1970 British Cohort Study: 2004-2005 Survey *Technical Report*

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1 Introduction

1.1 The 1970 British Cohort Study

Birth cohort data are some of Britain's richest research resources for the study of human development. Cohort studies follow the same group of people from birth into and through adulthood, providing a picture of whole generations. There are four national longitudinal birth cohort studies in Britain:

- National Survey of Health and Development (NSHD), which began in 1946
- National Child Development Study (NCDS), which began in 1958
- 1970 British Cohort Study (BCS70), which began in 1970
- Millennium Cohort Study (MCS), which began in 2000

This report provides an account of the design, development and conduct of the sixth follow-up survey of the 1970 British Cohort Study in 2004/2005.

BCS70 began when data were collected about the births and families of 17,287 babies born in the UK during one week in April 1970. Since then, there have been five surveys gathering information from respondents living in England, Scotland and Wales[1]. With each successive attempt, the scope of enquiry has broadened from a strictly medical focus at birth, to encompass physical and educational development at age five (1975), physical, educational and social development at ages ten (1980) and sixteen (1986), and then to include economic development and other wider factors at age 26 (1996) and 30 (1999/2000). There have also been studies of sub-samples of the cohort, the most recent being in 1991/92 when a 10% representative sub-sample was assessed for difficulties with basic skills.

Data for BCS70 have so far been collected from a number of different sources (the midwife present at birth, parents of the cohort members, head and class teachers, school health service personnel and the cohort members themselves). Data have also been collected in a variety of ways (paper and electronic questionnaires, clinical records, medical examinations, physical measurements, tests of ability, educational assessments and diaries)[2].

The 2004/2005 follow-up aimed to extend the data collection of the previous surveys. It involved a Computer Assisted Personal Interview (CAPI) and Computer Assisted Self-completion Interview (CASI) and updated information on the cohort member's current situation as had the 1999/2000 surveys. It also included a computer and paper-based assessment of each cohort member's basic skills.

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1 Including the Channel Islands, Isle of Man and other offshore islands.

2 Further information on the BCS70 sweeps can be found in Butler, N.R., Golding, J. and Howlett, B.C. (1986) From Birth to Five: A Study of the Health and Behaviour of Britain's Five year olds. Oxford: Pergamon Press; Bynner, J., Ferri, E., and Shepherd, P. (1997) Twenty-something in the 90s: Getting on, Getting by; Getting Nowhere. Aldershot: Dartmouth Press; Bynner, J., Ferri, E. and Wadsworth, M. (2003) (eds), Changing Britain, Changing Lives: Three Generations at the End of the Century. London: Institute of Education. Information can also be found on the CLS website http://www.cls.ioe.ac.uk

In addition to these elements (known as the 'Core interview'), in a half of all sample points (interviewer assignments), the 2004/2005 survey collected information about the cohort member's natural or adopted children and included assessments of the children's cognitive skills (Parent & Child Survey).

Several organisations played a part in the development and delivery of the 2004/2005 survey for BCS70.

The Centre for Longitudinal Studies (CLS), part of the Bedford Group for Lifecourse and Statistical Studies at the Institute of Education, University of London (and formerly the Social Statistics Research Unit at City University), has been responsible for the study since 1991. CLS led the development of the 2004/2005 survey and commissioned NatCen to carry out the fieldwork. In 2004, CLS was granted long-term funding by the Economic and Social Research Council (ESRC) to establish a stable infrastructure for the study and ensure that fieldwork is conducted at regular intervals.

Fieldwork for the 2004/2005 survey was funded by the ESRC and the National Research and Development Centre for Adult Literacy and Numeracy (NRDC).

NatCen was commissioned by CLS to carry out both the 2004/2005 BCS70 survey and the NCDS telephone survey (which is reported elsewhere[3]). NatCen's responsibilities were to work in collaboration with CLS in the development of instrumentation, conducting fieldwork and initial data preparation, as well as supplementing CLS tracing activities, and making contact with cohort members.

NatCen in collaboration with CLS were also responsible for the fieldwork of the 1999/2000 survey.

[3] Simmonds, N., Fuller E., Lessof, C. and Fouduoli, V. (2007). Technical report of the 1970 British Cohort Study: 2004 – 2005 survey. National Centre for Social Research.

2 Sample Design

2.1 Introduction

The BCS70 selected all babies born in the UK during one week in April 1970. In later sweeps, the cohort was augmented by additional children who were born outside Great Britain, but within the target week in 1970, and subsequently moved to and were educated within Britain. Individuals from Northern Ireland, who had been included in the birth survey, were dropped from the study in subsequent sweeps (see Table 2.1).

Table 2.1 Number of Cohort Members ever participating in BCS70

	No. of cohort members	%
Births during one week in April 1970	17, 287	*93*
Immigrants to age 16	1, 346	*7*
Total Cohort Members	18, 633	*100*

As in previous sweeps of the BCS70, the target sample for the survey was all cohort members currently living in England, Scotland or Wales[4], excluding permanent refusals. The sample definition was subsequently refined, and some cohort members were excluded for specific reasons. The sample issued to field for the sixth follow-up study (i.e. cohort members invited to take part in the 2004/2005 survey) comprised 13,107 cohort members. Further details are given below.

2.2 The Sample

In order to remain within the available budget for the survey, the target sample was designed to improve the efficiency of the main fieldwork by eliminating unnecessary interviewer tracing. In practice, details of cohort members who had personally refused further participation; and those who had emigrated or died were not issued to NatCen. In addition, those who had not taken part in any survey after the 10-year follow-up were also excluded from the target sample[5] (see Table 2.2).

Table 2.2 Cases excluded from the target sample before issue to NatCen

	No. of cohort members
Personal refusal	427
Emigration and Death	2, 058
Other unproductive cases since 1986 survey[6]	2, 951
Total	5, 436

[4] Including the Channel Islands, Isle of Man and other offshore islands.

[5] In an ideal situation, cohort members who were not contacted in earlier sweeps would be re-issued in the latest survey in an attempt to keep attrition at a minimum.

[6] Includes cases excluded from the address database prior to 1991 for reasons not currently identified by CLS.

The sample issued to NatCen comprised 13,197 cases. The sample included all eligible cohort members living in Great Britain and outlying islands, who had been interviewed in 1986 or later (i.e. since they were 16) and whose contact details had been confirmed since 1996. In practice, the sample included a number of cases where the contact information held was believed to be out-of date or inaccurate. Of the sample issued to NatCen, ninety cases were not issued:

- 15 cases were coded as 'do not issue' by CLS as they had indicated that they would not take part in the 2004/2005 survey.
- 74 dress rehearsal cases were coded as productive, ineligible or refusal and subsequently were not reissued for the main stage
- 1 cohort member had moved abroad, and was therefore ineligible.

Therefore the actual issued fieldwork sample comprised 13,107 cohort members. In total, 85% of the sample had been interviewed by NatCen interviewers in 1999/2000, 9% had participated in the 1996 postal survey, and 6% were last interviewed in 1986 (NatCen was not involved in either the 1986 or 1996 surveys).

For one in two cohort members, there was an additional element to the survey, called the Parent & Child interview. This element aimed to collect additional information about the cohort members and their children, and also assessed these children's skills. For this reason, the issued sample was split into 438 Core and 436 Parent & Child points (interviewer assignments). On average, each point included 13 cohort members.

2.3 Serial Numbers

Each BCS70 cohort member has a unique serial number that was allocated at the beginning of the study in 1970. In order to facilitate fieldwork management and data processing, and to increase confidentiality, each cohort member in the issued sample was allocated a unique NatCen serial number, specific to this sweep of fieldwork.

Each serial number consisted of seven digits, plus a check letter (e.g. 1000101R, 5000201B):

- the first digit indicated whether the case was part of a Core or a Parent & Child point – Core cases began with a 1, Parent & Child cases began with a 5
- the next four digits indicated the point
- the last two digits indicated the individual within the point.

If a cohort member moved during the fieldwork period, their new address could be issued as part of a different point. However, their serial number did not change, and they remained eligible for either a Core or Parent & Child interview as in the original point.

The NatCen serial number was provided on the address label of the Address Record Form (ARF), on the address information sheet and on most other documents which were returned to the NatCen Operations Department for coding and editing. The CLS serial number was used on tracing and occupier letters and on any correspondence with the cohort members.

To maintain confidentiality, the NatCen serial number was removed from the dataset before it was deposited at the ESRC Data Archive (see section 5.8.3.)

3 Development

3.1 Introduction

Development of the 2004/2005 survey began in April 2003, and NatCen and CLS met on a regular basis throughout the study. Before the main stage fieldwork started in February 2004, the content and order of the interview was determined. This included deciding on the time to be allocated to each module, the questions and assessments that were to be included, the development of interviewing methods, interviewer protocols and instructions, and consideration of the way information would be recorded on paper and in CAPI. The issued sample was defined, and sample management procedures outlined. The CAPI was programmed and the documents were designed. Associated procedures were agreed, such as the allocation of interviewers to cohort members, the briefing of interviewers and transportation of equipment, and the exchange of sample information between NatCen and CLS.

Three pilot studies were carried out before the main stage of the survey:

- First pilot, covering the Adult Basic Skills Assessment, in July / August 2003
- Second pilot, covering the Parent & Child survey, in September / October 2003
- The full survey pilot, or Dress Rehearsal, in November / December 2003.

3.2 First Pilot - Basic Skills Assessment[7]

3.2.1 Objectives

The overall objective of the first pilot was to inform the selection of the most effective combination of questions to include in the final Basic Skills Assessment. This assessment was used to assess the cohort members' literacy and numeracy skills and to identify any symptoms associated with dyslexia, and was expected to take 40 minutes of a 90-minute main stage interview. The average interview length of the pilot survey was expected to be around 75 minutes, varying according to the skills and abilities of the respondent.

The pilot aimed to:

- estimate how long this part of the interview would take in a home setting
- estimate how long each item (question or assessment) would take
- select the most effective combination of questions and assessments that could be completed in the available time
- indicate how acceptable and comprehensible each item was for respondents
- indicate how easy each item and the assessment as a whole was for interviewers to administer
- identify any difficulties that might be encountered by interviewers.

The pilot also enabled an initial testing of the overall acceptability of the assessments, as well an initial evaluation of the survey resources: CAPI and paper instruments (including showcards), interviewer briefings, and project instructions.

[7] More information on the first pilot can be found in "British Cohort Study (BCS70) 2004 pilot of Basic Skills Assessment", NatCen, August 2004 (unpublished), and in Parsons, S., Bynner, J., Foudouli, V. (2005) "Measuring Basic Skills For Longitudinal Study: The design and development of instruments for use with cohort members in the age 34 follow-up in the 1970 British Cohort Study (BCS70)", London: National Research and Development Centre for adult literacy and numeracy.

3.2.2 The Interview

This pilot interview consisted of seven main sections administered in the following order using CAPI:

General introductory questions
These covered sex, age, ethnicity, children, health, occupation, education, attendance at basic skills courses and self-reported difficulties with basic skills or any dyslexia problems. These questions were administered by interviewers using the CAPI.

Literacy multiple-choice questions
These were adapted from the *Skills for Life* Survey, also known as the National Adult Basic Skills Baseline Survey[8]. After completing a practice question, the respondent read questions from the laptop screen and selected their answer from a number of alternatives presented on the screen. Then the interviewer, who typically sat alongside the respondent, entered their response into the laptop. This approach followed the procedure used in the *Skills for Life* Survey.

After a set of seven screening items had been administered:

- if the respondent had answered four or more items correctly, he / she pursued an "upper tier" (more difficult route) consisting of 18 items
- alternatively, he / she pursued a "lower tier" (easier route) consisting of 19 items.

Literacy open-ended questions
These questions were derived from the assessment previously administered to a representative 10% sample of BCS70 cohort members in 1991, when they were aged 21. A comparable survey using a similar approach but different test questions, was carried out at age 37 for NCDS cohort members. For continuity, the age 34 survey drew exclusively on the questions previously asked at age 21. The assessments were administered on CAPI, with the use of showcards.

Numeracy multiple-choice questions
Like the literacy multiple-choice questions, these were adapted from the National Adult Basic Skills Baseline Survey and administered on the laptop. Again, there were two tiers to the assessment, depending on the number of correct answers to the screening items. After a practice question, a set of six screening items were administered:

- if the respondent had answered four or more items correctly, he / she would be routed to an "upper tier" (more difficult route) consisting of 12 items
- alternatively, he / she would be routed to a "lower tier" (easier route) consisting of eight items.

Numeracy open-ended questions
As with the literacy open-ended questions, these were derived from the assessment previously administered to BCS70 cohort members in 1991 and were administered using CAPI and showcards.

[8] This was carried out by BMRB Social Research on behalf of the Department for Education and Skills, in 2002. See Williams, J., Clemens, S., Oleinikova, K. and Tarvin, K. (2003). The Skills for Life survey: A national needs and impact survey of literacy, numeracy and ICT skills. DfES Research Report 490.

Dyslexia assessment, consisting of two sub-sections

The first dyslexia sub-section comprised a battery of twenty questions, *The Vinegrad Checklist,* covering everyday symptoms of dyslexia[9]. The second sub-section comprised six exercises adapted from the Dyslexia Adult Screening Test (DAST)[10]. These were:

- **One minute reading exercise:** the respondent had to read as many words as possible from a list of 120 words presented on a showcard
- **Two minute spelling exercise:** the respondent had to spell as many words as possible out of 32 words read out by the interviewer; the number of words read out could increase to 40 (through the addition of some easier words) if several spelling mistakes were made at the beginning
- **One minute writing exercise:** the respondent had to copy a short passage
- **Phonemic segmentation:** the respondent was asked to split 12 words into their constituent sounds or syllables
- **Spoonerisms:** the respondent was asked to swap round the initial sounds of three pairs of words
- **Three minute nonsense passage reading:** the respondent had to read a 75 word passage containing 15 "nonsense" (invented) words.

These exercises and associated documents were modified for use in a household interview. Some information was entered in the CAPI, and the original DAST scoring sheet (used for recording respondents' scores and times) was revised for a household setting. Pilot-specific booklets were designed and the amount of scoring that interviewers had to do was reduced. Due to time restrictions, only four of these exercises could be administered at the main stage and the pilot aimed to determine the best combination of exercises.

Interviewers were trained to administer all of the assessments in a standardised manner.

Feedback

This section gave respondents and interviewers an opportunity to feedback on the Basic Skills pilot.

3.2.3 Fieldwork

Sixteen interviewers were briefed by NatCen researchers, with contributions from the CLS research team. The briefings took place on 22nd and 23rd July 2004 and interviewers were given written project instructions to supplement the briefing. Interviews were carried out between 23rd July and 6th August 2003, and debriefing took place on 7th and 8th August 2003.

The sample was recruited from the general population, with interviewers aiming to interview equal numbers of men and women aged between 29 and 39 whose first or near-first language was English. No formal socio-economic criteria were given, but interviewers were instructed to recruit from a diverse range of housing types, spread across socio-economic and geographical areas within their local area.

[9] Originally The Adult Dyslexia Checklist, it was later revised by Michael Vinegrad and became known as The Vinegrad Checklist. Vinegrad, M. (1994) "A Revised Adult Dyslexia Checklist". Educare, 48, pp21-23.

[10] Fawcett, A. and Nicolson, R. (1998). The Dyslexia Adult Screening Test (DAST). London: The Psychological Association.

Subsequently, to ensure that a sufficient number of respondents with poor literacy and / or numeracy skills would be recruited, interviewers were asked to target respondents who might be more likely than average to have poor basic skills. Since this could not be done explicitly without the risk of causing offence, interviewers were encouraged to use some informal approaches such as focusing recruitment in more deprived areas and reassuring reluctant participants that we were particularly interested in involving individuals who might find these kinds of tasks difficult. Interviewers were also encouraged to use a 'snowballing' technique of asking respondents who had seemed to enjoy the assessment but had found the task challenging, to suggest friends who might be interested in taking part.

A total of 177 interviews (58% women, 42% men) were achieved in England and Scotland. The age range was balanced, but cast slightly wider than the BCS70 cohort (25 - 45 years old) for convenience, given the limited fieldwork period. Everyone who completed the interview was given a £10 gift voucher as a token of appreciation.

3.2.4 Key Findings, Outcomes And Changes

General points
Most interviewers found the assessments initially challenging, but interesting and enjoyable. They generally needed to practice before they started interviewing. Two interviewers were themselves dyslexic to an extent that caused difficulties with parts of the questionnaire. As a result it was considered necessary to inform interviewers that they might find the survey difficult if they had symptoms associated with dyslexia.

Respondents who agreed to take part in the pilot found it interesting, although many found it challenging. Several respondents asked for feedback on how they had done, and for more information regarding the subject areas covered by the assessments.

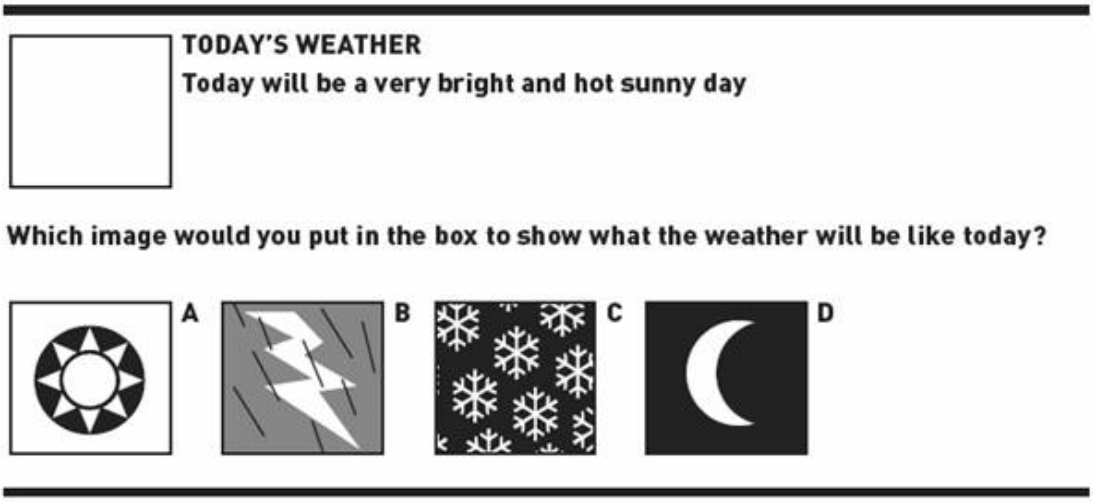
A need was identified for clearer transition screens between the multiple-choice and open ended sections (including instructions to respondent and interviewer), given that there were five points at which the interviewer and respondent were asked to change positions in relation to each other and the screen. It was decided to change the order of the assessments, so that both multiple-choice sections (literacy and numeracy) were administered in sequence, followed by the open-ended sections (literacy and numeracy).

Interviewers agreed that the assessments needed to be done without interference, ideally with nobody else present.

There were no strong reactions to the length of the interview. As a result of the pilot, changes were made to the interviewer briefing and project instructions, and individual items which took a long time to answer were dropped from the assessment.

Literacy and numeracy items
The pilot revealed a number of problems with specific literacy and numeracy items.
A frequent theme in feedback was the difficulty experienced by many respondents in grasping what was expected of them in the multiple choice sections, partly caused by the variation in screen layouts. As a result, the screen layouts were standardised, with the question always appearing at the top of the screen, followed by an image or excerpt of information and the list of response

options at the bottom of the screen. An illustration of the layout of the screen is provided below. Please note that this is not one of the items included in the assessment.



The 'practice' screen at the start of the literacy and numeracy multiple choice assessments was replaced by the introduction screens used in the *Skills for Life* Survey. This consisted of three 'dummy' questions and background information screens that the interviewer read out to the respondent. Apart from improving instructions to respondents, consistency with the *Skills for Life* Survey protocol was maintained.

Respondents experienced the most difficulty with the numeracy tasks and those elements of literacy that were based on information presented in graphic and tabular form. In general they liked questions that were relevant to their own experience and were unhappy with tasks which referred to things they had not encountered, or actively avoided (for example, questions based on the metric system or ferry and train timetables). Several items were dropped and a few others modified in response to these findings.

Whereas the two-tiered assessment seemed to work well for literacy, that is the screening questions accurately identified a small percentage of adults with a very poor grasp of literacy, this was not the case for numeracy. 1 in 3 respondents progressed along the easier lower-tier of the numeracy assessment creating more of a bimodal distribution, with little or no progression from the lower to the upper tier.

As a result, it was decided to keep the two tiers for the literacy assessment (with a few modifications) and revise the order of the numeracy assessment so that all numeracy items were attempted by all respondents. This way a more complete picture of the widespread and diverse nature of difficulties associated with numeracy would be captured. The sequence of the numeracy items also changed so that all questions relating to a particular curriculum topic and set at different ability levels followed each other, before questions on a different curriculum topic were introduced. It was anticipated that this would offer encouragement and help maintain the respondents' interest during the assessment.

Interviewers unanimously agreed that the multiple-choice literacy and numeracy modules should be administered as a CASI, i.e. with the respondent entering the responses. They also suggested the addition of a "pass" option so that respondents could proceed if they could not decide on a response (rather than simply guessing the answer). Any changes needed to be carefully considered as they did not conform with the standard protocols used in the Skills for Life Survey, but they were ultimately implemented in the main stage.

The question wording and showcards relating to the open-ended assessments were revised to improve clarity, as were the interviewer instructions.

Dyslexia
The background questions concerning everyday symptoms of dyslexia were sometimes difficult for respondents to understand. Response options were limited to "yes" or "no", whereas respondents felt that many of the topics they were asked about were true only sometimes or in specific contexts. These questions were subsequently dropped as they had only been included as an additional tool for selecting the 'best' four exercises from the DAST.

The interviewer instructions for the DAST exercises were initially provided on the CAPI. Following interviewer feedback at the pilot, almost all of the instructions were incorporated into the assessment booklet, to improve the interviewers' management of this assessment.

The DAST test materials and protocols had been adapted for the first time for use in a household context, and though the experience of the pilot suggested that the general approach was successful, it also identified opportunities for further modification. Details of administering the instrument were discussed with the DAST's originators and copyright holders, and all protocols and materials were updated and refined.

After examination of the pilot results, the writing and the phonemic segmentation exercises were dropped. The spelling exercise was reduced to a one minute exercise and the list of words to be read out by the interviewer was reduced accordingly.

3.3 Second Pilot - Parent & Child Survey[11]

3.3.1 Objectives

The second pilot focused on all components of the Parent & Child Survey, which aimed to look at the cohort members as parents, gather information on their children and assess the children's cognitive skills. Eligible children were defined as all the cohort member's natural or adopted children who were aged 16 years or under. One of the main objectives was to establish whether fathers would experience difficulties, when answering detailed questions about their child's health and development (as they may not have been closely involved with the care of their children). The average interview was expected to take between one and two hours, depending on the number of children in the household and / or the order of administering the various components.

[11] More information on the second pilot can be found in Parsons, S., Bynner, J., Foudouli, V. (2005) "Measuring Basic Skills For Longitudinal Study: The design and development of instruments for use with cohort members in the age 34 follow-up in the 1970 British Cohort Study (BCS70)" London: National Research and Development Centre for adult literacy and numeracy.

The second pilot was designed to achieve the following:

- estimate how long each Parent and Child element would take in a home setting
- select the most effective combination of interview questions and child assessments that could be completed in the available time
- indicate how acceptable and comprehensible the questions and assessments were for parents and children
- confirm or challenge the mode of delivery for each element of the survey and how elements should relate to each other
- identify any difficulties that might be encountered by interviewers.

Additionally, the pilot aimed to evaluate the survey resources (e.g. CAPI questionnaire, paper instruments such as self-completion booklets and showcards), interviewer instructions, and the briefing especially relating to the child assessments.

3.3.2 The Interview

The second pilot interview consisted of six main components:

- the household grid determined eligibility for different elements of the questionnaire, and the introductory questions gained consent for the child assessments and child self-completion questionnaire
- a CAPI questionnaire with the cohort member about each eligible child in the household
- a paper self-completion questionnaire for the cohort member about each eligible child in the household, mainly covering child development and parenting styles (there were four colour coded booklets for different age groups)
- a CASI interview for children aged 10 to 16; some questions were not presented to children aged 10 - 11 years as they were not appropriate for this age group
- an age-specific cognitive assessment of each eligible child aged between 3 and 16
- questions to collect respondents' and interviewers' feedback.

The child assessments were derived from the British Ability Scales Second Edition (BAS II)[12]. This is a battery of individually administered tests of cognitive abilities and educational achievement, suitable for use with children and adolescents. All of the assessments were age and ability adaptable. Children of different ages started the assessments at different points and progression was dependent upon their performance. The assessment material and standard BAS II scoring were adapted to facilitate the use of CAPI (both with permission). The assessments were administered on CAPI and required paper answer booklets that were specially designed by CLS and NatCen.

Two sets of cognitive assessments were used for the pilot::

Early Years exercises for children aged 3 years – 5 years 11 months

- **Naming Vocabulary:** Children were shown a series of pictures in a stimulus booklet (BAS II easel) and asked to name each of them.
- **Copying:** Children were shown a series of line drawings in the BAS II easel and asked to copy them as accurately as possible.
- **Early Number Concepts:** Children were asked to count and judge quantities, sizes and other numerical concepts with the aid of the BAS Easel.

[12] British Ability Scales II Administration and Scoring Manual (1996) Elliot, C. D., Smith, P. & McCulloch, K. NFER-NELSON, Great Britain.

School Age exercises for children aged 6 years - 16 years 11 months

- **Word Reading:** Children were asked to read out words printed on a showcard.
- **Spelling:** Children were asked to write down a set of words read out by the interviewer; each word was read in the context of a sentence to avoid misinterpretation.
- **Number Skills:** Children were given a series of mathematical problems to solve.

3.3.3 Fieldwork

Nine interviewers were briefed by NatCen researchers, with contributions from members of the CLS research team. They were given written project specific instructions to supplement the briefing. Seven interviewers had also worked on the first pilot.

The briefing took place on 22nd and 26th September 2003; between the first and second briefing day, interviewers were expected to find two children aged 3-16 with whom they could practise administering the child assessments (preferably one child to complete the 'Early Years' and one child to complete the 'School Age' assessments). Fieldwork took place between 27th September and 12th October 2003 and the pilot debrief was on 20th October 2003.

The sample was recruited from the general population, with each interviewer aiming to recruit eight families with one, two or three or more children aged 16 years or under. The aim was to conduct interviews with equal numbers of men and women aged 29 - 39 whose first or near first language was English. Interviewers were given specific quotas for the number and ages of children they should interview. They were asked to recruit a mix of socio-economic groups and geographic areas, by spreading their quota over different types of housing within their area (such as social housing, semi-detached and detached houses).

A total of 60 households in England, Wales and Scotland participated in interviews; some of them had also been involved in the first pilot. Information was collected on 127 children, of which 78% completed at least one assessment. Children who participated were given packs of stickers as a gift and adult respondents were given £10 vouchers.

3.3.4 Key Findings, Outcomes And Changes

General points

Although most interviewers reported that they had no particular difficulties administering the Parent & Child Survey, a few noted that they found the experience somewhat demanding. The different components were particularly difficult to conduct when there were young children or more than one child in the household, and also when there were challenges within the household environment (such as pets running around, neighbours or friends visiting and children being noisy). In general, interviewers felt that the overall time in the household was too long.

Interviewers did not feel that male respondents experienced greater difficulties than female respondents when answering questions about their children.

Successful interview experiences were characterised by a number of features such as the interviewers being very organised, flexible and able to co-ordinate different elements. At the same time interviewers ideally needed a good environment to work in, most importantly a controlled household where there was sufficient support for their tasks. All interviewers agreed that the use of parallel blocks in the CAPI facilitated their activities, not least because they often had to return to

the household in order to complete outstanding interview elements. Finally, practising the assessments as much as possible before the first interview was considered essential.

As a result of this feedback, project instructions and later briefings were substantially modified to cover ideal circumstances necessary for a successful interview, and the interview procedures were to an extent simplified. The CAPI structure was also altered; the Parent & Child interview became an integral part of the main interview, and questions regarding children were grouped into 'loops', so that each topic could be covered for all the respondent's eligible children before moving on to the next topic.

The paper self-completion questionnaires were on the whole successful in keeping cohort members occupied while their child completed the assessments, except where children were very young and needed attention. On some occasions the interviewer left the questionnaire with the parents, and arranged to collect it later.

Child assessments and CASI

There were a number of comments regarding the child assessments. There was a general consensus that if a child was distracted during the middle of an assessment, then their concentration easily wandered. Interviewers had to be firm with parents who tended to encourage or otherwise help their children; at the same time, they too found it hard to watch children struggle with difficult sections. Interviewers agreed that as their experience increased, this aided their administration of the assessments according to the protocols. Although the packs of stickers were well-received by younger children, interviewers felt that they were not appropriate for older children.

Several comments were made in relation to individual assessments and appropriate actions were taken for the next pilot.

Early Years exercises (3 years – 5 years and 11 months)

- Children enjoyed the **Naming Vocabulary** exercise and it did not take too long. Interviewers mentioned that the pages of the Easel sometimes stuck together; relevant advice was given at later briefings. Some images were criticised as they appeared outdated and / or uninteresting; specific instructions on administering such items were given to interviewers.
- The **Copying** exercise proved difficult for most children and went on for too long. Children younger than three and a half years did not seem to have the necessary skills to complete the task. After consultation, it was decided to replace the BAS Copying task with a set of copying exercises that had been used by the cohort members themselves when they were 5 years old[13].
- The **Early Number Concepts** exercise was challenging and children appeared to lose interest after having answered a few items. Interviewers felt that if the images had been more attractive the children might have tried harder, and progressed further.

  With regard to the order of the three tasks, it was decided to finish the assessment with the Copying task. Children generally seemed to enjoy it more than the Early Number Concepts task and therefore they would end on a more positive note.

School Age exercises (6 years – 16 years and 11 months)

- In the **Word Reading** exercise, several children read too quickly for the interviewers' pace and the interviewer needed to manage their speed. If CAPI routed to an earlier item, some children

[13] Osborn, A.F., Butler, N. R. and Morris, A. C. (1984). The Social Life of Britain's Five Year Olds. A report of the Child Health and Education Study. London: Routledge and Kegan Paul.

questioned why they were asked to read words before the point where they had started. For later stages, interviewers were advised to explain that the computer selected the starting item and sometimes instructed them to move around.

- For the **Spelling** exercise, interviewers generally felt that the exercise went on for too long and agreed that repeating the word to be spelt at the end of the sentence laboured the point. Furthermore, as with the Word Reading task, some children realised that they had to go back and spell easier words and this proved awkward for the interviewer to explain. After further discussion, it was decided to use the BAS II exercise in a modified format so that all children within a defined age range received a fixed number of words that progressively became more difficult.
- Most comments on the **Number Skills** exercise related to the formatting of the booklet, the mathematical signs used, and the traditional question types included, rather than the administration of the exercise. In general, children seemed to try too hard to complete questions that were beyond them. For the next stage, the booklet was redesigned, symbols were updated in consultation with experts and several sums were presented in a manner which children were expected to be more familiar with (e.g. horizontal rather than vertical). At the same time, interviewers were briefed to explain the presentation of the booklet, if the child seemed to have problems.

In addition to the changes mentioned above, the format of the CAPI screens was improved to help interviewers identify the questions more easily. Finally, further instructions on interacting with young children and encouraging them without giving item-specific feedback were provided.

Regarding the child CASI questionnaire, the instrument as a whole and several questions in particular were considered too long and rather unsuitable for younger children. This instrument was revised into a paper self-completion for later stages, as a paper format seemed more appropriate for this age group.

3.4 Third Pilot - Dress Rehearsal[14]

3.4.1 Objectives

The third pilot or Dress Rehearsal primarily aimed to establish how the survey tasks would be best managed by interviewers, and was also a final assessment of the interview content, instruments, protocols, documents and project instructions, which incorporated the changes made as a result of the preceding pilots. At this stage, the full CAPI questionnaire (which was very similar to the questionnaire for the 1999 - 2000 survey) was introduced for the first time.

The Dress Rehearsal survey procedures were substantively different to the previous pilots. The sample was not taken from the general population, but was drawn from cohort members. This pilot also intended to test cohort specific elements, including contact procedures, the use of feed-forward data in the CAPI, the use of CLS sample data for the documents, and the wording of advance letters and other documents.

Interviewers were informed that tracing cohort members might be necessary, either because the address provided was insufficient or because the cohort member had moved. They were supplied with “mover letters” that they could leave with informants who were hesitant to reveal the cohort member’s forwarding address.

[14] More information on the Dress Rehearsal can be found in Parsons, S., Bynner, J., Foudouli, V. (2005).

3.4.2 The Sample

The sample for the Dress Rehearsal comprised 140 eligible cohort members in areas local to the ten selected interviewers (see Table 3.1). Of these participants, 81% had been interviewed in 1999/2000. Interviewers were asked to interview at least one cohort member who had last been interviewed in 1986, at least one father and his children, and as many families as possible.

Table 3.1 Dress Rehearsal issued sample by area

Areas covered	No. of interviews
Twickenham, Richmond, Chiswick	14
Kilmarnock and rural Ayr	14
Lake District	15
Hartlepool	13
Retford	13
Harrow	15
West Cornwall	14
Weybridge, Walton, Molesey	13
Brentwood, Chelmsford	15
Colchester	14
Total	140

3.4.3 The Interview

The Dress Rehearsal interview had six elements, four of which related to the Parent & Child interview. Although only two of these elements would be administered to all cohort members in the main stage, it was decided to administer all six elements in all eligible households for the Dress Rehearsal. In other words, all Dress Rehearsal points were treated as 'Parent & Child' points. Eligible children were all of the cohort member's natural or adopted children who were resident in the household and were aged 16 years and under.

The six elements administered during the Dress Rehearsal were:

- a standard questionnaire (CAPI and CASI) for all cohort members, including the household grid and questions about the cohort member's education, housing, health, work, family life etc.
- an additional module within the CAPI, covering health, care and education of all eligible children
- an assessment of the cohort member's basic skills (literacy and numeracy) and any symptoms associated with dyslexia
- a paper self-completion questionnaire for the cohort member, covering parenting styles and the development of each of their eligible children
- cognitive assessments of each eligible child aged between 3 and 16, based primarily on the British Ability Scale (BAS II)
- a paper self-completion questionnaire for all eligible children aged between 10 and 16 years old.

3.4.4 Fieldwork And Response

The Dress Rehearsal took place in November and December 2003. Advance letters were sent to the 140 cohort members in the sample in early November 2003. Ten NatCen interviewers were briefed on 20th, 21st and 24th November 2003; five of them had taken part in either one or both of the previous pilots. Fieldwork took place between 25th November and 7th December and the interviewers were debriefed on 11th and 12th December 2003.

Overall, interviews were conducted with 66 cohort members and 40 of their children. Of these children, 14 completed the BAS Early Years assessments and 26 completed the BAS School Age assessments. Interviewers were unable to contact 37 cohort members. Nine cohort members were unwilling or unable to be interviewed during the fieldwork period, two had died and twenty-six cases were not interviewed due to end of fieldwork (see Table 3.2).

Table 3.2 Contact and response achieved during the Dress Rehearsal

	No. of cohort members
Productive	66
Both core interview AND Parent & Child module completed	47
Full core interview only	17
Partial core interview	2
No contact with cohort member	37
Unknown if CM resident due to non-contact at address after 4+ calls	10
No contact with responsible adult	3
No contact with cohort member	2
Proxy refusal	1
No follow up address obtained	16
Left mover letter	5
Unproductive (out of scope)	8
Personal refusal	6
Cohort member died	2
Unproductive (Dress Rehearsal only)	3
Broken appointment, no recontact	1
Away / in hospital during entire survey period	2
Fieldwork period finished before interview was conducted	26
Total	140

3.4.5 Key Findings, Outcomes And Changes

General points

In general, the Dress Rehearsal went well and there were no particular problems. Other than a few issues (including question wording, routing errors and interviewer instructions that needed clarification) that were amended for the main stage, the CAPI program worked well. The use of parallel blocks in the CAPI was very much welcomed by all interviewers. During the Dress Rehearsal fieldwork, all researchers reviewed the CAPI and other instruments. Amendments identified during this process were implemented at the same time as the other outputs from the Dress Rehearsal.

The main issue mentioned was the length of the interview, especially when the cohort members had not been interviewed since 1986, had long housing or employment histories or when children were involved. As a result of these circumstances, the interviewers often had to make two or more

visits to the household and needed to be flexible with times of day or days of the week when they could visit. At the same time, interviewers often had to wait while several family activities were going on (making drinks, cooking dinner etc.)

Another problem that interviewers faced was that many cohort members had moved, and they were often difficult to trace. In more than a quarter of cases (37), interviewers were unable to make contact with the cohort member. It was not clear whether this would prove to be a problem at the main stage, when interviewers would have more time to trace movers.

Adult assessment

The basic skills multiple-choice section generally seemed too long. The interviewer's presence felt intimidating and this resulted in several cohort members trying to give the correct answers even when the questions were beyond their level. It was decided that this should be administered as a CASI interview, unless the cohort member preferred that the interviewer input their answers into the laptop. A "pass" option was introduced for the main stage, as had been suggested after the first pilot. The introductory teaching screens were further clarified and the item order was slightly modified in order to accommodate specific comments. The basic skills open-ended section was fine, other than a few item-specific comments that related mostly to the showcards.

There were mixed feelings towards the dyslexia assessment. In general, respondents seemed to enjoy it although some of them were frustrated by the Spoonerisms exercise; also, there were a few queries and comments against the term "dyslexia". Interviewers found it rather difficult to administer, particularly because timing was involved, but agreed that it got easier with practice. It was decided that the briefing structure should be altered to incorporate more practice time, and that interviewers should be encouraged to practise as much as possible before starting fieldwork. Also, the term "dyslexia" was replaced by a friendlier term – 'reading and writing exercises'. It was hoped that this new term would encourage cohort members to participate and avoid causing them unnecessary worry.

Child assessments and CASI

Comments on the child assessments largely reinforced the points made during the second pilot.

The main issue for the Early Years age group was the fact that some images seemed inappropriate or uninteresting. The new copying task was simpler than the one used in the second pilot, and did not take as long to complete; interviewers who had also worked on the second pilot agreed that it was preferable to the BAS copying task.

For the Reading and Number Skills exercises in the School Age group, children seemed to be demoralised when they failed several items and the assessment continued, or when they went back to earlier (easier) items. The revised Spelling task went much better than the standard BAS exercise.

It was agreed that the child self-completion questionnaire worked much better on paper than as a CASI, and this method was preferred for the main stage.

4 The BCS70 Interview

The main stage 2004/2005 BCS70 interview had several components. The content of the interview changed according to whether the cohort member belonged to a Core point or a Parent & Child point.

The first two elements described below (Core interview and Adult assessment) were administered in all points (both Core and Parent & Child). The remaining elements were only administered in Parent & Child points with eligible children. Eligible children were all of the cohort member's natural or adopted children, who were aged 16 years or under, and lived in the household at the time of the interview.

4.1 Core Interview

The Core interview consisted of a CAPI and a CASI questionnaire for all cohort members and was expected to take approximately 50 minutes of interview time.

- The CAPI interview aimed to update the cohort member's details on household composition, housing, marital status and partnerships, births and other pregnancies, periods of lone parenthood, children and wider family, employment, family income, academic education, vocational and other training, computer use, basic skills, general health, diet and exercise, height and weight, family activities and social participation.

- The CASI module included questions about voting behaviour, attitudes, family life, alcohol consumption, general skills, psychological well-being, experience of crime, rating the local services and satisfaction with life.

If the cohort member could not understand the questions (even through an interpreter) or communicate the answers for themselves, the interviewer attempted to conduct a proxy interview[15] with a carer or family member. The proxy interview was short and asked about key life events such as marriage and children, and about current activity status, qualifications and health. No other elements were administered.

Documentation of the Core interview is included in Appendix B.

4.2 Adult Assessment

The Adult assessment measured the cohort member's basic skills (literacy and numeracy) and symptoms associated with dyslexia and was expected to take 40 minutes of interview time on average. The basic skills section consisted of a series of multiple-choice questions, followed by a set of open-ended questions.

[15] Examples of cohort members who might fall into the proxy category included people with severe learning difficulties or people who were very ill e.g. in a coma.

4.2.1 Multiple-Choice Basic Skills Questions

The multiple-choice questions were adapted from the *Skills for Life* National Adult Basic Skills Baseline Survey[16], and were administered using CASI. There were several introductory screens, comprising instructions on completing the assessment and three practice questions showing different formats of questions. These questions were adapted from those used in the *Skills for Life* Survey.

The assessment consisted of 20 questions assessing literacy skills and 17 questions assessing numeracy skills. Depending on the cohort members' answers to the first ten literacy items (screening items), the difficulty of the next ten items changed.

Each question consisted of a visual image and some text. The question always appeared at the top of the screen, the image at the centre, and the four (in most cases) possible answers appeared at the bottom of the screen. The cohort member read the question on the screen and entered their answer, then the next item appeared automatically. For most interviews, the multiple-choice was completed as a CASI, but there was an option for the interviewer to enter the cohort member's responses if he / she was asked to do so.

4.2.2 Open-Ended Basic Skills Questions

After completing the multiple-choice CASI questions, there were thirteen open-ended CAPI questions, seven assessing literacy skills and six assessing numeracy skills. These were derived from the assessment administered to a representative 10% sample of BCS70 cohort members at age 21 in 1991.

These questions were administered in a standard interview format: the interviewer showed the cohort member a visual stimulus on a specified show card, for example a map or a page from the Yellow Pages directory, and then asked a question. When the cohort member gave their answer, the interviewer coded it as "Correct" or "Incorrect" (including "Don't Know" responses). For two items that were considered challenging for interviewers to code, there was a third option "Interviewer cannot code" which allowed interviewers to record the cohort member's verbatim response. Interviewers used this code if they were unsure whether the cohort member's response was correct or incorrect. These verbatim responses were coded by the CLS research team.

4.2.3 Reading And Writing Exercises (Dyslexia)

The last part of the Adult Assessment involved administering four exercises adapted from The Dyslexia Adult Screening Test (DAST)[17] which had been modified for use in a survey interview setting. At the end of the interview cohort members were asked to write a couple of sentences about what they had most liked or disliked about being part of BCS70. Apart from being a rich and valuable source of information, a sample of each cohort member's hand-writing was also collected. Taken together, these exercises provided an instrument for assessing whether an individual was experiencing some of the many symptoms associated with dyslexia. This part of the interview was always referred to as "Reading and Writing exercises" (the term "dyslexia" was avoided as this was

[16] Devised by the Centre for the Development and Evaluation of Lifelong Learning (CDELL) at the University of Nottingham. Carried out by BMRB on behalf of the Department for Education and Skills in 2002.

[17] Fawcett, A. and Nicolson, R. (1998). The Dyslexia Adult Screening Test (DAST). London: The Psychological Association

not a clinical assessment and the term had not been well received by respondents during the pilot) and was expected to take no more than 10 minutes.

The following exercises were administered, using showcards and a specially designed yellow booklet:

- **Reading exercise:** The cohort member was asked to read aloud as many words as possible from a list of 120 words in one minute. The words were printed on a showcard and were graded in difficulty.
- **Spelling exercise:** The cohort member was asked to spell as many words as possible from a list of 16 words in one minute. The words were read out by the interviewer, and the list contained an additional four words for cohort members who made mistakes spelling the first two words.
- **Spoonerisms exercise:** In this exercise the interviewer read out pairs of words, and the cohort member was asked to swap their initial sounds. A maximum of three minutes was allowed to complete three Spoonerisms.
- **Reading a nonsense passage:** The cohort member was asked to read aloud a 75 word passage containing 15 nonsense (invented) words in three minutes.
- **Writing a few sentences:** The cohort members were asked to write a few sentences about how they felt about being part of the BCS70 during their lifetime. This task was introduced at the main stage and also aimed to provide a sample of the cohort member's writing skills.

4.3 Parent & Child CAPI module

This module was an extension of the Core interview, and only applied if the cohort member had natural or adopted children aged 16 years and under in the household. It could only be completed as part of (and towards the end of) the Core interview and was expected to take up to 10 minutes per child to complete. It covered each child's physical and mental health, any parent-child separations, pre-school care, current education and parental aspirations. The questions asked depended on the child's age. If appropriate, the module also collected electronic consent for the child assessments and the child self-completion questionnaire.

This module was always asked of the cohort member, even if the other parent claimed to be more closely involved with the care of their children. However, the other parent could contribute to the cohort member's answers. This element of the interview was structured in a series of loops, so that questions in each section were asked about all eligible children in turn, before moving on to the next topic.

Documentation of the Parent & Child interview is included in Appendix B.

4.4 Parent Paper Self-Completion Questionnaires

Cohort members were asked to complete a paper questionnaire for each eligible child, and they could discuss responses with their partner if necessary. The questionnaire covered parenting styles, the child's physical and cognitive development, parent / child relationship, child's behaviour, discipline, school absence / exclusion and reading / schoolwork. The questions varied according to the child's age.

There were four colour coded booklets and the questionnaire content varied according to the child's age:

- pink booklets were administered for children aged 0 to 11 months
- blue booklets were administered for children aged 1 year to 2 years and 11 months
- green booklets were administered for children aged 3 years to 5 years and 11 months
- lilac booklets were administered for children aged 6 years to 16 years and 11 months.

These questionnaires were expected to take around 10 minutes to complete and could be collected by the interviewer at a later visit, or posted back by the cohort member using a Freepost envelope.

4.5 Child Assessments

The child assessments were adapted from the British Ability Scales Second Edition (BAS II) [18], a well-respected and widely-used educational assessment tool, normally used by educational psychologists in a classroom or clinical setting to examine cognitive development and educational attainment.

The assessments used in the main stage of the BCS70 were adapted for survey use. Each of the cohort member's eligible children completed three exercises designed to measure a range of verbal and numerical abilities. Although dependent on the child's age and ability, each set of exercises was expected to take an average of 20 minutes to complete.

Different exercises were used for different age groups:

Early Years exercises (3 years – 5 years and 11 months)

- **Naming Vocabulary:** The child was shown a series of pictures and asked to name each of them
- **Early Number Concepts:** The child was given a set of simple arithmetic tasks, involving counting and judging quantities
- **Copying:** The child was shown a series of line drawings and asked to copy them as accurately as possible. This exercise was not part of the BAS II, but had been completed by the cohort members themselves when they were age 5[19].

School Age exercises (6 years – 16 years and 11 months)

- **Word Reading:** The child was asked to read out words from a printed list
- **Spelling:** The child was asked to spell words read out by the interviewer
- **Number Skills:** The child was given a series of mathematical problems to solve.

All eligible children were given funpacks as a gift or token of thanks after the interview.

[18] British Ability Scales II Administration and Scoring Manual (1996) Elliot, C. D., Smith, P. & McCulloch, K. NFER-NELSON, Great Britain.

[19] Osborn, A.F., Butler, N. R. and Morris, A. C. (1984). The Social Life of Britain's Five Year Olds. A report of the Child Health and Education Study. London: Routledge and Kegan Paul.

4.6 Child Self-Completion Questionnaire

All eligible children aged between 10 and 16 years and 11 months were asked to complete a paper self-completion questionnaire (orange booklet). Topics covered included leisure time activities, the child's relationship with their parents, their attitudes to school and aspirations for the future, their self-esteem, smoking, drinking, drug use and experience of petty crime. If the child was aged 10 or 11 years old, the interviewer was directed to remove a perforated page from the questionnaire as the questions on this page (for example about drug taking) were not considered appropriate for this age group.

Interviewers were instructed to collect the questionnaire during their visit if at all possible, although the questionnaire could be left with the child (with a re envelope) to post back if necessary. Parents were shown a blank copy of the questionnaire if they wanted to see the content, and were strongly discouraged from looking at the child's responses. This questionnaire took 10 to 15 minutes to complete.

5 Fieldwork Procedures

5.1 Interviewer Briefings

Interviewer briefings began on 5th February 2004 and finished on 28th May 2004. There were two types of briefings; those for the Core Interview (Core points) lasting two days and those for the Parent & Child interview (Parent & Child points) lasting three days. Ten Core briefings and twenty Parent & Child briefings were carried out across Britain at nine regional centres. In total, 331 interviewers were briefed to work on the project until the end of fieldwork. All briefings were led by researchers from NatCen and CLS.

Core briefings covered the background to the BCS70, contact procedures, the CAPI and CASI interview, the adult assessments and the use of survey documents, including the ARF and the reading and writing booklet. For the dyslexia exercises, some audio examples that had been specially recorded for training the interviewers were used. The briefing schedule ensured that there was enough time for interviewers to go through the assessments on their own and to attempt administering them on each other.

Parent & Child briefings additionally covered the extra CAPI module asking about the cohort member's children, the child assessments, the parent self-completion questionnaires and the child self-completion questionnaire. For the child assessments two videos were used, to show how to establish rapport with the child and how to administer the BAS II Naming Vocabulary assessment. Interviewers had the chance to practise administering the assessments on each other. Between the second and third day of the briefing, interviewers had a period of two days, during which they were instructed to practise administering the assessments on one child aged 3 - 5 years old and one child aged 6 - 16 years old. These children had been recruited before they attended the first day of the briefing.

The majority of interviewers who worked on BCS70 were experienced, and many of them had worked on Cohort Studies before. Any interviewers who were new to NatCen were supervised on their first interview.

5.2 Issue Of Work

The sample comprised 13,107 cohort members and was split into 874 points: 438 Core points and 436 Parent and Child points (see section 2.2 for more detail). The sample was issued in six monthly waves, between February and July 2004. An additional wave (Wave 7) was issued in November 2004. The cases issued at Wave 7 had moved during fieldwork from a later point to an earlier one.[20] Fieldwork took place between February 2004 and June 2005.[21]

[20] The cohort members who were issued in each wave were selected by the postcode of their most recently known address. A few cohort members informed CLS of a move which took them from an area not yet issued into an area that had already been issued; these cases were issued at Wave 7.

[21] Fieldwork began in February 2004 and was scheduled to be completed within nine months; it was extended because of difficulties tracing cohort members.

Table 5.1 shows the schedule of fieldwork and the number of cases in each wave.

Table 5.1 Schedule of fieldwork issue

Wave	Date advance letters were posted	Date fieldwork started	No of cohort members
1	3 February	27 February	2259
2	2 March	22 March	2153
3	6 April	26 April	2207
4	5 May	24 May	2143
5	8 June	28 June	2158
6	6 July	26 July	2094
7	29 October	8 November	93
Total			13107

5.2.1 The Address Record Form (ARF)

The Address Record Form was the key fieldwork document. For each case issued to the field, an ARF was generated, and labelled with details including the survey serial number, the cohort member's name, gender and address. An Address Information Sheet was also attached to the ARF. This provided interviewers with additional information that might aid their attempts to contact the cohort member and their preparation for the interview (e.g. date that the address was last confirmed). There were two different-coloured versions of the ARF, one for Core points and one for Parent & Child points.

Interviewers were instructed to make contact with the person named on the ARF, and were discouraged from introducing the BCS70 survey to another person, including other household members. The ARF was then used to record progress with that case, including all attempts to make contact, any tracing activities, any change of address, other relevant information and the final outcome, whether productive or not. The importance of recording sufficient detail whilst maintaining confidentiality was emphasised. The information provided by interviewers on the ARF was used by CLS and the NatCen Telephone Unit in their further work to trace sample members whose residence was unknown.

Copies of the ARFs can be found in Appendix A of this report.

5.3 Advance Letter

Cohort members were contacted in writing three weeks before the beginning of each wave of fieldwork. The advance letter was printed on CLS letterhead, and signed by Professors John Bynner and Neville Butler, both familiar names to cohort members. The NatCen Operations Department mailed out these letters.

The letter introduced the current round of the BCS70 study, explained NatCen's role and asked for the cohort member's continued participation in the study. There were two slightly different versions, one for Core and one for Parent & Child points. A CLS Freephone number was included in the letter for cohort members to use if they had any questions or if they wanted to update contact information. This number could also be used if cohort members did not want to take part in the follow-up[22], or if they preferred that the interviewer make contact by telephone rather than in person. Cohort members were also sent a leaflet with general information about the study and a few key findings.

[22] Cohort members who chose not to participate ("office refusals") were not approached by NatCen.

Copies of the advance letter can be found in Appendix A of this report.

5.4 Making Contact

For each wave of fieldwork, interviewer workpacks were sent out two weeks after the advance letters had been sent to cohort members. In order to ensure the best response, interviewers were advised to make their initial contact with cohort members face to face. In cases where a cohort member had asked to be contacted by telephone, or where personal contact proved especially difficult[23], interviewers were instructed to make telephone contact, and make particular efforts to persuade the cohort member to participate in the study. To maintain confidentiality, interviewers were instructed to avoid mentioning the title of the study to anyone other than the cohort member or their parents.

If cohort members remained unavailable for interview after a reasonable period, they were deferred and re-contacted in a later fieldwork wave. Cohort members who had moved outside the interviewer's work area were re-allocated to another interviewer.

Interviewers were asked to make a minimum of four attempts to contact the cohort member at different times of the day and on different days of the week. All steps in the contact process, whether successful or not, were recorded on the ARF.

In 89% of all cases resulting in a productive interview, interviewers had to make at least two visits to the household. In 17% of cases, five or more visits were made. Table 5.2 provides more information on the number of visits.

Table 5.2 Number of visits to the cohort member's address

	Frequency	Percent	Valid Percent	Cumulative Percent
1	1028	*11*	*11*	*11*
2	2681	*28*	*28*	*39*
3	2047	*21*	*21*	*60*
4	1359	*14*	*14*	*74*
5	858	*9*	*9*	*83*
6	558	*6*	*6*	*88*
7	359	*4*	*4*	*92*
8	244	*3*	*3*	*95*
9	168	*2*	*2*	*96*
10	121	*1*	*1*	*98*
11 or more	229	*2*	*2*	*100*
Total	9652	*100*	*100*	
Missing information[24]	13	*0*		
Total	9665	*100*		

[23] Examples of situations in which this could apply included very remote rural addresses and addresses that the interviewer had already visited several times without making contact or discovering any information about the occupants. In such cases, interviewers asked the Green team for authorisation to telephone the cohort member.

[24] These are cases where the total number of calls are unavailable due to technical reasons.

5.4.1 Mover Letter

If the cohort member had moved, the interviewers attempted to find their new contact details. In order to do this, they spoke to ask the current residents or the neighbours. It was hoped that these individuals , who might be able to direct them either to the cohort member, or to friends or relatives nearby who would know their contact details. If they found the new address and it was within a reasonable distance of the original address[25], they attempted to interview at the new address. Alternatively, they updated the contact information and informed the Operations Department who allocated the cohort member to another interviewer.

If someone knew the cohort member's new contact details but was reluctant to reveal any information, the interviewer asked him / her if they would be willing to forward a letter to the cohort member. If they agreed, a mover letter was left with the informant so that they could post it or pass it on to the cohort member, and the cohort member could contact CLS.

If the interviewer was unable to establish the cohort member's new address after making reasonable efforts to do so, they returned the ARF to the Operations Department for further tracing.

A copy of the mover letter can be found in Appendix A of this report.

5.4.2 Tracing Procedures

If the interviewer had been unable to make contact with the cohort member, ARFs were passed to the CLS Tracing Unit. The Tracing Unit used additional information recorded on the BCS70 address database and various other sources. Later in the fieldwork period, in an attempt to shorten the in-office tracing period, selected ARFs were sent from the NatCen Operations Department to NatCen's Telephone Unit. The Telephone Unit called each available telephone number at least four times at different times of the day and on different days of the week.

If either Unit made contact with the cohort member, the contact information was updated and returned to the NatCen Operations Department who re-allocated the cohort member to an interviewer. If either Unit could not make direct contact with the cohort member, they attempted to trace his / her address by following up any leads. This tracing process was recorded on the ARF.

An Occupier letter was sent by NatCen to 1,651 cases in early January 2005. This letter aimed to collect the cohort member's contact details and could be completed by either the cohort member or the person living at the cohort member's last known address. A copy of this letter can be found in Appendix A. In addition, as the members of the BCS70 cohort are flagged on the National Health Service Central Register (NHSCR), CLS were able, with permission from ONS, to arrange for tracing letters to be forwarded (via Health Authorities and subsequently GPs) to 1,712 cohort members during January and February 2005. This resulted in new address information for 306 cohort members. Of the letters sent to NHSCR to be forwarded, 73% were forwarded to GPs and of these 86% were sent on to cohort members.

In total, 1,111 of all productive cases were interviewed after having been re-issued to the field. These cases included indefinite refusals, movers, those found as a result of tracing, and cases where the interviewer had not completed all of the tracing requirements.

[25] This applied if the new address was within 15 miles of the original address, or if it was closer to the interviewer's own home than the original address.

5.5 Fieldwork Progress

Fieldwork was initially due to run from February 2004 to October 2004 but was extended several times. It continued until June 2005 in order to allow more time for tracing and for the overall yield of the study to be maximised. The number of interviews achieved during each of the seventeen months of fieldwork is shown in Table 5.3.

Table 5.3 Interviews achieved by month

		no. of CMs interviewed by month	% of CMs interviewed by month	Cumulative CMs interviewed by month	cumulative % of CMs interviewed by month
2004	February	4	*0*	4	*0*
	March	981	*10*	985	*10*
	April	1,222	*13*	2,207	*23*
	May	1,215	*13*	3,422	*35*
	June	1,363	*14*	4,785	*50*
	July	1,287	*13*	6,072	*63*
	August	1,299	*13*	7,371	*76*
	September	765	*8*	8,136	*84*
	October	378	*4*	8,514	*88*
	November	409	*4*	8,923	*92*
	December	253	*3*	9,176	*95*
2005	January	171	*2*	9,347	*97*
	February	100	*1*	9,447	*98*
	March	75	*1*	9,522	*98*
	April	102	*1*	9,624	*100*
	May	40	*0*	9,664	*100*
	June	1	*0*	9,665	*100*
Total	9,665	*100*	*9,665*	*100*	

Table 5.3 includes all re-issued cases, including those who had originally been difficult to contact, those who had limited availability for an interview, those who had broken appointments and those who had refused an interview when first contacted, but indicated that they might be available later. As mentioned earlier, this contributed 1,111 additional cases to the achieved sample.

5.6 Thank You Letters

All cohort members were sent a letter thanking them (and their children, if appropriate) for taking part in the survey. Thank you letters were sent to cohort members at the end of each wave of fieldwork. Copies of these letters (both Core and Parent & Child) are included in Appendix A.

5.7 Fieldwork Quality Control

As noted above, all interviewers conducted a dummy interview and practised administering the cognitive assessments before starting work. The majority of interviewers who worked on the project were experienced interviewers, and some of them had previously worked on the Cohort Studies. All interviewers new to NatCen were supervised on their first visit and given extra assistance where it was felt necessary. Following this initial supervision, it is standard practice for NatCen interviewers to be supervised in the field twice a year, one of which includes a review of their last year's work. In addition, standard NatCen checking procedures applied: 10% of cohort members interviewed were re-contacted by telephone or letter, and interviewers were supervised regularly. Interviewers whose performance was below expectation were contacted and offered further briefing and support.

The interviewer's route through the CAPI questionnaire was programmed so that all relevant questions came on route according to the cohort member's earlier answers. Several checks of values and measurements were also built into the CAPI. The 'hard' checks did not allow entries outside a given range, and the 'soft' checks asked the interviewer to confirm what he / she had entered. Soft checks were usually triggered where values were implausible but not impossible. These checks were reviewed when the data were edited.

5.8 Safety, Consent And Confidentiality Issues

5.8.1 Safety Issues

Before starting work, interviewers had to follow standard NatCen procedures and notify the local police. The interviewers explained what the survey was about, and gave them a copy of the NatCen police letter and BCS70 advance letter. The interviewers also presented their identity card and left their name and a contact telephone number.

5.8.2 Parental Consent

In Parent & Child points, it was essential that interviewers gained parental consent before carrying out the child assessments. Appropriate prompts came up at the start of the Parent & Child module asking parents to give their verbal consent which was recorded on the CAPI. Written consent was not required. Only those children for whom verbal consent had been obtained and recorded electronically were assessed.

Similarly, interviewers had to record parental consent at the appropriate CAPI screen before handing the child paper self-completion questionnaire to any 10 - 16 year old children in the household. The child was instructed to put the completed questionnaire in the envelope provided and seal it. If a parent wanted to see the content of the questionnaire, the interviewer could only show them a blank copy.

The cohort member or another responsible adult had to be present at the time of the child assessments, though not necessarily in the same room. In general, interviewers were briefed to avoid physical contact with children.

5.8.3 Confidentiality Issues

In order to maintain confidentiality, both field and telephone unit interviewers were instructed to avoid mentioning the title of the study to anyone but the cohort member or their parents. As mentioned in the advance letter, the cohort member's answers were treated in strict confidence in accordance with the Data Protection Act. In addition, interviewers were not permitted to interview anyone known to them personally, such as a friend, a neighbour or a colleague. Such instances were re-assigned to other interviewers.

As part of the strict procedures adopted in the cohort studies for guaranteeing confidentiality, no personal (including coded) information is included in the dataset deposited at the ESRC Data Archive for general research use. For this reason, the NatCen serial number was removed from the dataset before it was deposited at the ESRC Data Archive. However, the CLS serial number (which does not contain coded personal information) was included, to enable linkage between the new survey data and that collected in previous sweeps.

6 Response

6.1 Summary

In total 9,665 cohort members were successfully interviewed between February 2004 and June 2005, a response rate of 75% of the eligible sample with a co-operation rate of 88%.

The issued sample of 13,107 cohort members who were invited to participate in the survey included cohort members who would be eligible and available for interview (see Chapter 2). In the course of fieldwork, 168 cohort members were found to be no longer eligible, either because they had moved abroad or because they had died. In calculating the survey response rate these 168 cases have been excluded because they were ineligible, and therefore the survey response rate (75%) is based on the eligible sample rather than the issued sample.

The response to the survey is summarised in Table 6.1.

Table 6.1 Summary of the response to the 2004/2005 BCS70 survey

	No. of cohort members	% of issued sample	% of eligible sample
Issued sample	13,107	*100*	-
Ineligible	168	*1*	-
Eligible sample	12,939	*99*	*100*
Response	9,665	-	*75*

6.2 Details Of Survey Response

The contact rate for the survey – the percentage of eligible cohort members who were contacted by an interviewer, NatCen's Telephone Unit or the CLS Tracing Unit – was 85% of the total number of issued cohort members (including those who were later identified as ineligible). The co-operation rate – the percentage of cohort members contacted who were successfully interviewed – was 88%.

Table 6.2 provides a detailed breakdown of the response to the survey.

Table 6.2 Details of the response to the 2004/2005 BCS70 survey

	no. of CMs	% of issued sample (n=13,107)	% of eligible sample (n=12,939)	% of CMs contacted (n=10,978)
Ineligible	168	*1*	-	-
CM moved abroad	157	*1*	-	-
CM died	11	*0*	-	-
Not contacted	1961	*15*	*15*	-
No follow up address obtained	1512	*12*	*12*	-
Left mover letter	118	*1*	*1*	-
No contact with responsible adult	9	*0*	*0*	-
No contact with CM	101	*1*	*1*	-
Info refused about CM	9	*0*	*0*	-
Unknown if CM resident	120	*1*	*1*	-
Address inaccessible	5	*0*	*0*	-
Unable to locate address	12	*0*	*0*	-
Demolished	33	*0*	*0*	-
Vacant housing unit	36	*0*	*0*	-
Non residential address	6	*0*	*0*	-
Refusals	1056	*8*	*8*	*10*
Personal refusal	580	*4*	*5*	*5*
Withdrawn prior to fieldwork / interview				
Office refusal (NatCen)	53	*0*	*0*	*0*
Refusal to CLS	49	*0*	*0*	*0*
Refused during interview	1	*0*	*0*	*0*
Proxy refusal	107	*1*	*1*	*1*
Broken appointment	266	*2*	*2*	*2*
Other unproductive	254	*2*	*2*	*2*
Ill at home	11	*0*	*0*	*0*
Incapable	14	*0*	*0*	*0*
Away during fieldwork	30	*0*	*0*	*0*
Case returned, end of fieldwork	24	*0*	*0*	*0*
Other unproductive	175	*1*	*1*	*2*
Lost on laptop[26]	3	*0*	*0*	*0*
Productive interviews	9665	*74*	*75*	*88*
Fully productive - Core only	6798	*52*	*53*	*62*
Fully productive - All P&C[27] elements	2332	*18*	*18*	*21*
Fully productive - Not all P&C	465	*4*	*4*	*4*
Fully productive - Proxy (Core)	22	*0*	*0*	*0*
Partially productive - Core only	45	*0*	*0*	*0*
Partially productive - All P&C elements	2	*0*	*0*	*0*
Partially productive - Not all P&C	1	*0*	*0*	*0*

6.2.1 Non-Contact

In total, 1,961 cohort members (15% of the issued sample) could not be contacted.
In the vast majority of these cases, the cohort member had moved to a new address that could not be found despite extensive tracing efforts. In most other cases, either no contact was made with anyone at the address, or the people contacted were not aware of the cohort member's new contact details. There were also some cases where the issued address was inaccessible, non-residential or the house had been demolished or was vacant[28].

[26] These are cases where the interview was productive but the data was lost in transmission.

[27] 'P & C' stands for Parent and Child

[28] It had been estimated that 10% of cohort members would have moved since the 1999/2000 survey. So this proportion was higher than had been anticipated, especially since the issued sample excluded cases regarded as having a low likelihood of contact (e.g. contact details had not been confirmed since 1996, permanent refusals etc).

This latest sweep of the survey collected a stable address from cohort members who had been interviewed. A stable address is nominated by the cohort member and can be contacted if CLS need to trace the cohort member in future sweeps.

6.2.2 Refusals

Overall, 10% of contacted cohort members refused to participate, a percentage slightly higher than the 99/00 sweep (9%).The greatest number of refusals in BCS70 came directly from the cohort members, either when the interviewer called to make an appointment or prior to fieldwork. In some cases, another person in the household refused on behalf of the cohort member (proxy refusal). Finally, some cohort members either cancelled or broke the appointment[29].

6.2.3 Other Unproductives

During the survey period, a number of cohort members were ill, incapable of completing the interview, away during fieldwork or otherwise unavailable. Since fieldwork was conducted over seventeen months, many attempts were made to contact these cohort members.

There were also 24 cases where the cohort member's contact information was updated towards the end of fieldwork, however there was no time to arrange and / or conduct an interview.

[29] Broken appointments were taken to be disguised refusals, that is, the cohort member expressed willingness to take part when spoken to, but was consistently unavailable after several attempts at re-arrangement by the interviewer and/or follow-up contact.

6.3 Response To Individual Survey Elements

This section is based on the 9,665 cases included in the final Core data set[30]. The Parent & Child dataset included 5,207 cases, corresponding to 2,846 households. Among the cohort members who were successfully interviewed, an additional 1,946 cases assigned to a Parent & Child point, did not have any eligible children in the household.

6.3.1 Core Interview

Successful interviews were completed with 9,643 cohort members and 22 relatives / carers (proxy interviews). The majority of interviews (9,617) were fully productive. The mean and median times for the CAPI interview were 42 minutes and 39 minutes respectively.

The CASI interview was completed by 9,600 cohort members. The mean and median times were 10 minutes and 9 minutes respectively.

6.3.2 Adult Assessment

Table 6.3 shows the response to individual elements of the adult assessment (proxy interviews were excluded from these elements). The table indicates the number of cohort members who *completed* the relevant sections (in contrast to the number who *started* each section but later withdrew completely from that section). More than 99% of respondents completed all four elements. At the beginning of the multiple-choice section, 9,318 cohort members recorded that they were willing to enter their own responses and 265 preferred the interviewer to do it.

Table 6.3 Response to individual elements

Section	Number of CMs participating	Mean	Median
Multiple-choice literacy	9,568	10	10
Multiple-choice numeracy	9,562	12	11
Open-ended literacy	9,556	3	3
Open-ended numeracy	9,555	3	3
Total	9,643		

Table 6.4 shows the number of DAST booklets that were returned by interviewers. Of these booklets, 9,433 (97.5%) were included in the final DAST dataset[31].

Table 6.4 Dyslexia booklets

	N	%
Returned by interviewer	9,456	*98*
No booklet, respondent refused	90	*1*
No booklet for another reason	97	*1*
Total	9,643	*100*

[30] Timings were calculated after excluding outliers and interviews which were interrupted.

[31] Twenty-three cases were not received by the Operations department.

6.3.3 Parent & Child Module

This module was asked of 2,846 cohort members and data was collected about 5,207 children. Table 6.5 shows the children's ages. The average duration of this module was 14 minutes and the median was 13

Table 6.5 Children's age

Age of child	No of children	%
0 - 11 months	443	*9*
1 years - 2 years 11 months	883	*17*
3 years - 5 years 11 months	1,359	*26*
6 years - 16 years 11 months	2,522	*48*
Total	5,207	*100*

6.3.4 Parent Paper Self-Completion Questionnaires

The response rate for parent self-completion questionnaires exceeded 90% for all four age groups, ranging from 94% for the youngest children to 91% for the oldest age group, as shown in Table 6.6. In the vast majority of cases the questionnaires were collected by the interviewer, but some respondents chose to post them back later. The table also shows the number of cases that were included in the final datasets.

Table 6.6 Self-completion parent questionnaires

	Pink (0 - 11 months)		Blue (1 - 2 years)		Green (3 - 5 years)		Lilac (6 - 16 years)	
	N	%	N	%	N	%	N	%
Collected by interviewer	379	*86*	759	*86*	1,202	*88*	2,204	*87*
Left to be posted by respondent	55	*12*	109	*12*	122	*9*	220	*9*
No booklet, respondent refused	4	*1*	7	*1*	19	*1*	54	*2.1*
No booklet for another reason	5	*1*	8	*1*	16	*1*	44	*2*
Total	443	*100*	883	*100*	1,359	*100*	2,522	*100*
Final cases in the edited dataset	*414*	*94*	*825*	*93*	*1,259*	*93*	*2,285*	*91*

6.3.5 Child Assessments

In total 1,251 cohort members (93%) gave consent for their child to complete the Early Years assessment, and 2,258 (91%) gave consent for their child to complete the School Years assessment.

Table 6.7 shows the number of Early Years and School Age assessment booklets returned. On average, the Early Year assessment took 20 minutes to complete and the School Year assessment took 22 minutes. The median times were 18 and 20 minutes, respectively.

Table 6.7 Child assessment booklets

	Early Years - White (3 - 5 years)		School Age - Blue (6 - 16 years)	
	N	%	N	%
Collected by interviewer[32]	1,235	*91*	2,244	*89*
No booklet, respondent refused	75	*6*	159	*6*
No booklet for another reason	49	*4*	119	*5*
Total	1,359	*100*	2,522	*100*

6.3.6 Child Paper Self-Completion Questionnaires

There were 1,077 children aged 10 - 16 in the Parent & Child sample. The majority of cohort members (967, or 91% of cases) gave consent for their child to complete the paper self-completion questionnaire. Those cohort members who did not give consent for their child to complete the assessments, were also much more likely to refuse consent for the child paper self-completion questionnaire.

Interviewers collected 86% of booklets, and an additional 4% of respondents agreed to post them back to the office. In total, 942 cases were included in the final dataset, as shown in Table 6.8.

Table 6.8 Self-completion child questionnaires

	N	%
Collected by interviewer	928	*86*
To be posted by respondent	40	*4*
No booklet, respondent refused	65	*6*
No booklet for another reason	44	*4*
Total	1,077	*100*
Final number of cases in the edited dataset	942	*88*

[32] The number of booklets and consents differ slightly because the Operations department may have received some booklets without any data or the booklets may not have been received at all.

7 Coding And Editing

7.1 Editing CAPI Data

In order to minimise post-interview editing, data entered into CAPI was automatically subjected to checks (see section 5.7). Where a "soft" check was triggered, the interviewer often opened and recorded a note explaining the situation. These notes were kept alongside the data, and could be inspected later. However, data checks during the interview were not exhaustive; for example, complex checks, based on the responses from multiple questions, were avoided. As a result, a separate coding and editing process was required and this was carried out electronically, using a new version of the CAPI program, specially developed for this purpose using Blaise. The edit checks and coding instructions were agreed with the CLS team.

The coding and editing process required the NatCen Operations Department to conduct further data checking, resolve outstanding queries and code responses to "other-specify" and open-ended questions (see Section 7.2). For each case a paper fact sheet was generated for the editor to use. This factsheet included the cohort member's details, and listed responses which had triggered a soft check during the interview, notes or remarks entered by the interviewer and all verbatim responses to "other - specify" and open-ended questions for coding.

Examples of actions taken by editors include:

- reviewing entries which had triggered a soft check (e.g. extreme values of earnings or amounts received or paid) in conjunction with interviewers' relevant notes where available
- checking and resolving interviewer queries
- reviewing unlikely combinations of open-ended responses (e.g. a school teacher working in a factory)
- back-coding "other - specify" responses that interviewers had been unable to code using a revised codeframe (e.g. main reason for moving house)
- coding open-ended responses (e.g. main reason for saving).

Editors recorded their actions and any outstanding queries on the paper fact sheets. These were reviewed by the Operations Department, and, in many cases queries were referred back to the NatCen researchers for guidance.

7.2 Coding Open Ended And "Other Specify" Questions

As mentioned in Section 7.1, the CAPI interview included a number of questions where the responses were recorded verbatim and subsequently needed to be coded. These were questions where the interviewer was either unsure where to code a particular response within the existing code frame, or the full range of responses could not be predicted before the interview, or the existing classification scheme was unsuitable for use during the interview due to its length.

The following types of questions required coding:

- Questions where a code frame had been established in the past, either in earlier BCS70 sweeps or on other studies. For these questions, provision was made to record additional information by using an "other - specify" code. It was agreed that where there were more than 200 "other - specify" responses, the existing code frames would be reviewed and new categories added.[33] New categories were introduced to the edit codeframe, if the original code frame categories proved insufficient[34]. Responses were then backcoded into the expanded code frames.
- Open-ended questions required interviewers to record the cohort members' verbatim responses i.e. it was intentional that a code frame was not provided in the CAPI. Again, it was agreed that where there were more than 200 verbatim responses, these would be coded in code frames created after reviewing the verbatim responses[35].
- Questions where a pre-existing classification scheme was used, for example relating to type of occupation and industry as well as health problems. For the first group of questions, Standard Occupational Classification (SOC2000) and Standard Industrial Classifications (SIC 1992) were used; the National Statistics Socio-economic Classification (NS-SEC) was derived from SOC2000 and employment status, and was used as a social class measure. For health questions, coding was based on the International Classification of Diseases, 10th revision (ICD-10). For educational qualification questions, an updated version of a codeframe first adopted for the 1981 NCDS follow-up was used.

New or revised code frames for questions in the first two categories were largely developed by NatCen researchers, with contributions from the CLS team. Final agreement on code frames was reached in December 2004.

A list of all questions that were coded is provided in Table 7.1. This table also indicates the type of code frame and software used for coding. The bulk of the coding was undertaken by the NatCen Operations Department, however coding of some health conditions and educational qualifications was accomplished after consultation with the NatCen and CLS researchers.

[33] In practice, all available verbatim responses were examined in order to amend the codeframes. In many cases, these exceeded 200 responses.

[34] These were questions where a large number of responses had been coded as "Other specific answer not in code frame", "Vague / Irrelevant" or "Editor cannot code".

[35] See footnote 31

Table 7.1 List of coded variables

Code frame	Software used	Module	Variable name
SOC / SIC	Blaise CAPI edit	QProxy	CJTitle, CJDo, CJFirm
		QEmploy	CJDo, CJTitle, TitDiff, DCJTit, CJFirm
		QEmploy - Histories	JTitle, Jdo
		QPartJob	PJTitle, PJTtldif, PJDo
ICD-10	Excel	QBirth	PregI
		QHealth2	LsiCond, KHLPrb2, OthCanc, HearOth, EyeOth
		QParent	PCCanc3, PCCong2o, Pcfit4, PCHea2, PCHea6, PCHear5, PCHear6o, PCHosp2o, PCHosp3a, PCOthh2, PCSght4o, PCSght6o, PCSPch4
Qualifications	Excel	QLifLong	EdqSub
		QVocal	VocSub, VocTypO
		QCourSki	CurQSub
Other - specify questions: (pre-existing codeframes were *expanded* after reviewing responses)	Blaise CAPI edit	GFields	Othlang
		QHouse	WhyMoth, HomeGo
		QFamily	PhOther
		QEmploy	OthAct1, CJOthOrg, JyoEn
		QPartJob	POthAct1
		BNfrmLn1	HuseOth, WuseOth, IntOth[36]
		QPartic	OthTimey
		QCMCasi	OthParty, OthPrty
		QParent	Pccsch2o
Open - ended questions (codeframes *created* to edit responses)	Blaise CAPI edit	QFamiInc	Savey, FinWhy[37]

In spite of extensive efforts to improve the code frames used, high percentages of responses remained unclassified for a number of questions (for example, those relating to the use of computers at home or work, or use of the internet and the questions on educational qualifications). This may be a result of the general nature of these questions.

After the coding and editing process had finished, NatCen researchers further reviewed and provisionally back coded these unclassified responses using an Excel spreadsheet. This enabled CLS to conduct further back coding on the delivered dataset and reduce the number of unclassified responses, if this was considered necessary. Furthermore, CLS researchers reviewed verbatim responses to the literacy open ended questions (questions OthUnc3b and OthUnc3c) as they were better qualified to do this. Data relating to the cohort member's educational qualifications were delivered to CLS in a separate dataset. This enabled CLS researchers to further review the verbatim responses to these questions and if necessary, revise the qualification code frame and the codes attached.

7.3 Editing Paper Questionnaire Data

Keying of the self-completion paper questionnaire data was undertaken by an external agency; then the data was edited in a similar way to the CAPI data. Editors needed to resolve contradictions, for example where cohort members or their children had ignored routing instructions or ticked more than one response to a question where only one response was required.

[36] Code frames for these questions needed significant development.

[37] For this variable two separate codeframes were developed, depending on the response to question FinPast.

In the few cases where the cohort member responded to an open question (as opposed to choosing from pre-coded categories), editors were instructed to be permissive about implausible answers (e.g. extreme values of pocket money) which could be corrected in analysis. Clearly impossible answers were coded as missing values (the equivalent of a CAPI 'hard check').

Editing and coding instructions are included in Appendix C.

7.4 CAPI Problems With The Data

While editing data, a few problems were identified. The majority of these were resolved by NatCen researchers, in consultation with the Programming and Methods Department.

- In a few cases, the questionnaire aimed to collect information about the cohort member's past, for example employment history or relationship history. In these modules, the intention had been to collect information in such a way that the most recent event was recorded first, and the next most recent event was recorded second. In a few cases (mostly in the pregnancy module) the current event was not recorded as the most recent event, and therefore the order of event histories was incorrect at the point the data was collected. This was resolved by reordering the data in SPSS before delivery of the dataset to CLS.
- In some cases, a fault in BLAISE (which has since been rectified) resulted in a verbatim response to one open-ended question being replicated elsewhere. This usually happened with two or more questions on the same topic (e.g. questions on the cohort member's previous jobs), but in some instances the questions concerned were not related to each other (e.g. respondent's job and reason for saving). Replicated responses were reviewed one by one and amended as appropriate, wherever possible.
- A few routing errors were identified in the questionnaire during the course of fieldwork. Where possible, these errors were rectified as soon as they were discovered. However, where this was not possible affected responses were coded as missing values during the edit. Cohort Members were not re-contacted. CLS have been provided with a detailed description of each of these occurrences and their resolution so that this can be taken into account during analysis of the data.

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Appendix A Fieldwork Documents

Advance letter – Core Sample
Advance letter – Parent and Child Sample
BCS70 Calendar
Mover letter
Occupier letter
ARF – Core sample
ARF –Parent and Child Sample
Thank you letter – Core Sample
Thank you letter – Parent and Child Sample
Self-completion questionnaire about children aged 0 – 11 months
Self-completion questionnaire about children aged 1 – 2 years
Self-completion questionnaire about children aged 3 – 5 years
Self-completion questionnaire about children aged 6 – 16 years
Young Person self completion questionnaire
Showcards – Core Sample
Showcards – Parent and Child Sample
Project instructions

Appendix B BCS70 2004- 2005 Survey Questionnaire Documentation

Core questionnaire documentation
Parent & Child questionnaire documentation
Proxy questionnaire documentation

Appendix C Coding And Editing Instrucions

CAPI coding and editing instructions

ICD-10 health coding instructions

Appendix D Details Of UK Data Archive Deposit

Data from the 2004-2005 follow-up of the 1970 British Cohort Study is deposited with the UK Data Archive at the University of Essex. The various elements of the deposit, are listed below. Users are advised that they will need to consult all elements of the documentation to gain a full understanding of the data.

BCS70 2004-2005 Deposit: Elements

Title	Format
BCS70 2004-2005 Follow-up: Cohort Member Interview Data (December 2006)	SPSS
BCS70 2004-2005 Follow-up: Adult Assessment Data (December 2006)	SPSS
BCS70 2004-2005 Follow-up: Parent and Child Interview Data (December 2006)	SPSS
BCS70 2004-2005 Follow-up: Parent and Child - Parent Self-completion Data (December 2006)	SPSS
BCS70 2004-2005 Follow-up: Child Assessment Data (December 2006)	SPSS
BCS70 2004-2005 Follow-up: Child Self-completion Data (December 2006)	SPSS
BCS70 2004-2005 Follow-up: Technical Report	PDF
BCS70 2004-2005 Follow-up: Interactive Data Dictionary for SPSS dataset (based on the SPSS Data Dictionary)	Idealist for Windows
BCS70 2004-2005 Follow-up: Guide to the Dataset	PDF
BCS70 2004 Guide to Child Assessments	PDF
BCS70 2004 Guide to Child Paper Questionnaires	PDF
BCS70 2004 Guide to Child Self Completion Questionnaire	PDF
BCS70 2004-2005 Follow-up: CAPI Documentation	PDF
BCS70 2004 Parent and Child - Parent Self-completion: Children aged: 0-11 months	PDF
BCS70 2004 Parent and Child - Parent Self-completion: Children aged: 1- 2 years	PDF
BCS70 2004 Parent and Child - Parent Self-completion: Children aged: 3 - 5 years	PDF
BCS70 2004 Parent and Child - Parent Self-completion: Children aged: 6-16 years	PDF
BCS70 2004 Child Self-completion Questionnaire: Children aged 10-16 years	PDF