in questionnaire

	Total		Pilot area					
			Area A	Area B	Area C	Area D	Area E	Area F
	n	%	n	n	n	n	n	n
Total	154		28	21	30	24	18	33
First sample run	63	41%	12	7	13	10	7	14
Second sample run	47	31%	8	7	6	6	6	14
Third sample run	44	29%	8	7	11	8	5	5
Mothers reporting a single baby	150	97%	26	20	29	24	18	33
Mothers reporting twins	2	1%	1	0	1	0	0	0
Mothers reporting triplets	1	1%	1	0	0	0	0	0
Missing information	1	1%	0	1	0	0	0	0
Mothers reporting a baby boy	76	49%	16	8	15	13	9	15
Mothers reporting a baby girl	74	48%	12	13	14	11	9	15
Missing information	4	3%	0	0	1	0	0	3
Not living as a couple	9	6%	0	2	2	1	2	2
Living as a couple	139	90%	27	19	26	23	16	28
Missing information	6	4%	1	0	2	0	0	3

3 Instrument development

3.1 Computed Assisted Interviewing (CAI) scripts

UCL were responsible for development of the Computed Assisted Interviewing scripts. Once questions had been formulated, these were entered into a Structured Query Language (SQL) database which was transferred to Ipsos MORI to enable these data to be used in the scripting process. This proved extremely useful and greatly minimised the number of potential scripting errors which might arise from typographical errors or unclear specifications.

Ipsos MORI's involvement in the questionnaire design process was limited to a memorandum sent to UCL on 13 March 2015, following Ipsos MORI's study of the proposed Birth Component instruments for the six-month visit (with the exception of the instrument for the non-resident fathers). The memorandum focused on the order in which modules were to be administered, the balance of the interview between interviewer administration and self-completion modes, and the appropriateness of measures for interviewer administration and self-completion modes.

Ipsos MORI advised that the balance of the interview should as far as possible be tilted towards interviewer administration at the expense of the self-completion mode, that questions that were sensitive in nature should be asked near the end of the questionnaire if possible, and there should be a presumption that questions were asked by the interviewer unless a question was sensitive or susceptible to social desirability bias. UCL accepted this advice and some amendments were made.

3.2 Development of survey materials

A great many survey materials were required for the Birth Component Study. Many of the materials had been designed by UCL prior to the commissioning of the Birth Component. Ipsos MORI were afforded the opportunity to make comments on the text of materials and a small number of changes were made.

The survey materials are listed in the following table, along with their purpose:

Document	Purpose
All respondents	
Appointment cards	To leave with respondents when the interviewer made an appointment at a face-to-face visit
GP letter	To leave with respondents who may wish to inform their GP they have taken part in Life Study
HFEA form	To leave with respondents who had help conceiving the cohort baby and who consented to the interviewer knowing this
Mother	
Opt-in questionnaires (two- and eight-pages)	This is for the interviewers' information but was intended to be used if the mother said she did not understand how Ipsos MORI obtained her contact details
Advance letters for the mother (spares)	These advance letters were posted along with the Participant Information Sheet to the mother before the interviewers made contact
Advance letter for the mother (Laminated)	This advance letter could be used on the doorstep to show the mother
New baby? Congratulations take part in Life Study	This leaflet was enclosed with the advance letter to the mother during the opt-in fieldwork
Participant Information Sheet	This booklet for mothers and resident partners taking part was sent with the advance letter for the mother to read before she consented to the interview
Blue consent form	This consent form was used to gain consent for the mother's interview and for information linkage for the mother and baby
ASQ-3 questionnaire	This Ages & Stages Questionnaire (ASQ-3) and instruction sheet were placed with the mother after the interview was complete
Leave behind sheet	This list of potential support services was left behind so that mothers and partners could access them if they felt they needed to
Thank you letter	This was left behind at the end of the mother interview
Non-resident father opt-in letter	This was to be left behind if the mother agreed to forward information about Life Study to the non-resident father
Non-resident father opt-in form	This was to be left behind if the mother agreed to forward information about Life Study to the non-resident father
Change of address card	This was left behind at the end of the mother interview
Resident partner	
Participant Information Sheet	This information for mothers and resident partners taking part was for the resident partner to read before he/she consented to the interview
Green consent form	This consent form was used to gain consent for the resident partner's interview and for information linkage
Leave behind sheet	This list of potential support services was left behind so that mothers and partners could access them if they felt they needed to
Thank you letter	This was left behind at the end of the resident partner interview (if not already given to the mother)

Document	Purpose
Non-resident partner	
Advance letters for the non-resident fathers	These advance letters were to be posted to the non-resident father if the interviewer intended to visit him
Advance letter for the non-resident father (Laminated)	This advance letter could be used on the doorstep to show the non-resident father
Participant Information Sheet	This information for non-resident fathers taking part was sent with the advance letter for the non-resident father to read before he consented to the interview
Yellow consent form	This consent form was to be used to gain consent for the non-resident father's interview and for information linkage
Leave behind sheet	This list of potential support services was left behind so that non-resident fathers could access them if they felt they needed to
Thank you letter	This was to be left behind at the end of the non-resident father interview
Change of address card	This was to be left behind at the end of the non-resident father interview

3.3 Ethics approval

Life Study was undertaken within an *Ethics and Information Governance Framework* developed by UCL. Section 7.1 of the Framework states that:

The core scientific protocol and operational procedures of the Life Study resource, as well as proposed uses of it, will have approval from appropriate ethics committees in accordance with guidance from relevant bodies (such as the Health Research Authority) and with relevant provisions (such as the Research Governance Frameworks of England, Wales, and Scotland; Governance Arrangements for Research Ethics Committees; and Standard Operating Procedures for Research Ethics Committees in the United Kingdom).

Accordingly all survey documents were submitted to and approved by the NHS London – City and East Research Ethics Committee (REC reference 12/LO/1492).

4 Interviewer training

All interviewers selected to work on the pilot of the Birth Component were experienced interviewers, with four of the five having also worked on the most recent sweep (sweep six) of the Millennium Cohort Study. The interviewer training for the pilot comprised three elements – a practice interview, a face-to-face briefing and a detailed interviewer manual.

4.1 The practice interview

The purpose of the practice interview was two-fold: for interviewers to familiarise themselves with the questions and interviewing procedures, but also to familiarise themselves with the amendments we had made to our Electronic Contact Sheet system which were particular to Life Study.

The practice survey scripts were identical to the survey scripts the interviewers would use in the pilot. Interviewers were issued with 10 practice sample cases, as well as practice instructions. In addition, we provided interviewers with a description of six possible scenarios to enable them to practice using the scripts in an efficient manner. Each scenario contained a range of information about the household; such as the name of household members, their relationships, ages, other children outside the household, and whether their parents were alive. This enabled interviewers to see how the scripts were routed, how the text fills worked, and to see the full variety of topics covered in the interview.

4.2 The briefing

The briefing of pilot interviewers was held at Ipsos MORI's offices at Thomas More Square, London, on 7 September 2015.

The briefing was delivered by the Ipsos MORI team. Researchers from the Life Study team at UCL also attended and were able to answer questions from interviewers during the day. The initial session, *About Life Study*, was delivered by the Deputy Director of Life Study, Professor Peter Elias, who was also the Director of the Birth Component.

The agenda for the briefing is set out below. The briefing covered all aspects of the study procedures, and was mainly delivered as a presentation. Ipsos MORI demonstrated the survey materials to the interviewers, as well as showing them the survey materials and how they should be used. Further, there was an opportunity for the interviewers to practice using the survey instruments as interviewers were asked to carry out a practice interview during the briefing.

Time	Duration (hh:mm)	Session
10:00	00:30	Arrival and coffee
10:30	00:15	About Life Study (UCL)
10:45	00:30	The sample
11:15	01:00	Your task
12:15	00:45	Lunch
13:00	00:15	The Electronic Contact Sheet
13:15	00:30	Securing household participation and participant engagement
13:45	01:15	The instruments
15:00	00:15	Break
15:15	00:30	The instruments (continued)
15:45	00:35	Ethics, confidentiality, safeguarding and the consent process
16:20	00:10	Field admin

4.3 The interviewer manual

As the field procedures for Life Study were complex, and because interviewers needed to be fully informed about a wide range of issues prior to starting their assignment, Ipsos MORI decided to produce a detailed interviewer manual giving a comprehensive overview of the Birth Component assignment. This is a key document in many large-scale studies and an important instrument for interviewer training. The manual was 90 pages in length, and covered the following topics:

- 1 **About Life Study.** This covered an overview of Life Study and its aims, Life Study's funding and governance, information about birth cohort studies and a description of the key features of Life Study.
- 2 **The sample.** This covered the sampling frame, birth records, sample selection, the opt-in fieldwork and rules about sample member eligibility.
- 3 **The interviewer task.** This gave a brief overview of making contact and tracing, the interviews with mothers, resident partners and non-resident fathers, as well as a description of the documents and envelopes in the interviewer pack.
- 4 **Electronic Contact Sheet.** This gave an overview of the Electronic Contact Sheet (ECS), how interviewers should manage their assignment with the ECS, as well as other functionality such as how to view a case, add information about their progress, how to

access the Dimensions interviewing programme², how to finalise a case and record outcomes, and other useful information.

- 5 **Securing household participation and respondent engagement.** This covered securing household participation, making initial contact with the mother, contacting respondents, the calling pattern, making appointments, dealing with refusals, cultural sensitivity, how to engage respondents with the self-completion script, and procedures for large print documents.
- 6 **The instruments.** This gave interviewers an overview of the instruments, explained how the showcards were to be used, and then set out the key questions in each module. This was important as questions in some modules would affect what questions respondents were asked later in the interview or affect the text substitutions many questions required. The manual also alerted interviewers to questions where they needed to take particular care to explain the concepts, or because these questions might be less familiar to them.
- 7 **Ethics, confidentiality, safeguarding and the consent process.** This covered the importance of ethics, confidentiality, disclosure of harm, respondent well-being, interviewer safety protocols, and the consent process.
- 8 **Field administration.** This covered field office contacts, key dates, return of work and reporting and details of the “average” assignment.

² Dimensions is the name of the software used to programme and administer the instruments. At the time of the pilot Dimensions was owned by IBM SPSS Data Collection but is now owned by Unicom.

Part B: During fieldwork

5 Summary of the interviewer task

5.1 Delivering the advance mailing

Ipsos MORI administered the advance mailing from the office. Letters were despatched on 3 September 2015, ensuring that interviewers could start work straight away after the briefing on 7 September 2015.

5.2 Eligibility rules

To be eligible for the pilot a mother had to:

- Be aged 16+ at date of birth of the selected baby and be its biological mother.
- Be living in private residential accommodation.
- Have legal responsibility for the selected baby.
- Not be living on the Isles of Scilly or (in Scotland) north of the Caledonian Canal or on the islands.

To be eligible for the pilot a resident partner had to:

- Be aged 16+ at date of birth of the selected baby.
- Be living with the mother or *resident*. The resident partner had to consider the mother's address as their main residence. If the mother's partner considered both the mother's address and another address to be main residences, the interviewer was instructed to consider the mother's partner as the resident partner.

Many cohort studies to date have included interviews with fathers who live with their children, but it is rare for studies to include non-resident fathers, and UCL were very interested in including non-resident fathers in Life Study. Data from the first round of the Millennium Cohort Study, where mothers were interviewed when their baby was nine months old, suggests that around 15 per cent of the mothers were not living with the father of their baby at that point. Most of the non-resident fathers were in contact with the mother and baby (58 per cent saw their baby three times a week or more, and only 3 per cent never saw their baby). Therefore, non-resident fathers appear to be playing an important role in the life of the mother and the baby and consequently they were deemed of scientific interest.

The funding for this part of Life Study was provided by the Nuffield Foundation. The inclusion of non-resident fathers meant an adjustment to the sampling design was needed.

To be eligible for the pilot a non-resident father had to:

- Be the biological father of the selected baby.
- Be aged 16+ at date of birth of the selected baby.
- Be living at a different address from the mother, that is, not be resident (as defined above).

5.3 Overview of the interviewer assignment

Each interviewer was issued with a sample of mothers who had “opted in” to Life Study and provided sufficient contact details (their name, their baby's name, and address) for us to attempt a face-to-face interview.

An advance mailing was sent from the Ipsos MORI office, comprising an advance letter and accompanying Participant Information Sheet. As this was the pilot of the baseline wave of the Birth Component, interviewers were asked to follow up this mailing by making contact by personal visits only, not by telephone or email³.

Interviewers were instructed to ask the current householder or neighbours for a forwarding address if they found the mother and baby had moved away. There were no other tracing requirements placed on interviewers.

From the time the sample became available, interviewers had eight weeks to complete the assignment. This was the same fieldwork window planned for the main stage of the study. The design was based on the baseline survey interviews being conducted with mothers of the sampled babies when the babies were between five and seven months old (aged approximately between 22 and 30 weeks). Babies develop rapidly in the early months of life and consequently it is important to have as little variation as possible in the age of the babies at time of interview, to ensure the data about the babies are robust. A two month interviewing window was deemed necessary so that interviewers had sufficient time to complete their assignment and achieve high response rates. It was acknowledged that it was important that the number of interviews conducted with mothers when the selected baby had a corrected postnatal age greater than seven months should be minimised.

Interviewers were asked to make a minimum of six face-to-face visits to each mother, at least one of which must be in the evening, one at the weekend and a further one either in an evening or the weekend. At each address, interviewers were asked to interview the mother first, and afterwards interview any resident partner, or non-resident father, as applicable.

5.4 The mother interview

The key respondent for the study was the selected baby's mother. Interviewers were only permitted to interview the mother if she was still living with the baby.

The first interviewer task was to ensure the mother had read and understood the Participant Information Sheet. This gave further detail about Life Study than contained in the leaflet they

³ On other well-established birth cohort studies interviewers are often permitted to contact respondents with a very high propensity to respond by telephone.

received as part of the opt-in fieldwork process. The Participant Information Sheet complied with the undertakings given in Life Study's *Ethics and Information Governance Framework*.

Interviewers were asked to secure consent from the mother. In considering whether a mother could provide consent interviewers were required to take account of the four principles for assessing an individual's capacity to make decisions as set out by the Royal College of Psychiatrists⁴ in their guidance and incorporated into Life Study's *Ethics and Information Governance Framework*. An individual can be considered to have capacity to provide consent if they can:

- Understand the information provided;
- Retain information;
- Weigh up the benefits and harms, and;
- Communicate their response clearly.

All interviewers were issued with blue consent forms to use during the mother interview. Interviewers were required to write the baby's name and date of birth at the top of the form and then ask the mother to read the first page and initial each box. Interviewers then asked the mother to write her name, sign and date the first page. Interviewers then did the same and entered the consent form number in the Dimensions interviewing programme.

The mother interview was the first thing the interviewers had to do in every household and had to be completed before a resident partner could be interviewed, or (where applicable) a non-resident father could be interviewed (at a separate address). The mother interview established who was living in the household and generated a summary of all the scripts interviewers needed to complete as well as identifying the correct respondents to interview.

The mother interview was intended to be around 65 minutes long on average, although it was anticipated that the length would vary considerably depending on the answers the mother gave. The interview was comprised of three scripts:

- **Main interview 1:** Intended to be around 20 minutes in length where the interviewer asked the mother questions;
- **Main self-completion:** Intended to be around 25 minutes in length (where the mother completed the questions using the interviewer's tablet);
- **Main interview 2:** Intended to be around 20 minutes in length where the interviewer asked the mother questions.

At various points in the Main interview 1 and Main interview 2 scripts the interviewer was required to ask the mother for permission to link administrative records held about her and the cohort baby by various public bodies to her survey answers. These linkage consents were

⁴ The Royal College of Psychiatrists provides guidance on assessing capacity to make healthcare-related decisions in *Mental Capacity and the Law*. This is available at: <http://www.rcpsych.ac.uk/expertadvice/problems/mentalcapacityandthelaw.aspx>. Life Study | Version draft 1 | Internal / Client Use Only | This work was carried out in accordance with the requirements of the international quality standard for Market Research, ISO 20252:2012, and with the Ipsos MORI Terms and Conditions which can be found at <http://www.ipsos-mori.com/terms>. © Ipsos MORI 2015.

collected at relevant points in the interview (for example consent for linkage to health records was collected after questions about health). These consents were collected on the consent form, where interviewers needed to ask the mother to initial the relevant part of the form for her and for each cohort baby.

At the end of Main interview 2, interviewers were asked to do the following:

- 1 If the resident partner or non-resident father identified in the mother interview was not physically present in the household, or they were not capable of doing an interview, interviewers collected information about the resident partner/non-resident father in the partner proxy module. If there was both a resident partner and non-resident father eligible for that household the partner proxy module was asked about the resident partner only.
- 2 Collect contact details for the mother, as it was recognised that details provided during the opt-in fieldwork might be wrong or incomplete.
- 3 Interviewers were asked to make some observations about the interview, such as whether it was carried out in any minority languages⁵, and for any comments.
- 4 Interviewers were asked to place the Ages & Stages Questionnaire (ASQ-3) (one for each cohort baby) and to ask the mother to return it to us in a reply paid envelope. Interviewers were told not to remain in the household while the ASQ-3 was completed, unless they were carrying out a resident partner interview.
- 5 If the baby had a non-resident father (identified during the mother interview) interviewers were asked to obtain permission from the mother to approach him for interview, and to elicit her view on the best way of doing so (we envisaged the mother might provide the interviewer with contact details, or the mother might agree to forward an invitation on our behalf).
- 6 Interviewers were required to leave with the mother a sheet containing some information about organisations which might be able to help mothers who might be facing a number of difficulties touched on during the interview. They were also asked to leave a thank you letter from UCL, and a change of address card, in case the mother moved house between the interview and the intended next stage of the pilot (a web or telephone interview when the baby was twelve months old).
- 7 In some cases, a mother said in the self-completion script that she had assistance in conceiving the cohort baby and consented to the interviewer knowing that. In these cases the interviewer was so informed by the interviewing programme, and asked to hand the mother an HFEA CD form in a discreet manner. If she returned the form to us in the

⁵ Ipsos MORI has the capacity to carry out interviews in minority languages. There was no requirement in the pilot for interviews to be carried out in minority languages because of its small-scale and accordingly no translations of the self-completion section or documents were made. Interviewers were told that if they could personally speak a minority language as preferred by the respondent then it was acceptable to carry out the interview in that language (bearing in mind that the self-completion section had to be completed by the respondent in English). No household interpreters were permitted due to the number of sensitive items in the instruments.

reply paid envelope, this would enable the Life Study team to link Human Fertilisation & Embryology Authority records to her survey answers.

- 8 We recognised that some respondents may want to tell their GP about the questions they were asked during the interview. Interviewers were provided with a letter to give them which they could show to their GP or forward on to them.

5.5 The resident partner interview

We anticipated that around 85 per cent of mothers would be living with a resident partner. The Dimensions interviewing programme identified the presence of any resident partner at the start of the mother interview.

Interviewers were asked to interview the resident partner straight after completing the mother interview if possible. If this was not possible, interviewers were instructed to make an appointment with the resident partner personally to interview them at a later date, or to ask the mother the best time to call back to secure an interview.

If interviewers could not conduct a resident partner interview during their visit to interview the mother, or could not make an appointment, interviewers were permitted to telephone the household to make an appointment for the resident partner interview once the mother had been interviewed.

Interviewers were instructed that where the mother had a resident partner and the baby had a non-resident father, only a resident partner interview was permitted.

The interviewers were told to follow the same procedures as for the mother interview, described in section 5.4, with the following exceptions:

- The consent forms for the resident partner interviews were green. The resident partner gave permission to link administrative records held about themselves only, not the cohort baby, to survey answers.
- The resident partner interview was intended to be around 45 minutes long on average, although it was anticipated that the length would vary considerably depending on the answers the resident partner gave. The interview was comprised of three scripts:
 - **Main interview 1:** Intended to be around 22 minutes in length where the interviewer asked the resident partner questions;
 - **Main self-completion:** Intended to be around 11 minutes in length (where the resident partner completed the questions using the interviewer's tablet);
 - **Main interview 2:** Intended to be around 12 minutes in length where the interviewer asked the resident partner questions.

At the end of Main interview 2 interviewers were asked to do the following:

- Collect contact details for the resident partner, as we did not gather any contact details for the resident partner during the opt-in fieldwork.
- Interviewers were asked to make some observations about the interview, such as whether it was carried out in any minority languages, and for any comments.
- Interviewers were asked to leave resident partners a thank you letter from UCL.
- In some cases, a resident partner who was the natural father of the baby said in the self-completion script that he had assistance in conceiving the cohort baby and consented to the interviewer knowing that. In these cases the interviewer was so informed by the Dimensions interviewing programme, and asked to hand the resident partner an HFEA CD form in a discreet manner. If he returned the form to us in the reply paid envelope, this would enable the Life Study team to link Human Fertilisation & Embryology Authority records to his survey answers.
- We recognised that some resident partners may want to tell their GP about the questions they were asked during the interview. Interviewers were provided with a letter to give them which they could show to their GP or forward on to them.
- Interviewers were asked to ask the mother (if she was present in the household) if she had completed the ASQ-3 yet (if an ASQ-3 had been placed at a previous visit). Interviewers were asked to say that if the ASQ-3 was complete it could be collected by them there and then or returned by post. Section 8.8 describes the ASQ-3 instrument in more detail.

5.6 The non-resident father interview

We anticipated that around 15 per cent of mothers would not be living with the baby's natural father. Regardless of the reason why the mother did not live with the baby's natural father, we wanted to attempt to interview the non-resident father, if the mother knew his identity and she did not have a resident partner. On 23 June 2015 UCL decided that for the pilot interviewers should not attempt a non-resident father interview or a non-resident father proxy interview if there was a resident partner in the household, as the number of families this would cover was likely to be small. UCL intended to review this once the outcomes of the pilot were known.

Interviewers were instructed that the approach to the non-resident father, however made, should only ever be made with the informed consent of the mother. The reason was that the cohort baby was the subject of interest for Life Study and we assumed that the mother would remain the gatekeeper for the cohort baby until the baby grew up and reached age 16 (when they could give consent for their own participation in Life Study). For this reason it was important that we did not alienate the mother, and thus only approach the non-resident father if she agreed.

As some non-resident fathers will live a short distance from the mother while others may live much further away, we instructed interviewers to attempt an interview with a non-resident father only if they considered he lived locally. In the main stage of Life Study non-resident

fathers who did not live locally might have been re-allocated to another interviewer but this was not possible due to the limited scale of the pilot.

Interviewers were given three permitted ways to approach the non-resident father:

- Some non-resident fathers may visit the mother's household regularly to see their baby whether or not they are still in a relationship with the mother. Ideally the interview with the non-resident father would take place at such a visit (this was our recommended approach), but we recognised this would not be possible in all situations. Interviewers were instructed to attempt to interview the non-resident father if he was present at the end of the mother interview. If he was not present interviewers were instructed to ask the mother if they could approach him during a future visit to the mother.
- The mother might agree to forward on an invitation letter and form to take part in Life Study to the non-resident father. The non-resident father would then hopefully contact us to participate and we would then provide the interviewer with his contact details.
- The mother might pass the contact details of the non-resident father to the interviewer enabling them to approach the non-resident father directly, using an advance letter followed by a personal visit.

The Dimensions programme guided the interviewer through these options.

Interviewers were instructed to make no assumptions about who knew about the identity of the baby's natural father, nor of the relationship status of the non-resident father, nor of the state of knowledge of anyone living with the non-resident father and in particular any partner.

In terms of procedures the interviewers were told to follow the same procedures as for the mother interview, described in section 5.4, with the following exceptions:

- The consent forms for the non-resident father interviews were yellow. The non-resident father gave permission to link administrative records held about himself only, not the cohort baby, to his survey answers.
- The non-resident father interview was intended to be around 45 minutes long on average, although it was anticipated that the length would vary considerably depending on the answers the non-resident father gave. The interview was comprised of three scripts:
 - **Main interview 1:** Here it was intended that the interviewer would ask the non-resident father questions;
 - **Main self-completion:** Here it was intended the non-resident father would complete the questions using the interviewer's tablet);
 - **Main interview 2:** Here it was intended the interviewer would ask the non-resident father questions.

At the end of Main interview 2 interviewers were asked to do the following:

- Collect contact details for the non-resident father, as we did not gather any contact details for the non-resident father during the opt-in fieldwork.
- Interviewers were asked to make some observations about the interview, such as whether it was carried out in any minority languages, and for any comments.
- Interviewers were asked to leave non-resident fathers a sheet containing some information about organisations which might be able to help fathers who might be facing a number of difficulties touched on during the interview. They were also asked to leave a thank you letter from UCL, and a change of address card, in case the non-resident father moved house between the interview and a possible next stage of the pilot (a web or telephone interview when the baby was 12 months old).
- It was envisaged that, in some cases, a non-resident father might say in the self-completion script that he had assistance in conceiving the cohort baby and consent to the interviewer knowing that. In these cases the interviewer was so informed by the Dimensions interviewing programme, and asked to hand the non-resident father an HFEA CD form in a discreet manner. If he returned the form to us in the reply paid envelope, this would enable the Life Study team to link Human Fertilisation & Embryology Authority records to his survey answers.
- We recognised that some non-resident fathers may want to tell their GP about the questions they were asked during the interview. Interviewers were provided with a letter to give them which they could show to their GP or forward on to them.

Part C: After fieldwork

6 Response

6.1 Sample coverage

The design of the Birth Component was based on the baseline survey interviews being conducted with mothers of the sampled babies when the babies were between five and seven months old (aged approximately between 22 and 30 weeks old).

Interviewers were issued with 154 cases for the face-to-face fieldwork. Fieldwork began on 8 September 2015 and interviewers were permitted to undertake interviews up to and including 1 November 2015 (the “fieldwork cut-off date”). This deadline was chosen because it had been agreed that at the main stage interviewers should have no more than eight weeks to complete the assignment to ensure the sampled babies were at the appropriate age. As the sample was based on an opt-in approach, it was anticipated that, within the time frames available covering the sample might prove particularly challenging as response rates were likely to be high.

Interviewers managed to reach a final outcome (that is, they had completed the work at that address, and entered a final, as opposed to interim, outcome in their Electronic Contact Sheet) at 100 of the 154 issued households, as well as one of the two identified non-resident father households. In a further 15 households some interviewing had been conducted prior to the deadline, but not all elements of the study had not been completed. Interviewers had also started work with eight other households (making contact with a household member, visiting the address, or identifying a household which had moved since the opt-in fieldwork). There were a significant number of households – 32 – which interviewers did not have time to contact before the end of the scheduled fieldwork. One of these was a non-resident father household, the others were households where the cohort baby lived.

6.2 Response

A full list of survey outcomes is given in Table 6.1. Please note that as interviewers had not completed the assignment at 54 households, we coded the final outcomes of these “interim” cases based on the call history for each case.

Fully productive households were those where all eligible respondents (mother and resident partner where the mother was living with someone as a couple, and mother only where she was not) completed an interview. Partially productive households were those where the interviewer had coded a final outcome for the household during the fieldwork period but where all eligible respondents had not been interviewed (in practice where a resident partner was eligible but the interviewer was unable to interview them). “Some interviewing” refers to households where the interviewer had not completed interviewing all eligible respondents because they were not able to do so prior to the fieldwork cut-off date.

Table 6.1: Household response by household type

	Total eligible households		Mother households		Non-resident father households	
	n	%	n	%	n	%
Total	156		154		2	
Productive	102	65%	102	66%	0	0%
Fully productive	52	33%	52	34%	0	0%
Partially productive	35	22%	35	23%	0	0%
Some interviewing started	15	10%	15	10%	0	0%
Non-response	51	33%	50	32%	1	50%
Refusal by cohort family	9	6%	8	5%	1	50%
Broken appointment	1	1%	1	1%	0	0%
Appointment made	1	1%	1	1%	0	0%
Contact with Cohort family: Other	4	3%	4	3%	0	0%
Left message/calling card	3	2%	3	2%	0	0%
No contact with anyone at address (after required visits made)	1	1%	1	1%	0	0%
No contact (with anyone at all)	27	17%	27	18%	0	0%
Cohort member has moved to address outside my area (Office to reallocate)	2	1%	2	1%	0	0%
Cohort member has moved and unable to find follow-up address	1	1%	1	1%	0	0%
Address not located/ inaccessible	1	1%	1	1%	0	0%
Other (please specify)	1	1%	1	1%	0	0%
Not started	3	2%	2	1%	1	50%

The refusal rate was very low (5 per cent of mother households) as was the non-contact rate where the required call pattern had been completed (1 per cent of mother households). This suggests that had a strict time limit not been imposed for fieldwork for scientific reasons (at the main stage interviewers should have no more than eight weeks to complete the assignment to ensure the sampled babies were at the appropriate age), it would have been possible to achieve a response rate of 80 per cent or more in mother households.

Interviewers were asked to code the reasons respondents gave for refusal, if any. The reasons given by mothers (more than one answer was permitted) for refusing household participation were "too busy" (five households), "survey too long" (three households) "questions too personal" (two households), a family member refusing on behalf of the respondent (one household), "unhappy about confidentiality" (one household), "other family member opposes participation (one household) and "looking after children" (one household). Two other reasons for refusal were given by mothers; in one household a respondent said they were "not able to commit fully to the study" while in another the household was afflicted by illness. The reason given for the non-resident father refusal was a family member refusing on behalf of the respondent.

Table 6.2 shows the breakdown of script completion by productive outcomes. As the table shows in all the partially productive cases the mother interview had been completed in full, but no partner interviewing had taken place. In the cases where some interviewing had taken place, not all scripts of the mother interview were complete, and no partner interviewing had taken place.

Table 6.2: Script completion by productive household outcomes

	Total productive households %	Fully productive n	Partially productive n	Some interviewing n
Total	102	52	35	15
Mother and resident partner eligible	99	49	35	15
Mother Main interview 1 completed	99	49	35	15
Mother Self-completion completed	98	49	35	14
Mother Main interview 2 completed	97	49	35	13
Partner Main interview 1 completed	49	49	0	0
Partner Self-completion completed	49	49	0	0
Partner Main interview 2 completed	49	49	0	0
Mother only eligible	3	3	0	0
Mother Main interview 1 completed	3	3	0	0
Mother Self-completion completed	3	3	0	0
Mother Main interview 2 completed	3	3	0	0

Table 6.3 shows partner outcomes by productive household outcomes. The main reason partners did not take part in the pilot was because interviewers were unable to contact them. In households where interviewers had completed the mother interview, failed to interview the partner and had recorded a final outcome ("partially productive" households), 26 per cent of partner non-response was due to refusal with 66 per cent of partner non-response was due to non-contact with the partner.

Table 6.3: Partner outcomes by productive household outcomes

	Productive households		Fully productive		Partially productive		Some interviewing	
	n	%	n	%	n	%	n	%
Total	102		52		35		15	
No eligible partner in household	3	3%	3	6%	0	0%	0	0%
Partner interview completed	49	48%	49	94%	0	0%	0	0%
Non-response	50	49%	0	0%	35	100%	15	100%
Refusal by partner	8	8%	0	0%	7	20%	1	7%
Refusal because away/in hospital during fieldwork period	2	2%	0	0%	2	6%	0	0%
No contact	37	36%	0	0%	23	66%	14	93%
Other	3	3%	0	0%	3	9%	0	0%

6.3 Call analysis

The five interviewers working in the six pilot areas made a total of 433 face-to-face visits to households over the fieldwork period. A breakdown is provided in Table 6.4 for the mother households (note the non-resident father households were never visited because the mother never gave the interviewer the address).

Interviewers made an average of three calls to each household. No productive cases were completed in one visit only, and for one household seven visits were required to complete interviewing.

Table 6.4: Number of calls in mother households

	Number of eligible households n	Total visits n	Mean number of visits n	Median number of visits n	Minimum number of visits n	Maximum number of visits n
Total	154	433				
Productive	87	293	3.4	3.0	2	7
Interim	52	117	2.3	2.0	1	5
Ineligible	1	1	1.0	1.0	1	1
Refusal	9	14	1.6	2.0	0	3
Non-contact ⁶	1	7	7.0	7.0	7	7
Other	2	1	0.5	0.5	0	1
Total started	152	433	2.8	3.0	0	7
Not started	2	0	0	0	0	0

⁶ Note that of cases where the final outcomes was coded non-contact, only one household was a genuine non-contact case (in other words, the minimum number of calls had been made). The other cases were coded as non-contacts in the office as a final outcome, as the interviewer had not been able to make the minimum number of calls required prior to the fieldwork cut-off.

The number of calls made to the 154 households, broken down by household outcome, is given in Table 6.5. Where the household contained a lone mother unsurprisingly less effort was required by interviewers (as there was no partner to interview). Interviewers completed these cases in a mean of 2.67 calls compared to 3.47 cases where a mother and resident partner were interviewed. However, across all 102 productive households the median number of calls made (three) was the same.

Table 6.5 Number of calls in mother households, by household outcome

	Number of mother households	Total visits	Mean number of visits	Median number of visits	Minimum number of visits	Maximum number of visits
	n	n	n	n	n	n
Total	154	433				
Mother and partner interviewed	49	170	3.5	3.0	2	7
Mother interviewed but no partner interviewed	50	171	3.4	3.0	2	6
Mother interviewed but no partner	3	8	2.7	3.0	2	3
No interviewing	50	84	1.7	1.0	0	7
Total	152	433	2.8	3.0	0	7
Not started	2	0	0	0	0	0

Table 6.6 shows the number of days elapsing between the first and last face-to-face visits by household outcome (this table excludes two cases where the interviewer was unable to contact the household). Where a mother and partner were interviewed, interviewers needed around a fortnight on average to complete interviewing, though around five weeks were needed in some cases. In households containing a lone mother, a little less time was needed, but even in these three cases a mean of 11 days was needed to complete the assignment.

Table 6.6: Number of days between first and last face-to-face visits, by household outcome

	Number of households visited n	Mean number of days n	Median number of days n	Minimum number of days n	Maximum number of days n
Total	152				
Mother and partner interviewed	49	14.3	13.0	.00	37.00
Mother interviewed but no partner interviewed	50	31.0	29.5	4.00	50.00
Mother interviewed but no partner	3	11.0	5.0	5.00	23.00
No interviewing	48	8.6	0.0	0.00	44.00
Total	150	18.0	16.5	0.00	50.00
Not started	2	0	0	0	0

6.4 Quality of the opt-in information

In 102 households a mother interview was secured, and this enables some assessment of the quality of the opt-in information provided.

In both opt-in questionnaires (two-page and eight-page questionnaires) mothers were asked if they had given birth to a single baby, twins or triplets. The opt-in data suggested that in the 102 households we interviewed at, we should expect to find 100 single babies, one household with twins and one with triplets. The opt-in data were correct except that in the household that reported triplets at the opt-in stage, only a single baby had been born.

Turning to the gender of the cohort baby, we isolated all cases where a mother had given this data on the opt-in questionnaire and where during both the opt-in stage and the pilot fieldwork a single birth had been reported. In 95 of these 97 cases the gender reported on the opt-in questionnaire was correct.

Turning to the date of birth of the cohort baby in 95 of 102 households the opt-in data were confirmed as correct during the pilot fieldwork.

6.5 Sample composition

The face-to-face fieldwork was conducted among mothers who had returned the opt-in questionnaire. We suspected that there was a high chance that the achieved sample was not a representative cross-section of mothers. As this issue is important in determining how generalisable some of the findings from the pilot are to the population of mothers of six month old babies, we analysed some of the basic demographic information collected.

According to the latest ONS figures, in 2014 the standardised average (mean) age of all mothers giving birth in England and Wales was 30.2 years⁷. Of the 102 mothers interviewed during the pilot, the mean age of the mothers at the day of birth of the cohort baby was 34.8 years and the median age was 34 years. The youngest mother interviewed was 23 years old at the birth of the cohort baby and the oldest was 42 years old. Only three per cent of mothers interviewed were under 25 years old. Although one of the six pilot areas was in Scotland, and so the ONS figures are not directly comparable to our data, it is safe to assume that the pilot sample was skewed towards older mothers. In 2014 just over half of births in England and Wales occurred within marriage or civil partnership (53%). Of the mothers interviewed at the pilot 79 per cent were married and 21 per cent unmarried. Again, the ONS figures are not directly comparable as one of the six pilot areas was in Scotland; however it appears that the pilot sample was more skewed towards married women.

Ninety-four per cent of the mothers said they were from a White ethnic background, with six per cent saying they were from an ethnic minority group. In the 2011 Census 86 per cent of the population of England and Wales were from a White ethnic background. It therefore appears that the pilot sample under-represented those from ethnic minority backgrounds.

Turning to education, it is striking how well-educated the participating mothers were. Eighty-five per cent had completed higher education, with 37 per cent having achieved a higher degree such as a Masters or Doctorate. Thus the pilot sample heavily under-represented the less well qualified.

Looking at income, 61 per cent of mothers who had a resident partner and who answered this question reported an annual net household income (that is, after taxes) of £46,901 or more. Eighteen per cent of mothers with a resident partner and who answered this question reported an annual net household income of £81,301 or more, implying their gross household income was well over £100,000 per year. Although three of the six pilot areas were in the Greater London area, where incomes are higher than in other parts of the UK, and direct comparisons with national figures are not possible, it appears that the pilot sample greatly over-represented affluent households.

6.6 Interviewer feedback

In general, interviewers reported that it was very or fairly easy to secure participation from mothers. One said

⁷ *Births by Parents' Characteristics in England and Wales, 2014* (available at <http://www.ons.gov.uk/ons/rel/vsob1/births-by-parents--characteristics-in-england-and-wales/2014/stb-parents-characteristics-2014.html>).

Apart from one mother, all were excited at being involved, and welcomed me.

Understandably the main difficulty interviewers faced was securing an interview with the resident partner. As one put it

I had many professional couples with dads working 50+ hours per week and getting them on board has been harder. Think length was a bit off-putting.

Another mentioned that it was often difficult to get resident partners to keep appointments. It was apparent at the de-brief that the opt-in approach meant the respondents were compliant and interviewers did not report having to spend a great deal of time persuading them to cooperate. One said he stressed to respondents that their baby was already contributing to society.

Interviewers' perception of the main reason for refusal was mothers thinking the burden was too much. Another interviewer said a respondent reported a friend had taken part (this was not surprising as in each pilot area all mothers giving birth during each sampling run month had been sent an opt-in questionnaire) and was worried about privacy.

Interviewers had been warned at the briefing that there was a significant risk the instruments might take longer to administer than the UCL team envisaged, and this proved to be the case (see Section 8.2). Note that UCL's timings were based solely on the main survey content which at the time of the Birth Component being commissioned did not allow time for recording respondent consent, recording contact details and interviewer observations (as the protocols for these had not been agreed). Further, UCL were not, understandably, in a position to assess the impact on questionnaire length of administration in an in-home setting where there might be disruptions because of the presence of a young baby. Recognising the potential for a long household visit interviewers started their assignments by making appointments to carry out the interview on another day.

Interviewers perceived the household visits were long. One said he started by telling respondents the visit would take one hour but after a few visits told them one hour 15 minutes. This was the shortest time reported with another interviewer reckoning a household visit took one hour 30 minutes on average. One said her shortest visit was one hour 20 minutes and the longest two hours 20 minutes (with the mother being "exhausted" at the end). Longer times in the household were reported by others. Another felt that visits were between two hours and two hours 30 minutes (mother only) or between three hours and three hours 30 minutes if the resident partner was interviewed at the same visit. Another adopted a rule of thumb of one hour 30 minutes to two hours (mother only) and two hours 30 minutes to three hours (mother and resident partner).

As all the respondents were looking after one or more very young babies and often other children, the interviews were regularly interrupted by the needs of the baby. This was reflected in the advice offered for future interviewers who recommended interviewers should be well prepared for interruptions. Another suggested that morning appointments should begin by 9.30 am so that the interview was complete by the time the mother might want to leave to pick up

children from nursery and that afternoon appointments should begin by 12.30pm to allow the interviews to finish in time for the mother to collect children from school.

Interviewers said that frequently resident partners were interviewed at a separate time to the mother, usually in the evenings or at weekends. One said the resident partner interview took a lot less time, because the mother often was looking after or holding the baby during the interview.

6.7 Quality considerations

- The net baseline response rate in the pilot was 10 per cent, meaning the data collected would not be of sufficient quality for a robust birth cohort study. The response rate to the face-to-face fieldwork was high with a very low level of refusal. A high response rate generally means the risk of bias in an achieved sample is low, making it reasonable to make inferences to the wider population. In this case this is not possible because the pilot areas were not representative of the UK, and the net opt-in participation rate which generated the sample was low. The data available regarding sample composition confirms the sample achieved contained significant biases with respect to age and ethnic background, and was skewed towards affluent households containing very highly educated mothers.
- The response and other paradata generated by the Electronic Contact Sheet system provided excellent quality information enabling us to assess response and also interviewer workload. We consider these data very high quality.
- Interviewers reported that the time spent in household was considerable. The length of an interview can affect data quality, as respondents may suffer from fatigue later in the interview leading to less considered answers. The current length of the scripts is a significant risk to data quality with the risk being highest for data collected at the end of the interview.

7 The consent process

7.1 Reconciliation of consent forms and interview consent data

Mothers were asked for a number of information linkage consents. They were asked to give consent both for their own records to be linked to their survey data, and those of the cohort baby. Resident partners were also asked to give consent for linking of their own records to the survey data.

Table 7.1: Consents gathered during interview

	Mother's records		Baby's records		Partner's records	
	n	%	n	%		
Total	102		103		49	
Environment consents						
Electromagnetic fields and radio waves records ⁸	96	94%	N/A	N/A	47	96%
Education consents						
Schools	100	98%	101	98%	48	98%
Further education	100	98%	101	98%	49	100%
Higher education	100	98%	101	98%	49	100%
None of these	1	1%	2	2%	0	0%
Health registration consents						
Health Registration records	93	91%	92	89%	49	100%
Health records consents						
NHS and Department of Health records	94	92%	93	90%	49	100%
Family doctor or GP records	94	92%	93	90%	49	100%
Dentist and optician records	94	92%	93	90%	49	100%
Birth/death registration and cancer register records	94	92%	94	91%	49	100%
None of these	7	7%	9	9%	0	0%
Economic consents						
Department for Work and Pensions records	87	85%	N/A	N/A	45	92%
HM Revenue and Customs records	86	84%	84	82%	45	92%
None of these	13	13%	16	16%	4	8%

⁸ Respondents were asked for access to records of their use of past, current and future mobile communication to assess the extent of their exposure to electromagnetic fields from these devices in the months before and during the mother's pregnancy. Respondents were told information relating to the frequency and duration of their use of mobile devices would be accessed. Life Study | Version draft 1 | Internal / Client Use Only | This work was carried out in accordance with the requirements of the international quality standard for Market Research, ISO 20252:2012, and with the Ipsos MORI Terms and Conditions which can be found at <http://www.ipsos-mori.com/terms>. © Ipsos MORI 2015.

Table 7.1 shows the consents gathered in the Dimensions interviewing programme. In general the proportion of respondents giving consent to information linkage was high. Respondents were most likely to agree to linkage of education records, with 98 per cent or more agreeing to linkage of school, further and higher education records. Ninety-four per cent of mothers and 96 per cent of partners consented to linkage of mobile phone records. The proportion agreeing to linkage of health records was lower but still very high. Just over nine in ten mothers consented to health records linkage, with all partners consenting. Respondents were least likely to give favourable answers to questions asking for linkage of tax or benefit records; however, the proportion consenting was still high.

Looking at fertility consents, of the 102 mothers interviewed, five said they had had IVF/ICSI treatment to help them become pregnant with the cohort baby. Three mothers agreed this information could be disclosed to the interviewer and in all cases the mother agreed to take the HFEA CD form from the interviewer and complete it. One mother handed the signed form to the interviewer and two said they would return it later. No forms were received at Ipsos MORI's offices.

Three of the 49 resident partners interviewed said they had had assistance with the conception of the cohort baby. All three agreed this information could be disclosed to the interviewer and to take the HFEA CD form from the interviewer. One partner handed the signed form to the interviewer and two said they would return it later. No forms were received at Ipsos MORI's offices.

Ipsos MORI undertook a reconciliation exercise in the office to establish whether the consent form protocols were followed correctly. For the 102 mother interviews conducted in whole or in part, we received 97 consent forms from the interviewers. On each occasion the interviewer had entered the correct consent form number into the Dimensions interviewing programme. Of these 97 forms:

- On 95 occasions mothers had initialled the boxes on the front page of the form, giving consent, as required. On one occasion the boxes were blank and on the other occasion the boxes had been marked with ticks.
- The mothers' names were entered into the Dimensions interviewing programme correctly on 96 occasions. On one occasion the surname was recorded twice with no first name recorded.
- The cohort babies' names were entered into the Dimensions interviewing programme correctly on 96 occasions (including the occasion the names of twins were entered). On one occasion the cohort baby's surname was recorded wrongly.
- On all occasions the mother signed the form on the front page indicating consent and also the relevant pages giving consent for information linkage for herself and the cohort baby.
- On 93 occasions the interviewers left all the (white) signed forms with the respondent as required. On four occasions one of the pages regarding information linkage consent for

the cohort baby was not given to the respondent (two pages should have been left with the mother for each cohort baby).

For the 49 resident partner interviews conducted, we received 48 consent forms from the interviewers. One interviewer had used a consent form for a non-resident father in error, and one had entered the wrong consent form number into the Dimensions interviewing programme. Of these 48 forms:

- On 46 occasions resident partners had initialled the boxes on the front page of the form, giving consent, as required. On one occasion the boxes were blank, and on the other occasion the boxes had been marked with ticks.
- The names of the resident partners and cohort babies were entered into the Dimensions interviewing programme correctly on all occasions.
- On all occasions the resident partner signed the form on the front page indicating consent and also the relevant pages giving consent for information linkage.
- On 46 occasions the interviewers left all the (white) signed forms with the respondent. On one occasion the copy of the front page indicating consent had not been left with the respondent. On one occasion one of the pages regarding information linkage consent was not given to the respondent (the second of the two pages that should have been left with the resident partner).

7.2 Interviewer feedback about the consent process

Interviewers' perceptions of the consent process were mixed, with significant problems being reported. Two interviewers felt the consent forms were "easy to use" and "self-explanatory". One said

Most respondents reacted well to the consents when they were explained well.

One interviewer felt very differently:

From the outset I felt they were far too official looking, and on a few occasions I had to spend a long time explaining why we did it. Some were uneasy.

She felt that the process might appear intimidating to some. She reported no particular problems in the pilot but believed that was because of the nature of the opt-in approach which appeared to encourage more educated mothers to respond.

Interviewers reported the consent process added a significant amount of time to the household visit. One estimated the process took 10 to 30 minutes "depending on whether the forms had been read", with others estimating around 10 minutes.

The purpose of the Participant Information Sheet was to facilitate achieving informed consent. Interviewers reported that respondents varied in the extent to which they paid attention to it. One reported all had read it in advance; other interviewers said respondents claimed they had

(but they were not convinced some had). One interviewer said “most had only glanced at it” while others said some had not read it in advance.

One procedural problem which we would have needed to resolve had Life Study continued, was what interviewers should do in cases where they had to return to complete an interview at a later point. The Dimensions interviewing programme prompted interviewers to leave copies of the signed consent form with the respondents at the end of Main interview 2. One could argue that it would be more appropriate to leave a copy of the first part of the consent form (where respondents give their consent to take part in Life Study but not for information linkage) with the respondent when they had agreed to take part.

7.3 Interviewer feedback about the information linkage process

The information linkage process was carried out at multiple points during the mother and resident partner interviews. Mothers gave consent for information linkage on behalf of each cohort baby.

This protocol followed the experiment carried out on *Understanding Society*⁹ which found information linkage rates were better if permission was asked when the questions seemed salient (in other words, when similar data were being collected directly from respondents). The experiment tested whether asking for consent to link to administrative data about the receipt of state benefits after a section in the interview that asked about these benefits led to a higher level of consent than asking at the end of the interview (as was the standard procedure on *Understanding Society*).

The Birth Component of Life Study was different to *Understanding Society* because it proposed to ask for many more information linkage consents (five in total) and at a much earlier stage in the study (*Understanding Society* collected most information linkage consents during or after Wave 4 of the study). Given the number and importance of the information linkage consents to Life Study we felt that spacing the consents throughout the questionnaire might impact positively on the proportion of respondents giving consent to each specific information linkage asked for.

We understand that the current procedure on *Understanding Society* (Wave 7) is to ask for all information linkage consents towards the end of the interview. The interviewer provides a brief preamble to the consent question which informs the respondent that the study would like to add information from specific (named) administrative records to the responses given in the interview; there is a leaflet which provides further information on what the data linkage involves, and, in order to give permission, the respondents need to sign a consent form. Consent is asked at the end of the interview so that signing the forms and reading the information leaflet does not interrupt the flow of the interview. The outcome of the consent question is recorded in the interviewing programme and a copy of the signed consent form is kept by the respondent and

⁹ *Propensity to Consent to Data Linkage: Experimental Evidence from the Innovation Panel on the Role of Three Survey Design Features* (Emanuela Sala, Gundi Knies, Jonathan Burton), *Understanding Society Working Paper Series* (No. 2013-05, August 2013). Life Study | Version draft 1 | Internal / Client Use Only | This work was carried out in accordance with the requirements of the international quality standard for Market Research, ISO 20252:2012, and with the Ipsos MORI Terms and Conditions which can be found at <http://www.ipsos-mori.com/terms>. © Ipsos MORI 2015.

the original is collected by the survey organisation, reconciled against the data and then sent to the Institute for Social and Economic Research for secure storage and for future reference.

In the pilot, interviewers reported some respondents refusing information linkage for privacy reasons or because they felt uneasy about signing on behalf of their baby.

There were significant problems reported with the implementation of the information linkage consent process. Some interviewers improvised and departed significantly from the agreed procedures.

The first criticism was that the process was too disjointed and meant the interview kept stopping and starting:

Broke up the flow of the interview. Perhaps do consents all in one go? Though there are a lot of them, so that might be off-putting.

The second criticism was that the process was too repetitive and wordy:

By the time you're reading out the consent stuff for the third time the respondent is saying "yes, yes" and taking the form before you're finished.

One felt the consequence was that consent was not properly informed:

So much to explain to the respondents when they have young children to contend with, so the information isn't properly digested.

Other interviewers felt ill-equipped to explain the information linkage consent process in detail:

This area in my view was the weakest part of the whole process. We did not have enough information to give to the parents to satisfy any concern they may have about how the information is collected and the confidentiality of the information. A separate leaflet with FAQs [Frequently Asked Questions] should be available to the interviewer. Some respondents were quite OK with it, others needed more time to consider the question, so it could take a good 10 minutes or so.

Another felt that had the sample been a more representative cross-section of mothers many would have struggled to comprehend information linkage:

The vast majority of my respondents were graduates and well read people. Many had some information and general understanding about the need for data linking. Because of this it wasn't that difficult. However, I feel the "less informed" person may struggle to comprehend and feel threatened by the intrusiveness of the possible information obtained.

Interviewers who followed the procedures strictly said the process was very repetitive and appeared frustrated by this and how long it took. Other interviewers improvised by asking information linkage consents at the start of the interview. They did this by explaining the process, and then asking the respondents to read through the form and sign where

appropriate. They said they then entered these responses later when prompted to by the Dimensions interviewing programme.

Interviewers did suggest some improvements to the process:

- As discussed one interviewer suggested they should have more information available to be able to provide further in-depth explanations if necessary. One suggested a leaflet with Frequently Asked Questions for the interviewer.
- Another interviewer suggested a laminated sheet, ideally in colour, could be produced showing every step of the process.
- Another interviewer felt that separate information linkage forms should be provided for the mother and the baby as she found there was “too much toing and froing” using the cardboard divider.
- Another interviewer felt the colour-coded system (to indicate whether the consent form was for the mother, resident partner or non-resident father) could be improved by printing the respondent type on the front of each consent form.

The proportion of respondents giving consent to the information linkage was high. Nonetheless, interviewers gave the following feedback about specific consents asked for:

- **Electromagnetic fields and radio waves.** Interviewers reported some respondents refusing these consents (allowing their mobile phone records to be linked to the study data). One reported respondents wanting to know exactly how the information was collected and another reported respondents feeling uncomfortable even when they read the consent form in detail.
- **Education.** Some interviewers explained that many respondents had been educated abroad and were unclear if educational establishments outside the UK would be contacted¹⁰. Others queried how information linkage was possible if they no longer used their maiden name (we did not collect mother's maiden name during the mother or resident partner interviews).
- **Health registration and health records.** Some interviewers reported respondents being uncomfortable with these consents.
- **Economic records.** Interviewers reported some respondents had significant privacy concerns with regard to economic records. One resident partner wanted to know if information about his bank account would be accessed. Other respondents felt the interview, which collected information about income, had already been intrusive and saw no need to provide further information.

¹⁰ For example, with regard to schools consents, the consent form said UCL would attempt to access records held by the English Department for Education, the Welsh Department for Children, Education, Lifelong Learning and Skills, the Scottish Government Education Directorate, or the Department of Education/Education and Skills Authority in Northern Ireland, or any other Government departments holding school records, including any successor or succeeding department/organisation holding these data.
Life Study | Version draft 1 | Internal / Client Use Only | This work was carried out in accordance with the requirements of the international quality standard for Market Research, ISO 20252:2012, and with the Ipsos MORI Terms and Conditions which can be found at <http://www.ipsos-mori.com/terms>. © Ipsos MORI 2015.

It is evident that interviewers felt the consent process took too long and it is unclear whether this was due to the significant number of information linkage consents required, the time needed to address participants' concerns, or that the method for separating and contextualizing the linkage consents for each type of data source interrupted the flow of the interview and created the impression of repetition. It is apparent that the level of concern among participants did vary. As the rate of information linkage consent was very high, it is possible that significant time was needed for interviewers to address some respondents' concerns. There was no indication at the briefing or de-briefing that interviewers had privacy concerns that they might project to respondents, though this cannot be ruled out. We analysed the consents by interviewer. Naturally the consent rates varied by interviewer, but there is no indication of a systematic problem whereby one interviewer was unable to secure consent across all the consent types.

7.4 Quality considerations

- A high level of consent was achieved for information linkage, and this could potentially augment data collected from a high quality representative sample very effectively.
- The quality of the information provided on the consent forms was high. The reconciliation process indicated there were very few problems with completion of the forms. The unrepresentative nature of the achieved sample (the sample achieved was skewed towards very highly educated mothers) means these positive conclusions need to be treated with caution.
- It is difficult to establish whether sufficient quality of information was provided to respondents to ensure they made an informed decision in all cases. Interviewer feedback suggests that in some cases respondents did not review all the information provided, particularly on the Participant Information Sheet. Further, some interviewers did depart significantly from the agreed procedures and some lacked confidence in answering respondent queries. This is a particular concern as it was hoped that an opt-out procedure would be used in the main stage, which would be likely to generate a more representative, and thus more balanced, sample of mothers. Thus interviewers would be likely to find the process more difficult than they did in this pilot, if these procedures were retained.

8 The interview

8.1 Interviewer perceptions of the materials

The materials were, on the whole, fairly well received by both respondents and interviewers.

The advance mailing to respondents had comprised a letter informing them the interviewer would call in the near future, and a Participant Information Sheet. The Participant Information Sheet was an A4 booklet and eight pages long. Compared with the two most recent baseline surveys in major UK longitudinal studies – *Understanding Society* and the Millennium Cohort Study – this, combined with the leaflet sent at the opt-in stage, represented a considerable amount of information provided to respondents before they were asked to participate.

For some respondents the Participant Information Sheet reinforced their decision to take part at the opt-in stage. One interviewer told us:

Most say they felt their child was having the opportunity to be involved in a special study and felt privileged.

Another said the Participant Information Sheet was well received but felt the size of it needed to be reduced, which inevitably would require a reduction in the amount of content. Another interviewer cautioned that:

Very few families actually read it in depth!

This interviewer said that most respondents glanced at the Participant Information Sheet and said he felt there was too much emphasis on people reading material which they often do not do or wish to do.

The main problem the interviewers reported was over information linkage. The potential for linking datasets of administrative or other data held by public bodies to survey answers greatly increases the number of analyses that can be carried out with data from studies such as these. Interviewers felt they did not have sufficient information to be able to explain to respondents what would happen and to answer questions. In particular interviewers wanted to know how information linkage was carried out in practice and also wanted more information on the purpose of linking mobile phone records to survey answers. One interviewer acknowledged that further information was present on the consent form but felt it should have been more prominently covered in the briefing or interviewer manual.

Other comments made by interviewers about the survey materials were:

- Some felt the Participant Information Sheet was balanced too much towards providing information for the mother taking part, with much less information aimed at the resident partner.

- Some wanted calling cards to be provided separately from the appointment cards they had been provided with. They felt this would have facilitated contact with the respondents.

8.2 Overall interview length

The overall interview length is computed by timestamps in the Dimensions interviewing programme which record the time each of the three interviewing scripts (Main interview 1, self-completion, and Main interview 2) are accessed by interviewers and when they are closed. It is important to note that timestamp data can be unreliable – for example, interviewers can pause interviews and when this occurs it cannot be ascertained with certainty when the interview is paused and when it is resumed, or the reasons for this.

Further, the timestamp data do not take into account the total time the interviewer spends in the household which can be significantly higher (this probably explains the apparent discrepancy between the interviewers' perceptions of the length of the interviews, and the timestamp data). This is a particular issue for this study, as all the mothers have young babies and in many instances other young children too. The UCL researcher explained the setting for one interview she observed:

The baby was either in the mothers' hands or playing on the floor, but needed her attention continuously. The interview was not completed as the baby got hungry and was obviously tired.

Table 8.1 shows interview lengths for the mother interview, by script. Some mother interviewing was completed in 102 households, with full interviews (that is all three scripts being completed) in 100 households. In one household the interview length was extremely long (over four hours). It is apparent from examination of the timestamp data that this is because the interview paused during the first module, and resumed some hours later. These data have thus been excluded from the analysis as they are liable to skew the mean measure.

The mean and median lengths for each script do not differ greatly. This suggests that there are not skews in the underlying data, though the length of time each script took to administer varied considerably.

The mother interview took on average one hour 27 minutes to administer, with the shortest interview taking 58 minutes and the longest interview taking well over two hours. Main interview 1 was the longest part of the interview, taking around 43 minutes on average, compared to 31 minutes for the self-completion and 14 minutes for Main interview 2. Both the Main interview 1 and the self-completion scripts took over one hour on occasion.

Table 8.1: Interviewing time for mother interview, by script

	Total interviewing time hh:mm:ss	Main interview 1 hh:mm:ss	Self-completion hh:mm:ss	Main interview 2 hh:mm:ss
Planned¹¹				
Mean length	01:05:00	00:20:00	00:25:00	00:20:00
Actual				
Mean length	01:27:29	00:42:32	00:30:54	00:14:16
Median length	01:24:21	00:41:05	00:28:12	00:14:20
Minimum length	00:58:08	00:29:12	00:16:12	00:06:38
Maximum length	02:17:49	01:14:36	01:10:30	00:25:16
Difference planned/actual	00:22:29	00:22:32	00:05:54	-00:05:44
Base (number of interviews)	99	101	100	99

These interview lengths were considerably longer than planned. As shown in Table 8.1, the shortest mother interview was only just under seven minutes shorter than the planned length, while the longest interview was just under one hour 13 minutes longer than the planned length. Overall the mother interview was over 22 minutes longer than planned, with this being driven by the length of Main interview 1. The self-completion was on average six minutes longer than intended, but this was largely offset by the shorter than intended Main interview 2. Note that the shorter than intended Main interview 2 may be partly a function of the opt-in approach, which seemed to result in a sample which over-represented affluent households. There were a

¹¹ Note these figures did not allow time for recording respondent consent, recording contact details and interviewer observations (as the protocols for these had not been agreed). Thus the difference between planned and actual time would be less than that presented here had an estimate of how long these protocols would take been produced.

considerable number of questions around benefits and income derived from them in Main interview 2, and in more affluent households one would expect fewer of these questions to be asked.

Table 8.2 shows interview lengths for the resident partner interview, by script.

The resident partner interview took on average 53 minutes to administer, with the shortest interview taking just over 30 minutes and the longest interview taking around one hour 27 minutes. The self-completion was the longest part of the interview, taking 27 minutes on average, compared to 16 minutes for Main interview 1 and 10 minutes for Main interview 2. All self-completion scripts took longer than the planned time to administer.

Table 8.2: Interviewing time for resident partner interview, by script

	Total interviewing time hh:mm:ss	Main interview 1 hh:mm:ss	Self-completion hh:mm:ss	Main interview 2 hh:mm:ss
Planned¹²				
Mean length	00:45:00	00:22:00	00:11:00	00:12:00
Actual				
Mean length	00:52:55	00:15:32	00:27:12	00:10:10
Median length	00:52:08	00:14:02	00:25:19	00:09:00
Minimum length	00:30:45	00:09:18	00:14:19	00:04:43
Maximum length	01:26:34	00:27:16	00:50:28	00:25:28
Difference planned/actual	00:07:55	-00:06:28	00:16:12	-00:01:50
Base (number of interviews)	49	49	49	49

¹² Note these figures did not allow time for recording respondent consent, recording contact details and interviewer observations (as the protocols for these had not been agreed). Thus the difference between planned and actual time would be less than that presented here had an estimate of how long these protocols would take been produced.

Table 8.3 shows the total interviewing time in household, by household outcome. Overall, in a household where a mother and partner were both interviewed, the average interviewing time was two hours 19 minutes, 29 minutes longer than intended. In households where the mother only was interviewed (whether or not she had a partner), the average interviewing time was one hour 29 minutes, over 22 minutes longer than intended. In the pilot it was assumed that we would spend an average of just under one hour 30 minutes interviewing in all households, whereas the actual time taken was one hour 53 minutes. It is important to note that we assumed that in 55 per cent of households we would interview a mother and a partner, whereas in this pilot we interviewed a mother and partner in 48 per cent of cases.

Table 8.3: Interviewing time in household, by household outcome

	Total interviewing time hh:mm:ss	Mother and partner interviewed hh:mm:ss	Mother interviewed only hh:mm:ss
Planned¹³			
Mean length	01:29:45 ¹⁴	01:50:00	01:05:00
Actual			
Mean length	01:53:08	02:19:04	01:28:43
Median length	01:51:49	02:13:29	01:25:42
Minimum length	00:58:08	01:37:13	00:58:08
Maximum length	03:18:17	03:18:17	02:17:49
Difference planned/actual	00:23:23	00:29:04	00:23:43
Base (number of interviews)	99	48	51

All mother interviews were conducted in English. In the 100 completed interviews, interviewers reported others being present on 47 occasions. Other adults were present on 20 occasions and children on 36 occasions. On 44 occasions others were present during Main interview 1, on 42 occasions during the self-completion and on 38 occasions during Main interview 2.

All resident partner interviews were conducted in English. In the 49 completed interviews, interviewers reported others being present on 23 occasions. Other adults were present on all 23 occasions and children on seven occasions. On 20 occasions others were present during Main interview 1 and the self-completion, and on 22 occasions during Main interview 2.

Whereas interviewers recorded children being present during 36 per cent of the mother interviews, children were present for far fewer (14 per cent) resident partner interviews. As we know from interviewer feedback that presence of children could be disruptive and lengthen the mother interview significantly, the lower prevalence of children present during the resident

¹³ Note these figures did not allow time for recording respondent consent, recording contact details and interviewer observations (as the protocols for these had not been agreed). Thus the difference between planned and actual time would be less than that presented here had an estimate of how long these protocols would take been produced.

¹⁴ This is based on the assumption that in 55 per cent of households where interviews were conducted we would interview a mother and partner, and that in the remaining 45 per cent of households a mother only would be interviewed.

partner interview may partly explain why on average the resident partner interview was over 34 minutes shorter than the mother interview.

8.3 Analysis of module lengths

Analysis of each of the interview scripts is complicated by some errors in the scripts relating to timestamps. Following the launch of the face-to-face fieldwork and in line with Ipsos MORI's standard procedures, the early data were checked and a number of problems identified with missing timestamps. These were fixed and updated versions of the scripts were made available to interviewers on 28 September 2015.

Of the 102 mothers interviewed, 51 were interviewed using scripts where there were problems with the timestamps. Of the 49 resident partners interviewed, 19 were interviewed using scripts where there were problems with the timestamps.

As the interview scripts were heavily filtered, resulting in very variable interview lengths, it is important to establish whether analysing interview lengths from the updated scripts only would affect estimates of the module lengths unduly. We therefore analysed the interview length, which relied on Ipsos MORI's standard timestamps, not set up specifically for Life Study, which write out data when an interview script is opened and closed, by version type. The results are shown in Table 8.4.

Table 8.4: Interviewing time for mother and resident partner interviews, by script and script version

	Total interviewing time hh:mm:ss	Main interview 1 hh:mm:ss	Self-completion hh:mm:ss	Main interview 2 hh:mm:ss
Mother interview				
Version 1 mean length	01:30:50	00:44:21	00:31:07	00:15:06
Base (number of interviews)	49	50	50	49
Version 2 mean length	01:24:13	00:40:45	00:30:40	00:13:27
Base (number of interviews)	50	51	50	50
Resident partner interview				
Version 1 mean length	00:55:46	00:17:37	00:28:04	00:10:05
Base (number of interviews)	19	19	19	19
Version 2 mean length	00:51:07	00:14:13	00:26:40	00:10:13
Base (number of interviews)	30	30	30	30

It is normally observed that interview lengths reduce slightly over a given fieldwork period, because interviewers become more familiar with the script(s) they are using. Taking this into account, these results show the interview lengths do not vary greatly between the versions, and thus we conclude it is safe to rely on the updated versions when analysing module lengths.

8.4 Main interview 1

Table 8.5 shows the module lengths for Main interview 1 (mother only). A “residual” is calculated which takes into account time at the very start (before the first timestamp at PersNo) and for the lack of a timestamp at the very start of the Parental and family health module.

As expected the module lengths varied considerably. The longest module was Diet and nutrition, taking nine minutes 33 seconds on average, with the next longest being the Environment module (six minutes 30 seconds) and Child sleeping and crying (four minutes 35 seconds). All other modules took less than four minutes to complete. In total the three longest modules – Diet and nutrition, Environment, and Child sleeping and crying, took up just over half the length of Main interview 1.

Table 8.5: Module lengths in mother Main interview 1 script

Module	Interviews n	Mean hh:mm:ss	Median hh:mm:ss	Minimum hh:mm:ss	Maximum hh:mm:ss
Demographics	51	00:03:45	00:03:34	00:01:20	00:09:40
Child health	51	00:01:30	00:01:16	00:00:33	00:04:50
Infections and Child sleeping and crying	51	00:00:27	00:00:22	00:00:04	00:02:11
Child sleeping and crying	51	00:04:35	00:04:14	00:02:25	00:08:41
Diet and nutrition	51	00:09:33	00:08:59	00:06:21	00:15:39
Environment	51	00:06:30	00:06:11	00:03:53	00:12:05
Housing	51	00:02:20	00:02:06	00:01:19	00:05:40
Neighbourhood	51	00:00:23	00:00:19	00:00:11	00:01:12
Identity	51	00:02:14	00:01:52	00:01:06	00:06:14
Parental education	51	00:03:27	00:03:18	00:01:35	00:06:52
Parental and family health plus residual	51	00:05:57	00:04:31	00:02:29	00:44:01
Total	51	00:40:45	00:39:28	00:29:12	01:14:36

Table 8.6 shows the module lengths for Main interview 1 (resident partner only). A “residual” is calculated which takes into account time at the very start (before the first timestamp at RelResp) and for the fact that there was no timestamp available at the very start of the Parental and family health module.

As expected the module lengths varied considerably. The longest module for which data are reliable was Parental education, taking two minutes 50 seconds on average, with the next longest being Diet and nutrition (two minutes one second) and Identity (one minute 49 seconds). All other modules took less than one minute 30 seconds to complete.

Table 8.6: Module lengths in resident partner Main interview 1 script

Module	Interviews n	Mean hh:mm:ss	Median hh:mm:ss	Minimum hh:mm:ss	Maximum hh:mm:ss
Demographics	30	00:00:49	00:00:23	00:00:12	00:09:05
Diet and Nutrition	29	00:02:01	00:01:59	00:01:14	00:03:15
Environment	29	00:01:28	00:01:28	00:00:15	00:03:20
Housing	30	00:01:18	00:01:19	00:00:39	00:02:59
Neighbourhood	30	00:00:55	00:00:52	00:00:35	00:02:06
Identity	30	00:01:49	00:01:21	00:00:38	00:06:34
Parental education	30	00:02:50	00:02:32	00:01:29	00:07:35
Parental and family health plus residual	28	00:03:27	00:02:58	00:01:59	00:08:02
Total	30	00:14:13	00:13:59	00:09:18	00:24:31

Interviewer and researcher feedback

Interviewers had some specific comments about Main interview 1 which are set out below, that we would have recommended for consideration had the main stage proceeded. One mentioned that the mothers felt the questions covered a great variety of topics and some felt the interview lacked focus, whereas others felt that it flowed well. Interviewers perceived this script lasted between 30 minutes to 50 minutes on average, and felt mothers found it quite interesting.

Interviewers gave the following feedback based on their perceptions of difficulties respondents had with some questions in the mother interview:

- **Infections and Immunity (Module 14).** One interviewer reported that some mothers had experienced a variety of infections and that this module appeared to take some time. Another said some mothers had antibiotics in the early months but they were not always sure which ones or the exact name of the complaint the antibiotics were used to treat.
- **CryAgBr, CryAgBrW, CryAgDur: Child sleeping and crying (Module 12).** These questions asked “have you noticed whether anything brings these attacks on?”, “please describe what brings on the attacks” and “how long do these attacks usually last?” respectively. One interviewer felt the question asking about “attacks” used inappropriate language

which might be “a little scary” for new mothers. One interviewer felt there was a danger of social desirability bias in these questions, as mothers might be reluctant to mention that their baby did not cry, because it might appear they were having an easier time than other mothers

- **BISQPutS: Child sleeping and crying (Module 12).** This question asked “how long does it take to put your baby to sleep in the evening?” Feedback from the UCL researcher suggests that in one interview a respondent said the length of time it takes them to put their baby to sleep varies, and queried whether the time before putting the baby into an infant cot should be included in the answer.
- **CryAgony: Child sleeping and crying (Module 12).** This question asked “has your baby ever had times when ^[he/she] appears to be in agony, screams, draws ^[his/her] legs up to ^[his/her] body and can't be calmed?”. Feedback from the UCL researcher suggests that in one interview a respondent was unclear as to whether the question is asking about the past or whether they should consider the present too when formulating an answer.
- **Diet and Nutrition (Module 13).** For this module it was apparent that showcards would be helpful for the interviewer, to avoid interviewers showing the screen to participants to assist them responding.
- **BEBQ07: Diet and nutrition (Module 13).** This question asked how frequently the following statement was true “my baby fed slowly”. One interviewer said that two mothers said whether the baby fed slowly depended on the age of the baby and the question was too general, referring to the “first few months of life”. One said the baby was slow at two weeks' old but faster at three months' old. The interviewer felt the reference age of the baby needed to be explicitly stated to help mothers answer accurately.
- **Baby Eating Behaviour Questionnaire (BEBQ): Diet and nutrition (Module 13).** One interviewer said that a number of mothers told him that they did not know how much milk their baby had consumed, but there was no “don't know” option available.
- **FormAge: Diet and nutrition (Module 13).** This question asked “how old was your baby when ^[he/she] FIRST received infant formula?” Feedback from the UCL researcher suggests that some respondents may give an answer in months and that this option should be available for respondents.
- **Grid 6: Environment (Module 21).** This question asked “on a typical day in the past week, how many bottles/beakers/cups of the following have you given ^[Cohort baby name] to drink?” One interviewer said that she experienced difficulty when the respondent said the baby did not take a whole beaker of water as the question required an answer of either zero or one or more. Another said she felt the reference period of a “typical day in the past week” was difficult for respondents and that people often gave an answer covering the whole week. Another interviewer said that in this question a “zero” answer could be entered in each box and one was not allowed to proceed. Another felt this question was confusing at first.

- **BabyMonW: Environment (Module 21).** This question asked “how old ^[was/were] ^[Cohort baby name(s)] when you regularly used a cordless baby monitor?” One interviewer found the response list confusing, as it looks like a single code list but is in fact a multi-code list.
- **DummyBPA: Environment (Module 21).** This question asked “does your baby currently use a plastic dummy? If yes, is it advertised as ‘Bisphenol A or BPA free’?” One interviewer reported a lot of mothers did not know the meaning of “Bisphenol A or BPA free”.
- **Citizen: Identity (Module 2).** This question asked “are you a UK citizen, a citizen of your country of birth or a citizen of another country?” Feedback from the UCL researcher suggests that some respondents may be uncertain of their citizenship in cases where they had a right to UK citizenship (because they were married to a UK citizen) but still retained the citizenship of their country of birth.
- **NumBooks and BookTeen: Parental Education (Module 6).** These questions asked “about how many books are there in your home?” and “about how many books were there in your home when you were 16 years old?” Feedback from the UCL researcher suggests that a respondent found answering these questions difficult as the additional information specified in the question (“please do not include magazines, newspapers or children’s books. (There are usually 40 books per metre of shelving or 15 books per foot of shelving).”) was not read to them as it should have been

With regard to the resident partner interview only one difficulty was recorded. In the preamble to the Environment module the interviewer is asked to read out “You will now be asked some questions about your environment”. The following questions are about X-rays and MRI scans in the three months before their partner became pregnant and the interviewer felt it was not obvious to the respondent how these questions related to the “environment” as respondents tended to understand the term.

We carried out a number of checks on the household grid data collected in the Demographics module (Module 1) to assess data quality. These checks are similar to those we have carried out on a number of other studies, including the Millennium Cohort Study, and were intended to look for outlier values or unusual answers which might suggest interviewer error:

- Checking if the mother was over 42 years old.
- Checking if any siblings of the cohort baby were over 16 years old.
- Checking if any step-parents or nannies/au pairs of the cohort baby were under 16 years old.
- Checking if any grandparents of the cohort baby were under 30 years old.
- Checking that the cohort baby did not have more than two natural parents.
- Checking that the cohort baby did not have more than one adoptive parent.
- Checking that the cohort baby did not have more than one step-parent.

- Checking that the cohort baby had one natural mother and one natural father.
- Checking whether the mother reported more than one resident partner.
- Checking the natural parents were not the same gender.

UCL's specification contained some checks for the Dimensions interviewing programme, but did not include the checks listed above. If sufficient time had been available we would have implemented these checks in the interviewing programme, and proposed to do so prior to the main stage (see our recommendations in section 9.1). Unsurprisingly, there are some problems in the data which the checks above would have prevented occurring:

- One mother reported a second male partner in the household, born in 2012. At RelBaby the interviewer recorded that this person was the natural brother of the cohort baby, suggesting the interviewer wrongly coded the answer at RelResp.
- One sibling of the cohort baby was 38 years old at the time of interview (when the cohort baby was around six months old). This individual (older than the mother) was coded at RelResp as the partner of the mother, but it appears was coded as the cohort baby's brother at RelBaby.
- One mother said the baby had more than two natural parents including two female parents. This was because the mother's daughter (according to RelResp), born in 2013, had been coded by mistake as the natural parent of the cohort baby at RelBaby. This suggests that the cohort baby had a natural father and a sister born in 2012.

8.5 Self-completion

Table 8.7 shows the module lengths for the self-completion script (mothers only). The module names are those presented to the respondents.

As expected the module lengths varied considerably. The longest module was How you are feeling, taking six minutes 22 seconds on average, with the next longest being Health (four minutes 31 seconds) – though this is probably partly explained by time taken by the interviewer showing the respondent how to use the tablet - and Parenting (three minutes 52 seconds). Other modules taking three or more minutes to complete include Family relationships (three minutes 39 seconds) and Your Social networks and support (three minutes 11 seconds).

Table 8.7: Module lengths in mother self-completion script

Module	Interviews n	Mean hh:mm:ss	Median hh:mm:ss	Minimum hh:mm:ss	Maximum hh:mm:ss
Health	50	00:04:31	00:03:54	00:02:07	00:14:38
Pregnancy and birth	50	00:02:13	00:01:55	00:01:07	00:05:59
Antibiotics and vaccinations	50	00:00:28	00:00:10	00:00:06	00:13:20
Parenting	50	00:03:52	00:03:08	00:01:50	00:09:21
How you are feeling	50	00:06:22	00:05:19	00:03:19	00:17:25
Your lifestyle	50	00:02:31	00:02:17	00:01:17	00:05:35
Your social networks and support	50	00:03:11	00:02:58	00:01:36	00:06:19
Family relationships	50	00:03:39	00:03:26	00:00:57	00:11:07
Your parents	50	00:02:12	00:01:52	00:00:24	00:04:56
Your financial situation	50	00:01:32	00:01:20	00:00:59	00:04:07
Total	50	00:30:40	00:27:00	00:16:12	01:10:30

As with the mother self-completion script, in the resident partner self-completion script the module lengths varied considerably (see Table 8.8). The longest module was How you are feeling, taking 10 minutes four seconds on average (note this included the Fluid Intelligence Test, which was deliberately set at three minutes in length), and with the next longest being Your lifestyle (four minutes 43 seconds). The lengths for Family relationships, Your social networks and support, and Parenting were similar, at an average of around two minutes 30 seconds.

Table 8.8: Module lengths in resident partner self-completion script

Module	Interviews n	Mean hh:mm:ss	Median hh:mm:ss	Minimum hh:mm:ss	Maximum hh:mm:ss
Health	29	00:01:32	00:01:24	00:00:30	00:03:33
Pregnancy and birth	29	00:00:18	00:00:13	00:00:07	00:01:09
Parenting	30	00:02:21	00:02:02	00:00:44	00:06:29
How you are feeling	30	00:10:04	00:09:32	00:05:49	00:17:32
Your lifestyle	30	00:04:43	00:04:48	00:02:15	00:09:02
Your social networks and support	30	00:02:22	00:02:10	00:00:40	00:05:01
Family relationships	30	00:02:34	00:02:20	00:01:12	00:05:10
Your parents	30	00:01:42	00:01:39	00:00:31	00:04:21
Your financial situation	30	00:01:29	00:01:12	00:00:52	00:04:08
Total	30	00:26:40	00:25:16	00:14:19	00:44:34

Interviewer and researcher feedback

Unsurprisingly, interviewers had less specific feedback about the self-completion script. Interviewers perceived that it was long. One expressed frustration that as a result she felt she lost control of the interview and was at a loss about what to do. One interviewer said he tended to bring paperwork with him to complete during the self-completion script to avoid this problem. Another suggested it was problematic to administer a lengthy self-completion script with mothers of young babies:

Due to the young age of these babies I found most mums felt the self-completion was far too lengthy. Many were tutting and blowing when the questions seemed relentless. The babies are of an age where they are clingy or hungry or tired and trying to use a computer with a baby is hard work. Despite trying to amuse the child and often other young siblings they did manage to complete it. However, some took up to an hour (one took two hours). The average self-completion was 45 minutes. They seemed to take ages on some aspects for example health issues and parental work information.

Feedback from the UCL researcher suggests that in one interview the setting may have prompted the mother to ask the interviewer to read out questions to them, because she was busy with the baby. In this case, the mother failed to complete the self-completion interview, as the lack of a progress bar (a side bar listed the modules to complete, but gave no indication of how long each one was) meant she overestimated the length of time needed to complete the final two modules (which are in fact among the shortest in the self-completion script).

Interviewers gave the following feedback based on their perceptions of difficulties respondents had with some questions in the mother self-completion script. Had the main stage proceeded we would have recommended these comments for consideration:

- **ChldWtG: Pregnancy and Birth (Module 9).** This question asked “please enter ^[Child name]'s birth weight in grams”. One interviewer mentioned that a respondent had difficulty in answering in grams as they had problems using the metric system. We cannot be certain why this is the case as at the previous question they were asked whether they wanted to answer in pounds and ounces or grams. It may be that they had difficulty converting kilograms to grams.
- **Consang: Pregnancy and Birth (Module 9).** This question asked “are you and ^[Cohort baby name(s)]'s father related by blood to one another?”. One interviewer mentioned one respondent laughed when asked this question, but we have no further information about why this was the case
- **MORS 10: Parenting (Module 16).** This question asked how frequently the statement “my baby dominates me...” was true. One interviewer said that one respondent found this question difficult to answer, but we have no further information about why this was the case.
- **MORS 11: Parenting (Module 16).** This question asked how frequently the statement “my baby likes to please me...” was true. One interviewer said that one respondent found this question difficult to answer, but we have no further information about why this was the case.
- **Borrow: Social Networks and Support (Module 18) (presented to the respondents as “Your social networks and support”).** This question asked “how many people among your family and friends could you borrow £100 from if you needed to?”. Some interviewers reported respondents making remarks or laughing at this question, but we have no further information about why this was the case.

Interviewers mentioned the importance of telling respondents the tablet was touch screen and that the keyboard should be detached before the tablet is handed to the respondent. Another mentioned that some respondents believe they had finished after the first module and the side bar had to be explained to them.

Interviewers gave the following feedback based on their perceptions of difficulties respondents had with some questions in the resident partner self-completion script. Had the main stage proceeded we would have recommended these comments for consideration:

- **Fluid Intelligence Test: Parental Mental Health (Module 4) (presented to the respondents as “How you are feeling”).** In general interviewers did not report great problems with the Fluid Intelligence Test although one or two respondents had difficulty with it, but we have no further information about why this was the case.

- **LiterEas: Parental Mental Health (Module 4) (presented to the respondents as “How you are feeling”)**. This question asked “can you usually read [a children's storybook in your own language] easily or with difficulty?”. One respondent criticised this question, saying it was redundant as the fact he was doing the self-completion script proved he could read well.

8.6 Main interview 2

Table 8.9 shows the module lengths for Main interview 2 (mother only). As no timestamps were included in the Contact details and Contacting non-resident fathers modules, the combined length of these modules was estimated by calculating the difference between the end of the partner proxy module and the time the computer recorded the Main interview 2 script being closed by the interviewer.

Table 8.9: Module lengths in mother Main interview 2 script

Module	Interviews n	Mean hh:mm:ss	Median hh:mm:ss	Minimum hh:mm:ss	Maximum hh:mm:ss
Parental Employment	50	00:03:24	00:03:30	00:00:38	00:05:13
Financial Situation	48	00:04:59	00:04:55	00:02:36	00:08:30
Partner Proxy	21	00:04:08	00:03:52	00:02:49	00:07:18
Contact Details and contacting non-resident fathers	48	00:03:19	00:02:44	00:01:13	00:07:19
Total	50	00:13:27	00:13:45	00:07:13	00:21:54

The Parental employment module took on average three minutes 24 seconds, but varied greatly in length. The Financial situation module took on average four minutes 59 seconds, and also varied greatly in length. The Partner proxy module took four minutes eight seconds on average, while checking and gathering contact details and asking permission to interview any non-resident father took three minutes 19 seconds on average.

Table 8.10 shows the module lengths for Main interview 2 (resident partner only). As no timestamps were included in the Contact details module, the length of this module was estimated by calculating the difference between the end of the Financial situation module and the time the computer recorded the Main interview 2 script being closed by the interviewer.

The Parental employment module took on average four minutes three seconds, but varied greatly in length. The Financial situation module took on average two minutes 43 seconds and also varied greatly in length. Gathering contact details took three minutes 27 seconds on average.

Table 8.10: Module lengths in resident partner Main interview 2 script

Module	Interviews n	Mean hh:mm:ss	Median hh:mm:ss	Minimum hh:mm:ss	Maximum hh:mm:ss
Parental Employment	30	00:04:03	00:03:50	00:01:54	00:07:20
Financial Situation	30	00:02:43	00:02:10	00:00:54	00:07:08
Contact Details	30	00:03:27	00:03:09	00:01:26	00:08:05
Total	30	00:10:13	00:09:42	00:04:43	00:17:55

Interviewer feedback

Interviewers reported relatively few problems with this script. One felt that questions on income would be better asked as part of the self-completion instrument. Some interviewers queried the necessity of the Partner proxy module being administered on all occasions when the resident partner was not present at the time of the mother interview¹⁵. They felt it added 10 minutes to a long interview and felt uncomfortable later when the resident partner was asked similar questions in his interview.

There were a small number of specific points made by interviewers. Had the main stage proceeded we would have recommended these comments for consideration:

- **JbStat: Parental Employment (Module 7).** This question asked “thinking back to just before ^[your last / your partner's last] pregnancy commenced, were you...”, with a list of activities including work or study following. One interviewer felt that the reference period could be unclear on occasions, and that respondents could be confused whether this referred to their first job after university/college.
- **FtPtWork: Parental Employment (Module 7).** This question asked “was this job full-time or part-time?”. One interviewer felt that it was unclear whether the question referred to the job now (after the baby had been born) or before the baby was born.
- **GrPayAmt: Financial Situation (Module 8).** This question asked “(thinking about your main job) how much was your GROSS pay the last time you were paid?”. One interviewer felt

¹⁵ On 23 June 2015 UCL decided that for the pilot interviewers should not attempt a non-resident father interview or a non-resident father proxy interview if there was a resident partner in the household, as the number of families this would cover was likely to be small. UCL intended to review this once we the outcomes of the pilot were known.

that it was unclear whether the question referred to the job now (after the baby had been born) or before the baby was born.

8.7 Non-resident fathers

Out of the 154 cases issued to interviewers for the pilot, opt-in questionnaires completed by the mother suggested 139 were living with someone as a couple and nine were lone mothers. Six mothers had not provided any information.

Table 8.11 shows what we found at the pilot. Our assumption had been that 15 per cent of mothers opting-in would be lone mothers. Our pilot sample was not designed to be representative and only six out of 32 areas (those where the response rate to the opt-in approach was relatively good) were issued for the pilot. We found that only two of the 102 mothers we were able to interview were lone parents (2%); one mother had a partner whom she did not live with.

Table 8.11: Comparison of relationship information collected at opt-in stage from mother, compared with field outcomes

	Information collected at opt-in stage from mother			
	Total	Living with someone as a couple n	Lone parent n	Missing information n
Total	154	139	9	6
<i>Of which</i>				
Some interviewing took place	102	92	7	3
Mother has partner	100	92	5	3
Mother has no partner	2	0	2	0
Mother has resident partner (natural father of baby)	99	92	4	3
Mother has non-resident partner (natural father of baby)	1	0	1	0
Mother has no partner	2	0	2	0
Total non-resident fathers identified	3	0	3	0

Five mothers said they were lone mothers at the opt-in, but said they had a partner when they were interviewed face-to-face. Four of the mothers had a resident partner, and one had a non-resident partner. Two who said they were lone mothers at the opt-in were lone mothers when we interviewed them. Of the four mothers with a resident partner:

- Two mothers said they were married at the time of birth of the baby and were still married at time of interview. Theoretically it is possible that at the time the opt-in questionnaire was completed, their husband had temporarily moved out (subsequently moving back in), but

we judge this to be very unlikely. We believe that in these two cases the mother must have misinterpreted the question on the opt-in questionnaire or ticked the wrong box by mistake.

- One mother said she was cohabiting with her partner at the time of the birth, but that she was now married. Again, it is theoretically possible that the partner/husband had temporarily moved out at the time of the opt-in (subsequently moving back in) but we judge this to be very unlikely. We believe the mother must have misinterpreted the question on the opt-in questionnaire or ticked the wrong box by mistake.
- One mother said that at the time of the birth she was living together with the partner part of the time, and now they are living together (but are still unmarried). In this instance it is possible that, if at the time of the opt-in questionnaire the partner was living there only "part of the time", the mother might (reasonably) not have considered herself to be living with him as a couple.

We were able to interview the resident partners of two of the mothers who said they were lone mothers at the opt-in but said when interviewed they had a resident partner. Both of the resident partners reported moving in with the mother before the opt-in fieldwork began. This is supporting evidence for our conclusion that some mothers either misinterpreted the question on the opt-in questionnaire or ticked the wrong box by mistake.

The one mother with a non-resident partner said she was in a relationship with her partner but not living together at the time of birth, and they were still not living together. Therefore the mother's answer to the opt-in questionnaire was correct.

The mother who had a non-resident partner (who was the natural father of the cohort baby) said we could approach the father of her baby to secure an interview, but that she would approach him on our behalf and she would not hand over contact details. The interviewer was not able to establish whether the non-resident father had agreed to participate or refused.

Two lone mothers were interviewed. One said we could approach the father of her baby to secure an interview, but that she would approach him on our behalf and she would not hand over contact details. She was not in a relationship with the father, nor had been at the time of the baby's birth. At the de-brief the interviewer reported that the mother said the father does not visit the child and she only saw the father at his mother's house at the weekend (she does not stay with them). The interviewer said:

I only had one non-resident father and the mum said he wouldn't be interested. I asked if I could contact him but she said she didn't have his number or address. I left materials for him and she said she would give them to him. When I called her two weeks later, she said she had given him the materials but that he was not interested at all.

Later, the mother informed the interviewer that the non-resident father had refused to take part.

The other refused to let us approach the father. She had been living with the father at the time of the baby's birth, but they had since separated. The interviewer reported:

She said repeatedly "he won't do it. He won't do it!" I stressed we would only ask him if he'd like to take part and of course it was up to him if he did, and how important his views were, but she still wouldn't give his name or address. Don't think it was "Life Study" she was worried about or its impact. She just seemed to view him as out of the picture.

For the two mothers interviewed who had no current partner, the survey data confirms the feedback from the interviewers described above. We do not know whether these two mothers have ever lived with the baby's father, as this question is asked only of those saying they are married but separated, divorced, or closely involved but living apart.

8.8 The ASQ-3 questionnaire

The ASQ-3 questionnaire was developed by academics at the University of Oregon and some others¹⁶. Due to copyright restrictions it has to be used exactly as developed. In practice this means it must be photocopied for use, as alterations for administrative purposes are not permitted.

Interviewers were highly critical of the ASQ-3 questionnaire. They felt it did not "fit" with the other materials and looked "faded and grey". The interviewers found writing the household serial numbers by hand on each page of the questionnaire a "little vexing", adding between two and five minutes to the overall interview time.

Could this be made to look a bit more inviting? It looks faded and grey and a bit of an afterthought. Also having to write in the reference number six times was irritating at the end of an interview.

One interviewer did mention that most mothers had done this or a similar questionnaire with the midwife after the baby was born.

Despite their reservations about the ASQ-3 questionnaire, interviewers were highly successful. Out of 100 cases where the mother reached the end of Main interview 2, interviewers successfully placed the ASQ-3 questionnaire in 99 cases. We received 52 ASQ-3 questionnaires from 51 households (where mothers had twins or triplets, they were asked to complete an ASQ-3 questionnaire for each baby) by the cut-off date of 13 November 2015, two working weeks after the end of face-to-face interviewing (to allow time for questionnaires to reach us through the post).

Mothers wrote the date they completed the ASQ-3 questionnaire on 31 of the 52 questionnaires we received (60 per cent). The amount of missing data fluctuates from item to item, but rarely rises above 20 per cent.

¹⁶ For further information, please see <http://agesandstages.com/products-services/asq3>.

8.9 Other issues

It is important to note that one interview was completed with a mother with twins. This was of interest because in a number of modules, particularly in Main interview 1, the questionnaire contains a significant number of "loops", where questions are asked about each cohort baby in turn. This means an interview with a mother of twins or triplets could be significantly longer than for a mother with one baby, and also creates the possibility for error through confusion as to which baby is the object of the questioning. The interviewer who interviewed the mother with twins reported that the scripts worked well and the mother did not get confused as to which baby she was being asked about.

The showcards were produced in separate sets – one for each respondent type – in the hope this would mean they were not unwieldy to use. The showcards were also sequenced so that a letter denoted the module they related to and a number denoted the showcard number within module. Interviewers felt:

- The sequencing convention made it harder for respondents to turn to the right showcard, and a numbering system would have been better.
- The number of showcards in for Financial situation (Module 8) was excessive and was off-putting to respondents when in fact only a few would be used.
- That showcards should be laminated as interviewers said that frequently the baby was in close proximity and this resulted in the showcards becoming shabby quite quickly.
- They would have preferred one set of showcards which covered all respondent types rather than separate sets for mothers, partners and non-resident fathers.

Feedback from the UCL researcher suggested showcards might be considered for all questions where more than five response options were permitted (except in the self-completion script where they are unnecessary).

No concerns were raised about administering the HFEA CD form. One interviewer was pleased about the prompt to leave copies of the consent forms with the respondents.

8.10 Quality considerations

- The quality of the timestamp data provided by the pilot was reasonable. There were two issues affecting data quality negatively. Firstly, the nature of Electronic Contact Sheets mean timestamps cannot take into account the total time the interviewer spends in the household, or the amount of time filling in paperwork outside the interview. This issue means that interview lengths in timestamp data are likely to underestimate the total time spent by the interviewer in the household. Secondly, there were some errors in the scripts relating to timestamps that were amended after 49 full mother interviews had been conducted. These errors affect the computation of module lengths within scripts, but we do not believe are a significant problem because around 50 complete mother interviews and 30 complete resident partner interviews were conducted with corrected scripts.

- The timestamp data show interviewers' perceptions that the time spent in household was considerable were correct. The length of an interview can affect data quality, as respondents may suffer from fatigue later in the interview leading to less considered answers. The current length of the scripts is a significant risk to data quality with the risk being highest for data collected at the end of the interview.
- On a significant number of occasions in both the mother and resident partner interview, others were present at the time of the interview. The presence of others has the potential to affect data quality, in particular for sensitive items, such as those found in the self-completion script.
- Potential data quality problems were reported by interviews for a number of questions in the Main interview 1, self-completion and Main interview 2 scripts.
- There are potential data quality problems with the ASQ-3 questionnaire. Just over half of the ASQ-3 questionnaires placed were returned (although the demographic profile of the mothers returning the ASQ-3 is similar to non-responders). There was some item non-response to the ASQ-3, occasionally rising to above 20 per cent.
- Problems were reported at some points in the script relating to unclear instructions for interviewers, and the lack of showcards for some questions with lists. This has the potential to affect data quality negatively.
- The lack of checks at certain points in the script, particularly the household grid, could impact negatively on data quality. Our checking focused on the household grid only where some discrepancies were noticed.

9 Conclusions

We now give our conclusions where appropriate, against each of the objectives of the pilot which are relevant to the face-to-face fieldwork. The findings of this report need to be treated with caution because the face-to-face fieldwork was conducted among mothers who had returned the opt-in questionnaire. They were not a representative cross-section of mothers and thus some of the findings may not be generalisable to the population of mothers of six-month old babies.

Ensuring that the opted in cases could be batched up and passed to interviewers in a timely manner at the end of the opt-in period (including any necessary sub-sampling).

The cut-off date for opting-in mothers to be included in the face-to-face fieldwork was 28 August 2015. Work to process these data was started on 1 September 2015 and the advance mailing undertaken on 3 September 2015. Thus the procedures were in place for rapid transfer of opted in cases to interviewers.

Ensuring that we could send the interviewers the information that they needed about each case to help them when making contact and scheduling appointments.

Interviewers were provided with a number of pieces of information about each household they were asked to approach: the name and address of the mother and cohort baby, the name, age and gender of the cohort baby, the date the mother opted in, the best day or time to contact, and any information written on the opt-in questionnaire by the respondent. Interviewers did not indicate they required any further information. At the de-brief some interviewers complained of problems with address details being incorrect. This is partly a function of the opt-in process but certainly further checking processes (such as comparing addresses against the Postcode Address File) could improve the quality of addresses provided.

Assessing training of interviewers and whether this was effective in equipping them to do what was required.

The briefing of the interviewers went well and seemed to be largely effective in equipping them to do what was required. It was apparent from the interviewer feedback that more could be done to explain the nature of the proposed information linkage to them, so they were better equipped to answer detailed queries from respondents. The briefing did conclude slightly earlier than anticipated and so there was scope for a longer separate session covering the consent process, rather than include it in a section which covered ethics, confidentiality and safeguarding as well.

The interviewers did diverge to some extent in their approach. For example at least one implemented the information linkage consents on one occasion rather than following the prompts in the scripts, one asked the respondents to complete the Financial situation module themselves, another did not on occasion use the showcards supplied for the demographics module, and another failed to read out some explanatory text. Some of this can be explained by interviewers being new to the study and could be overcome by familiarisation over a longer

period. Although further training might be one answer, in our experience where interviewers significantly diverge in their implementation of procedures, often this can be because of genuine problems with the procedures. We believe some of the problems mentioned above could be overcome with a review of the procedures.

Assessing response to the study in the field.

The response to the study in the field was very encouraging, although this can only be said about the mother households. Sixty-six per cent of mothers issued to interviewers took part; the rate of refusal and non-contact was very low, and it is likely the response rate would have exceeded eighty per cent, had the sample been exhausted during a longer fieldwork period.

Non-contact rates could be lowered significantly if fewer mothers were issued to interviewers. Caution needs to be shown in interpreting the above findings. Had an opt-out approach been used, we would anticipate response rates to the mother interview would have been lower; on the other hand this would have made the assignment size we used in the pilot more viable.

Assessing response among partners and how the partner interview worked in practice.

The response rate to the resident partner interviews was encouraging. In eligible households, interviews were achieved in 48 per cent of cases, compared to a target of 55 per cent. The main cause of non-response was non-contact, with only 26 per cent caused by refusal. Interviewers reported problems in contacting resident partners, as many were working long hours. This resulted in a number of broken appointments.

The response rate to the non-resident father element was disappointing. The opt-in approach appears to have delivered a sample of mothers who are in affluent households and stable relationships. Accordingly the prevalence of lone mothers was much lower (2 per cent) than anticipated (15 per cent). Although the response rate among the non-resident fathers we identified was disappointing (no interviews were achieved) it is difficult to know what the response rate would have been had more non-resident fathers been identified (as might have happened had the original plan to issue 32 pilot areas been viable). As a result, the pilot was unable to provide evidence of a viable approach to including non-resident fathers in a birth cohort study.

Gaining feedback on how the interview works within an in home setting and highlighting any issues that caused problems.

The interview worked reasonably well in a home setting. Problems with specific questions aside, the main problems were the length of the mother interview, the burden of the consent process, and the length of the self-completion process for both mothers and resident partners. The length of the mother interview constrained interviewers' productivity. Many felt that a maximum of two mother interviews were possible per day.

Gauging the length of the interview (both main and partner).

The mean length of interviewing time for the mother was one hour 27 minutes which is 22 minutes 29 seconds longer than planned. The mean length of interviewing time for the resident partner was around 53 minutes, around eight minutes longer than planned.

Overall, the total interviewing time in households where a mother and partner were both interviewed was two hours 19 minutes, 29 minutes longer than planned. During the pilot, the overall interviewing time per household was one hour 53 minutes, 23 minutes longer than planned.

In reality, these times underestimate the time spent by interviewers in the household, as suggested by the interviewers' own perceptions given at the de-brief. For example the initial consent task and reading of the Participant Information Sheet significantly lengthened the household visits in some cases.

Checking the questionnaire was working as it should (routing made sense etc.).

At the time of writing it has not been possible to analyse the c4,500 variables in the dataset generated by the Dimensions interviewing programme. UCL have been provided datasets containing all the interview and Electronic Contact Sheet data which can be used for further analyses. Ipsos MORI's checking of the data focused on ensuring timestamps operated as they should and some faults were identified which were rectified during the first weeks of fieldwork.

Assessing the number of visits required for a full response.

In households where mothers and resident partners were both interviewed, a mean of 3.47 visits were required by interviewers. In households where only a mother was eligible for interview, 2.67 visits were required.

Assessing the length of the fieldwork period and whether this was sufficient to allow for full call backs and chasing.

It is apparent that the length of the fieldwork period was not sufficient to allow for full call backs and chasing. At the conclusion of fieldwork interviewers had not completed work at 54 households, 35 per cent of the issued sample. The reason for this is the very high level of response at the households contacted combined with the very long average interview times which affected productivity. It is possible the assignment size used (an average of around 25 cases per interviewer) would be appropriate for an opt-out approach where one would expect many more refusals than following up mothers who had already opted in to the study.

Assessing the level of movers, and how effective tracing attempts were.

The rate of movers was very low. Interviewers identified only three cases where the cohort family had moved away since the opt-in process (2 per cent of issued sample). As the proportion of households contacted who agreed to an interview was very high, interviewers

had little incentive to conduct extensive tracing and were not required to do so. Thus it is not possible for us to evaluate how effective the tracing procedures would have been.

Checking all administrative procedures (ECS and return of work) were working.

We encountered no difficulties with administrative procedures relating to the Electronic Contact Sheet and return of work. One interviewer reported problems with his tablet which he said resulted in him losing data for two resident partner interviewers. Other interviewers mentioned they had difficulty with recording productive outcomes. One of the interviewers making this complaint had not used the Electronic Contact Sheet before the Life Study pilot and we believe the solution to these problems rests in further training and familiarisation for the interviewers concerned. The reconciliation exercise undertaken shows the administrative procedures around consent posed no problem.

Checking data returned were as expected (routing checks, basic edit checks).

At the time of writing it has not been possible to analyse the c4,500 variables in the dataset generated by the Dimensions interviewing programme. UCL have been provided datasets containing all the interview and Electronic Contact Sheet data which can be used for further analyses.

Ensure the processes for passing data to UCL worked effectively.

Data were transferred to UCL as scheduled via UCL's secure IDHS system.

Obtaining feedback from (some) participants to assess their views on taking part, their levels of engagement and their ideas for any improvements or changes¹⁷.

In general participants reacted well to the study, as might be expected as they had already opted in. Interviewers found most respondents welcoming and committed to the study, some viewing it a privilege to be part of a cohort study.

Interviewers did say that some mothers commented that the interview lacked focus, covering as it did a very wide range of topics. Some participants also had reservations about information linkage, leading to a lengthy consent process in some cases.

Gaining feedback from interviewers on the fieldwork processes and the interview, and whether there were suggested improvements and changes.

In general interviewers enjoyed the assignment and expressed their disappointment on being told that the funding for Life Study had been discontinued. They did have some suggestions for improvement:

¹⁷ Please note that our procedure was to record feedback received from respondents which were passed on to the Ipsos MORI research team by the interviewers. We did not ask all respondents for feedback.

- Some felt that the documentation was too dense and wordy and could be made much more succinct. They cautioned that some respondents do not fully digest all written material they are given, or do not wish to do so.
- They felt the interviews were too long and could be made shorter. The main cause of difficulty for them appeared to be the lengthy self-completion script, which led to some feeling they lost control of the interview situation, creating awkwardness for them as they had a significant amount of time to fill in the household.
- They felt they lacked sufficient information about the information linkage, which affected their confidence when explaining it to respondents and answering in-depth queries. They suggested a Frequently Asked Questions booklet could be produced, and perhaps a laminated card for respondents explaining the process. They also felt more training could be provided at the briefing about the information linkage procedures.
- They asked for a number of other improvements to documents such as:
 - One set of laminate showcards with better sequencing.
 - Calling cards as well as appointment cards.
- Interviewers did not feel the ASQ-3 questionnaire reflected well on the study, because of its presentation and Ipsos MORI's inability to change this due to copyright restrictions, despite their success in placing it and the reasonably good response to it.
- Some interviewers clearly experienced difficulties arising from the lack of showcards in certain parts of the interview, and some resorted to showing the respondents the screen with the list of valid answer options. The use of showcards in the interview needs a detailed review.

9.1 Recommendations

Our recommendations, were the study to continue, would have been as follows. We would have strongly recommended a further pilot to test procedures, in particular because we envisaged using a different sampling frame for the main stage of the Birth Component. It was intended that had the Birth Component of Life Study continued an "opt-out" approach would have been used in conjunction with a sampling frame accessed after an application for Section 251 approval¹⁸ and using the services of the Medical Research Information Service (MRIS) at the Health and Social Care Information Centre:

- **Sampling.** The nature of the opt-in approach generates a compliant sample and response rates to the pilot were very high with very low refusal rates. Consequently interviewers were not able to work the sample fully in the eight weeks available (at the main stage it was intended interviewers should have no more than eight weeks to complete the assignment

¹⁸ Section 60 of the Health and Social Care Act 2001 as re-enacted by Section 251 of the NHS Act 2006 allows the Secretary of State for Health to make regulations to set aside the common law duty of confidentiality for defined medical purposes. The Regulations that enable this power are called the Health Service (Control of Patient Information) Regulations 2002. The Health Research Authority took on responsibility for Section 251 in April 2013, establishing the Confidentiality Advisory Group (CAG) function. Life Study | Version draft 1 | Internal / Client Use Only | This work was carried out in accordance with the requirements of the international quality standard for Market Research, ISO 20252:2012, and with the Ipsos MORI Terms and Conditions which can be found at <http://www.ipsos-mori.com/terms>. © Ipsos MORI 2015.

to ensure the sampled babies were at the appropriate age), and thus response rates were lower than they would otherwise have been had a much longer fieldwork period been permitted. An opt-out approach would be very likely to generate a much lower response rate (we estimate around 55 to 60 per cent if optimal procedures were used), and we would want to review the assignment size to ensure it was appropriate to the expected level of response, once any changes to the interview length were taken into account. Ultimately an assignment size should enable the interviewers to work the sample issued fully in the eight weeks available, to maximise response.

- **Interviewer training and support.** Although procedures for checking opt-in data could have been improved, this would not have been necessary for a further pilot as an opt-out approach would have been used. We would recommend more interviewer training in the area of information linkage to improve confidence and their ability to answer respondents' questions. We would recommend a longer separate section of the briefing covering the consent process.
- **The interview length.** The interview was very long, especially for the mother. We would recommend that, ideally, a baseline interview in a longitudinal study should be kept as short as possible to avoid prejudicing future participation in the study. An opt-in approach naturally produces a fairly compliant sample who will tolerate a very long interview (although there must be concerns about data quality towards the end of any very long interview). It would be unwise to assume a very longer interview would be viable if an opt-out approach were used; a long interview length may well generate significant refusal rates. Accordingly we would recommend a total interview length for the mother of 45 minutes and a maximum length of one hour¹⁹. This would imply cutting the mother interview by between 30 and 45 minutes overall. The partner interview is less problematic in this regard, but to avoid prejudicing long-term participation in the study we would recommend this is kept to the planned 45 minutes *at a maximum*. This would imply cutting at least eight minutes from its current length. The shorter the interview the easier it might be for interviewers to make appointments to interview resident partners, as non-contact is a key problem for these respondents²⁰.
- **Use of self-completion interviewing.** We accept that interviewing using self-completion methods brings many benefits, offering respondents privacy for sensitive items, reducing or eliminating the possibility of embarrassment and considerations of social desirability bias which might affect the honesty of answers given. Self-completion sections need to be kept as short as possible so interviewers maintain control of the interviewer situation. Further, it is apparent that with mothers of young babies, self-completion is less practical as many mothers may need to hold the baby while attempting to complete the interview. We would recommend the self-completion is 10 to 15 minutes maximum, which would imply cutting between half and two-thirds of the current mother self-completion section,

¹⁹ At the baseline wave of the Millennium Cohort Study the mean duration of main interviews was estimated at 65.4 minutes, and the overall field response for this survey, with its substantial overrepresentation of disadvantaged wards, was estimated to be 81 per cent. It is well established that response rates have been declining over the fourteen or so years since the start of the Millennium Cohort Study.

²⁰ Note that at the baseline wave of the Millennium Cohort Study partner interviews averaged 29.2 minutes, in an era of much higher response rates.

and about half of the resident partner self-completion section. We would focus cuts on the following:

- **Parental Mental Health (presented to the respondents as “How you are feeling”).** The section covering mental health is made up of a good number of validated instruments which take a long time to administer. We accept mental health of mothers is a highly important area but strongly feel this important issue needs to be addressed in the most economical way possible.
- **Parental Behaviour and Lifestyle (presented to the respondents as “Your lifestyle”).** This section covers tobacco and alcohol consumption. We believe these important issues could be addressed more economically, for example by asking fewer detailed questions about tobacco consumption, and fewer questions about excessive drinking during pregnancy.
- **Social Networks and Support (presented to the respondents as “Your social networks and support”).** We would recommend cutting the detail of the nature of the contact between the mother and her own mother and father.
- **Family relationships.** We believe there is scope for fewer detailed questions about household chores and relationship dynamics.
- **Parental Employment (presented to respondents as “Your parents”).** We believe this module of questions could be cut completely, as it contains questions about the mother's parents which could be collected at another wave as Life Study is a longitudinal study.
- **A review of the interview content.** We would strongly recommend a review of the questionnaire content is undertaken, with the following objectives:
 - Ensuring there is a “sense check” of questions asked. There are a number of areas where we would question the utility of some questions as they are currently drafted. For example, the detailed questions looking at the nature of the contact between the mother and her own mother and father do not take into account that the mother's parents might not use more modern communications methods (the fact one might not send SMS messages to one's parents does not imply that one's relationship is any less close with them than someone who sends frequent messages to their parents). The question asking how many books the respondent has in their home says they should use the amount of shelving required as a guide, but does not remind respondents that books can be downloaded on to an electronic device. The Parental Employment and Financial Situation modules are also problematic. It is difficult to be confident about the current employment status of the mothers from the answers given (a very high proportion said they were currently in employment, which we consider surprising) and whether they were on maternity leave at the time of interview. Some respondents might find it easier to give gross annual household income, rather than net annual household income, and both might be of interests to analysts. Other questions would

merit review. For example, respondents who said they did not regard themselves as belonging to a religion were asked later how much difference religious beliefs made to their lives.

- Improving the manner in which sensitive questions are asked. It would be useful to review the wording around sensitive questions, acknowledging that some subjects such as the death of children or domestic violence could be painful, and provide respondents with some reasoning for why we want to ask them.
- Establishing how the data gained might be analysed. Data are now available from the pilot to enable analysts to consider how they might analyse the data if the sample size was much larger; the results could feed into the review of questionnaire content to improve the data collected.
- **A review of the use of showcards.** It is important that interviewers can easily understand how to administer a question. We would recommend a review of all questions to ensure this is clear and unambiguous. For example “read out” instructions might be appropriate in some cases. In general for questions with lists, we would recommend the use of showcards. We would also recommend that interviewers’ suggestions for improvements in this regard are studied closely.
- **Development and implementation of rigorous within-script checking.** Although there are some checks included in the Dimensions interviewing programme, there are scope for many more to ensure data quality is not negatively affected by discrepancies in respondents’ answers. The evidence from the household grid checking suggests the lack of some checks will adversely affect data quality. Further, this problem is not confined to the household grid. There are multiple points in the script where answers could be referred back to previous modules as soft or hard checks.
- **Testing the procedures for interviewing non-resident fathers.** The opt-in approach produced an unrepresentative sample of mothers skewed towards affluent mothers in stable relationships. Consequently we did not have an opportunity to test the instrument for non-resident fathers. We would recommend a large-scale opt-out fieldwork pilot to be able us to make a robust assessment of the adequacy of the proposed procedures.
- **Reviewing the consent processes.** This in our view is the most difficult area to make a recommendation. The evidence from the pilot is that the consent processes worked well, albeit there were complaints from interviewers. We would be very wary to generalise about these findings, as they may well not work with a more representative sample. The pilot sample was very heavily skewed towards highly educated women for whom long, bureaucratic forms are unlikely to be a problem and who would be familiar to an extent with concepts such as information linkage. They are likely, moreover, to be predisposed to reading long documents such as the Participant Information Sheet. We would recommend the following actions:

- Qualitative work with a representative cross-section of mothers to test the proposed materials robustly. In particular the guiding principle when developing materials ought to be that they should engage respondents and communicate key messages effectively, with all other considerations taking less of a priority. In particular, we feel that it might be worth considering provision of attractively designed information leaflets to explain consent (following the example of *Understanding Society*), and that the consent form should be designed to be as attractive as the survey leaflet.
- Developing simple easy-to-understand materials to explain information linkage to the respondents. For example, in *Understanding Society* an attractive consent flow chart (entitled “Data Flow for Administrative Records”) clearly shows the respondent what happens to their data and who holds it.
- Reviewing the spacing of the consent questions throughout the interview. We accept that *Understanding Society* found information linkage rates were better if permission was asked when the questions seemed salient, and we would be reluctant to abandon this approach. We feel we may have applied this guidance too dogmatically and that it might be better to ask information linkage consents in fewer groups of questions, perhaps one set of consents in Main interview 1 and one set in Main interview 2, at a suitable point. We would recommend that if information linkage consents are asked at one point in the interview, that this should be at the end not the start, to avoid the risk that some respondents’ concerns about of this part of the procedure, prejudice participation in Life Study.
- **Eliminating the ASQ-3 questionnaire.** We are not convinced the case for inclusion of the ASQ-3 has been strongly made. The conditions attached to its use are particularly problematic for administrative purposes making it difficult to scale up for use with a large sample size (as the document cannot be scanned). We agree with the interviewers that its appearance and wording reflects poorly on Life Study in the eyes of the respondents.

Sam Clemens
Research Director
Ipsos MORI
sam.clemens@ipsos.com

Nicholas Gilby
Research Director
Ipsos MORI
nicholas.gilby@ipsos.com

For more information

Ipsos MORI
3 Thomas More Square
London E1W 1YW

t: +44 (0)20 7347 3000
f: +44 (0)20 7347 3800

www.ipsos-mori.com
www.twitter.com/IpsosMORI

About Ipsos MORI's Social Research Institute

The Social Research Institute works closely with national governments, local public services and the not-for-profit sector. Its c.200 research staff focus on public service and policy issues. Each has expertise in a particular part of the public sector, ensuring we have a detailed understanding of specific sectors and policy challenges. This, combined with our methodological and communications expertise, helps ensure that our research makes a difference for decision makers and communities.

[Job number] | [version] | [confidentiality status]

Life Study | Version draft 1 | Internal / Client Use Only | This work was carried out in accordance with the requirements of the international quality standard for Market Research, ISO 20252:2012, and with the Ipsos MORI Terms and Conditions which can be found at <http://www.ipsos-mori.com/terms>. © Ipsos MORI 2015.