

Institute of Education University of London

# National Child Development Study

2008-2009 Follow-Up

Deposited with the UK Data Archive

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User guide to the data

October 2012



**Centre for Longitudinal Studies** Following lives from birth through the adult years www.cls.ioe.ac.uk



First published in 2012 by the Centre for Longitudinal Studies Institute of Education, University of London 20 Bedford Way London WC1H 0AL www.cls.ioe.ac.uk © Centre for Longitudinal Studies ISBN XXXX

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## NCDS 2008-2009 Follow-Up Team

The NCDS 2008-9 follow-up was designed and conducted by a joint team drawn from CLS and the National Centre for Social Research (NatCen). The key members of the team are listed below:

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#### Acknowledgements

We would like to thank a number of people for their contribution to the National Child Development Study 2008-2009 survey.

Firstly, we would like to thank all the cohort members, who generously gave their time to participate in this project and without whom this survey would not have been possible.

At the Centre for Longitudinal Studies and the National Centre for Social Research (NatCen), we would like to thank all those members of the administration, tracing and IT teams named elsewhere in this Guide, and the interviewers who worked on this study, and greatly contributed to the success of the fieldwork.

The work could not have been carried out successfully without the involvement of the many advisors drawn from researchers, policy makers and funders, who we consulted throughout the design of the surveys.

We wish to acknowledge the support for this follow-up of our principal funders: the Economic and Social Research Council.

## PREFACE

Data from the 2008-9 follow-up of the National Child Development Study has been deposited with the UK Data Archive at the University of Essex in stages. This document has been prepared to accompany the final deposit.

The elements of the deposit, to which reference will be made throughout this document, are identified below. Users are advised that they will need to consult all elements of the documentation to gain a full understanding of the data.

The Centre for Longitudinal Studies (CLS) request that any work which is based wholly or in part on analysis of National Child Development Study data includes the following acknowledgement:

"The analyses in this work are based wholly or in part on analysis of data from the National Child Development Study (NCDS). The data was deposited at the UK Data Archive by the Centre for Longitudinal Studies at the Institute of Education, University of London. NCDS is funded by the Economic and Social Research Council (ESRC)."

CLS also request that the term 'NCDS' be included when compiling keywords to accompany any publications based on analysis of the study's data.

Title	Format
	6066
National Child Development Study - Data collected in 2008/9 (at age 50)	SPSS
National Child Development Study – Unfolding bracket data collected in 2008/9 (at age 50)	SPSS
National Child Development Study 2008-2009 Follow-Up – A Guide to the Dataset	PDF
NCDS 2008-2009 Follow-Up: Questionnaire Documentation	PDF
NCDS 2008-2009 Follow-Up: Self-completion Questionnaire	PDF

#### NCDS 2008-2009 Follow-Up Data Deposit:

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# 1. Introduction

The 2008/9 follow-up of the National Child Development Study (NCDS) ran from August 2008 to May 2009. The survey partially overlapped with a telephone follow-up of the 1970 British Cohort Study (1970 cohort). The NCDS survey was designed by the Centre for Longitudinal Studies of the Institute of Education, University of London (CLS), and the fieldwork was carried out by the National Centre for Social Research (NatCen). The work was funded by the Economic and Social Research Council.

In total 12,316 cohort members were issued to interviewers and 9,790 were interviewed.

In March 2009 an interim dataset was deposited, based on 2,997 interviews completed between August and December 2008. This dataset was comprised of a subset of the full list of variables. Data from the full sample is now being deposited at the UK Data Archive (University of Essex) in stages.

In March 2010 a first dataset was deposited. This dataset included responses to the bulk of the questions put to cohort members in 2008/9. Variables which required complex post-fieldwork editing were not included.

This document accompanies the final deposit which includes responses to all the questions put to cohort members in 2008/9 (with the exception of open-text variables). Variables available here for the first time are:

- Those which relate to the four 'history' modules housing history, relationship history, fertility history and economic activity history<sup>1</sup>
- Variables relating to absent children
- Variables relating to older children
- Specific details relating to recently achieved qualifications

## 1.1 NCDS Background

NCDS started life as the Perinatal Mortality Survey, which was designed to examine the social and obstetric factors associated with stillbirth and infant mortality. In the first survey, data were collected about the births and families of 17,638 babies born in Great Britain during one week in March 1958. There have subsequently been a further eight surveys which have sought to gather information from respondents living in England, Scotland and Wales, in order to monitor their health, education, social and economic circumstances.

These surveys were carried out in 1965 (age seven), 1969 (age eleven), 1974 (age sixteen), 1981 (age 23), 1991 (age 33), 1999/2000 (age 42), 2004/2005 (age 46) and 2008/2009 (age 50). As part of the 1991 survey, information was additionally collected from co-resident partners and for a third of the sample data was also collected from any co-resident natural or adopted children of the cohort member.

Surveys of sub-samples of the cohort took place in 1976 (age 18), 1978 (age 20) and 1995 (age 37). The most recent sub-study, in 1995, involved conducting basic skills assessments with 10% of the cohort.

In addition, a 'Biomedical Survey' was conducted in 2002/3 which sought to obtain objective measures of ill-health and biomedical risk factors.

<sup>&</sup>lt;sup>1</sup> Separate datasets covering employment histories and partnership histories between 1974 and 2008 have recently been deposited at the UK Data Archive along with full documentation.

The 2004/2005 survey took the form of a 30 minute telephone interview which focused on updating the key changes in circumstances which had been experienced by cohort members in the time that had elapsed since their last interview.

The 2008/2009 survey was comprised of two parts: a 'core' face-to-face interview and a paper selfcompletion questionnaire. As in all recent follow-ups the main aim was to update information gathered in previous surveys in order to explore the factors central to the formation and maintenance of adult identity in each of the following domains:

- Lifelong learning
- Relationships, parenting and housing
- Employment and income
- Health and health behaviour
- Citizenship and values

#### **1.2 Survey Design**

A number of organisations were involved in the development and delivery of the 2008/2009 follow-up.

**Centre for Longitudinal Studies (CLS)** – CLS are an ESRC resource centre based at the Institute of Education, University of London and have been responsible for the study since 1991. CLS were responsible for the development of the 2008/2009 survey and commissioned the fieldwork.

**Funders** – The 2008/2009 survey was funded by the Economic and Social Research Council (ESRC).

**Advisors** – The content and design of the 2008/2009 survey was developed in collaboration with a number of advisory panels comprised of researchers, policy-makers and funders.

**Fieldwork subcontractors** – Following competitive tendering, the National Centre for Social Research (NatCen) were selected to conduct the 2008/2009 survey on behalf of CLS. NatCen assisted CLS with the development of instrumentation, conducted the fieldwork and carried out initial data preparation (including coding and post field editing) and documentation. NatCen also conducted the follow-ups in 2000 and 2004/2005.

## 2. Survey instruments

The 2008/2009 survey was comprised of the following elements:

- 1. A 55 minute 'core' interview which included:
  - a. Computer Assisted Personal Interview (CAPI) 40 minutes
  - b. Computer Assisted Self Interview (CASI) 10 minutes
  - c. A series of cognitive assessments 5 minutes
- 2. A paper self-completion questionnaire

The paper self-completion questionnaires were (in most cases) posted to cohort members once the interviewer had arranged an appointment to conduct the core interview. In the majority of cases cohort members had then completed these questionnaires in advance of their core interview, meaning that they could be collected by the interviewer when they visited.

In addition, cohort members completing the survey were also asked for their consent to link their responses with administrative data held by DWP and NHS and if applicable to provide their consent for CLS to approach their parents about a possible study concerned with examining inter-generational transfers and relationships between cohort members and their parents<sup>2</sup>.

More detail about each of these elements is provided below.

<sup>&</sup>lt;sup>2</sup> For more information about the paper self-completion questionnaire see Elliott and Brown, 2011 (<u>www.cls.ioe.ac.uk/ncds8datanotes</u>)

#### 3. Survey content and key variables

Many of the questions in the 2008/9 follow-up interview had been asked in earlier waves of the NCDS and the BCS, which will allow for the making of comparisons both across the sweeps of NCDS and with the BCS cohort. There were, in addition, a number of new areas of data collection including a new module covering symptoms of the menopause and a series of cognitive ability tests.

Table 1 below lists some of the key variables included in this deposit. The majority of these variables were also included in the Age 46 survey -NCDS7 (variable names are listed where applicable).

The case identifier used on the file is 'ncdsid' which replaces the old case identifier 'serial'. In August 2008, all historic NCDS datasets were re-deposited at the UK Data Archive with the old case identifier 'serial' replaced by a new identifier 'ncdsid'. This identifier can be used to link the data longitudinally to earlier sweeps.

The reason for changing the case identifier was to improve the security of the data and increase safeguards on the confidentiality of cohort members.

All datasets carrying the old serial numbers should normally be deleted within three months of receipt of the revised data by the researcher.

Further information on this may be found in the 'CLS Confidentiality and Data Security Review', included in the documentation available via ESDS.

## Table 1 - Some key variables

Information	NCDS8 variable name	NCDS variable label	NCDS7 variable name
Identifier	ncdsid	ncdsid serial number	ncdsid
Sex	n8CMsex	CM's sex	nd7sex
Legal marital status	nd8MS	(Derived) Marital status for all CMs (merging n8hms and n8ms)	nd7ms
Cohabitation status	nd8Cohab	(Derived) Whether CM cohabiting as a couple (merging n8cohab and n8hcohab)	-
Spouse / partner	nd8spphh	Cohort member lives with a spouse or partner	nd8spphh
Natural children	nd8nchhh	(Derived) Number of cohort member's natural children in household	nd7nchhh
Non-biological children	nd8ochhh	(Derived)Number of cohort member's non- bio children in household	nd7ochhh
Household size	nd8numhh	(Derived) Total number of people in household	nd7numhh
Accommodation	N8accom	Type of accommodation	n7accom
Number of rooms	nd8numrm	(Derived) Number of rooms in the house (n8numrms)	n7numrms
Tenure	n8ten	Home ownership / tenure status	n7ten
Mother alive	nd8maliv	(Derived) Whether CM's mother alive (incl prev sweep data)	nd7maliv
Father alive	nd8paliv	(Derived) Whether CM's father alive (incl prev sweep data)	nd7paliv
Non-residential relationships	n8othrea	Whether CM is currently in a non-residential relationship	n7othrea
Receipt of state benefits	N8stbe	Whether receiving any of state benefits specified (on card)	-
Social class	N8NS8	(Derived) NS-SEC 8 class analytic version	nd7ns8
Economic activity	n8Econ02	(Derived) CM's current economic activity	nd7ecact
Net pay	n8CNetWk	Computed : weekly amount of take-home pay	-
Partner's economic activity	n8pecac2	(Derived) CM partner's current economic activity	nd7potha
Partner's net pay	n8PNetWk	Computed : Partner's net pay - weekly amount	-
Highest academic qualification	nd8hachq	Highest Academic Qualification - info from 1991,2000,2004 and 2008	nd7achq1
Health	n8HlthGn	CM self-assessment of health	n7khlstt
Registered disabled	n8khldsl	Whether CM registered disabled	n7khldsl
Health limits Activities	n8khllt	Whether health limits everyday activities	n7khllt
Smoking	n8smokig	Smoking frequency	n7smokig
Alcohol consumption	n8drinks	Frequency of drinking alcohol	n7drinks

A broad summary of the content of the 2008/9 follow-up interview and self-completion questionnaire is provided in sections 3.1 to 3.4.

## **3.1 Core CAPI interview:**

The CAPI interview collected updated information about household composition, housing, relationships, births and other pregnancies, periods of lone parenthood, adopted children, absent and older children, parents, family income, economic activity, education and qualifications, work-related training, use of computers, health, smoking, drinking, exercise, height, weight, social participation and social support.

## 3.2 CASI interview:

The CASI interview collected information on voting behaviour and party support, experience of symptoms of the menopause, problematic drinking behavior, well-being, relationship satisfaction, domestic division of labour, job commitment, attitudes towards pensions and retirement, childhood, efficacy and life satisfaction.

The CASI interview included several established scales which are listed below along with the variables of which they are comprised. Overall scores for each scale have also been derived and included within the data deposit. Additional information about the derivation of these overall scores and copies of the syntax used can be found in Appendix 2.

## 3.2.1 Kanungo's Job Involvement Scale

The survey included four items from a ten-item scale developed by Kanungo (1982) as used by Frone and Rice (1987) to measure job involvement which is defined as 'psychological identification with a job'. The scale measures the extent to which one sees their job as an important part of their self-concept. A derived overall score is provided in nd8jobin. Scores range between 1 and 6 with higher scores indicating higher levels of job involvement.

Variable name	Variable label
n8comjb1	CASI: Whether most imp things in CM's life relate to presjob
n8comjb2	CASI: Whether job is only small part of who CM is
n8comjb3	CASI: Whether CM personally involved in his/her job
n8comjb5	CASI: Whether most CM's interests centre around their job
nd8jobin	(Derived) Overall job involvement score (1-6)

## 3.2.2 AUDIT (Alcohol Use Disorders Identification Test)

The AUDIT test replaces the CAGE scale as a measure of problematic alcohol consumption. The AUDIT consists of 10 questions covering alcohol consumption, problems and dependency. Responses to each question are scored from 0 to 4 giving a maximum score of 40 (nd8audit). Scores of 8 or more are associated with harmful or hazardous levels of drinking; scores of 13 or more for women and 15 or more for men are likely to indicate alcohol dependence. A derived variable (nd8audg) is provided which identifies those allocated to either of these groups.

Variable name	Variable label
n8drinks	Frequency of drinking alcohol
n8Audi02	CASI: Num drinks containing alcohol CM has typ drinking day
n8Audi03	CASI: Frequency of six or more drinks on one occasion
n8Audi04	CASI: Frequency CM unable to stop drinking in last yr
n8Audi05	CASI: Frq drink caused CM failed to do as expctd in last yr
n8Audi06	CASI: Freq CM need drink first thing in morning in last yr
n8Audi07	CASI: Frequency CM felt guilt after drinking in last yr
n8Audi08	CASI: Frq drink made CM unable to rem prev night in last yr
n8Audi09	CASI: Whether CM/other injured due to CM drinking in last yr
n8Audi10	CASI: Wh rels/friends concern about CM drinking in last yr
nd8audit	(Derived) Total AUDIT score
nd8audg	(Derived) AUDIT Group

#### 3.2.3 Malaise inventory

The survey included a set of 24 self-completion questions which combine to measure levels of psychological distress, or depression (Rutter et al, 1970). The 2008-9 follow-up used 9 of the original 24 items.

Variable name	Variable label
n8mal02	CASI: Whether CM feels tired most of the time
n8mal03	CASI: Whether CM often feels miserable and depressed
n8mal05	CASI: Whether CM often gets worried about things
n8mal09	CASI: Whether CM often gets into a violent rage
n8mal12	CASI: Whether CM often suddenly scared for no good reason
n8mal14	CASI: Whether CM is easily upset or irritated
n8mal16	CASI: Whether CM is constantly keyed up and jittery
n8mal20	CASI: Whether every little thing gets on CM's nerves
n8mal21	CASI: Whether CM's heart often races like mad
nd8mal	(Derived) Total Malaise score (9 questions)
nd8malg	(Derived) Total Malaise score - grouped

#### 3.3 Cognitive assessments:

The cognitive assessment module was comprised of four tests as described below. Variable names and variable labels are provided for reference.

#### 3.3.1 Word list recall

A test of verbal learning and recall was included where participants were required to learn a list of 10 common words. The CAPI program randomly selected one of four lists of words which were presented to the respondent by the computer using a recorded voice. In cases where the computer voice was not audible the list was read aloud by the interviewer, who was asked to imitate the pace and clarity of the recorded voice, reading the words at approximately 2 second intervals.

Once the list had been read out, cohort members had up to two minutes to recall as many as they could. Interviewers made a note of each word correctly recalled and entered the total into the CAPI program.

Variable name	Variable label
n8CfLisn	Number of words correctly recalled

#### 3.3.2 Animal naming

The second cognitive test was a test of verbal fluency which measured how quickly participants could think of words from a particular category, in this case naming as many different animals as possible within one minute. Interviewers made a note of each named animal and entered the total into the CAPI program. Repetitions, named animals (e.g. Bambi) and redundancies (e.g. white cow, brown cow) were excluded from the total score.

Variable name	Variable label
n8CfAni	Number of animals mentioned

#### 3.3.3 Letter cancellation

The letter cancellation test measures attention, mental speed and visual scanning. Participants were given a page of random letters of the alphabet and asked to cross out as many "Ps" and "Ws" as possible within one minute. Two scores were calculated: speed and accuracy. The 'speed' score was measured by the total number of letters scanned, the 'accuracy' score was measured by the number of Ps and Ws which were scanned but missed.

Variable name	Variable label
n8cfrc	Letter cancellation speed score: Total num letters scanned
n8cfmis	Letter cancellation accuracy score: Num Ps & Ws missed(0-65)

## 3.3.4 Delayed word list recall

The final test was a test of delayed memory which asked the participant to recall as many words as they could from the original list presented to them during the first word-recall task. The word lists were not repeated and participants had again two minutes to recall as many as they could. Interviewers made a note of each word correctly recalled and entered the total into the CAPI program.

Variable name	Variable label
n8cflisd	Number of words recalled after delay

#### 3.3.5 Comparability of cognitive assessments with other studies

When conducting the cognitive assessments interviewers working on the 2008-9 follow-up followed exactly the same procedures as were employed by interviewers working on the English Longitudinal

Study of Ageing (ELSA) (http://www.ifs.org.uk/elsa/) and as such the data collected by the two studies will be directly comparable.

Word-list recall exercises and the letter cancellation task have also been included in the 1946 cohort study (the National Survey of Health and Development) (http://www.nshd.mrc.ac.uk/nshd.aspx). There are however a number of small differences in protocol which will have an impact on the comparability of results:

- The word list recall exercise asks 1946 cohort members to recall 15 words, whereas ELSA and NCDS ask respondents to recall 10 words.
- In the 1946 study word list recall exercise the words are shown to the respondent in a flip book (at intervals of two seconds) whereas in the ELSA/NCDS exercise the words are read to the respondent by the computer (unless respondent unable to hear well in which case the words are read by interviewer). A person's ability to recall words which they have read may differ from their ability to recall words which they have heard spoken.
- In the 1946 study, respondents are asked to recall the words on 3 occasions, whereas ELSA/NCDS respondents are only asked to recall the words twice. On the 1946 study, once the word-list recall task has been completed for the first time it is immediately repeated a second time whereas on ELSA the task is only completed once at first. Each of the studies then include a delayed word-list recall exercise but the 1946 respondents will be at an advantage as they will have had an extra opportunity to commit the words to memory.
- 1946 cohort members are given one task between the original word list recall exercise and the delayed word-list recall exercise (the letter-cancellation task) whereas ELSA/NCDS respondents are given two tasks (the letter-cancellation exercise and the animal naming exercise).

The word-list recall exercises (immediate and delayed) were also included in the 1993, 1995, 1996, 1998, 2000, 2002 and 2004 sweeps of the Health and Retirement Study (HRS) (http://hrsonline.isr.umich.edu/). The protocols followed by interviewers working on the HRS were exactly the same as those working on NCDS and ELSA, meaning the data collected by each of the studies will be comparable. The only difference is that between the immediate word-list recall exercise and the delayed word-list recall exercise the HRS has included 5 minutes of questioning rather than additional cognitive assessments as included in ELSA/NCDS.

## **3.4 Paper self-completion:**

The paper self-completion questionnaire collected information on leisure activities, personality type, health, sleep, values and attitudes, sense of community and quality of life. In addition, cohort members were asked an open question where they were asked to write about the life that they imagined they would be living at the age of 60. This qualitative data has been transcribed and anonymised and is deposited separately.

The paper self-completion included several established scales. As mentioned above, overall scores for each scale have also been derived and included within the deposited data. Additional information about the derivation of these overall scores and copies of the syntax used can be found in Appendix 2.

#### **3.4.1** Personality Inventory

The self-completion questionnaire included 50 questions from the International Personality Item Pool (IPIP) (Goldberg, 1999). Responses can be summed to provide scores on the so called 'Big-5' personality traits: extraversion, agreeableness, conscientiousness, agreeableness and intellect. Scores on each trait range between 10 and 50 with higher scores equating to higher levels of each trait.

NOTE: The derived variables nd8ext, nd8agr, nd8con, nd8emo and nd8int which are included in the deposited data were incorrectly derived and will be re-deposited as soon as possible. In the mean time users are advised to re-create these variables using the syntax provided in Appendix 2 Section A.

Variable name	Variable label
n8scq2a	SC:I am the life of the party
n8scq2b	SC:I feel little concern for others
n8scq2c	SC:I am always prepared
n8scq2d	SC:I get stressed out easily
n8scq2e	SC:I have a rich vocabulary
n8scq2f	SC:I don't talk a lot
n8scq2g	SC:I am interested in people
n8scq2h	SC:I leave my belongings around
n8scq2i	SC:I am relaxed most of the time
n8scq2j	SC:I have difficulty understanding abstract ideas
n8scq2k	SC:I feel comfortable around people
n8scq2l	SC:I insult people
n8scq2m	SC:I pay attention to details
n8scq2n	SC:I worry about things
n8scq2o	SC:I have a vivid imagination
n8scq2p	SC:I keep in the background
n8scq2q	SC:I sympathise with others' feelings
n8scq2r	SC:I make a mess of things
n8scq2s	SC:I seldom feel blue
n8scq2t	SC:I am not interested in abstract ideas
n8scq2u	SC:I start conversations
n8scq2v	SC:I am not interested in other people's problems
n8scq2w	SC:I get chores done right away
n8scq2x	SC:I am easily disturbed
n8scq2y	SC:I have excellent ideas

Instact/22Sc:1 have intule to sayn8scq2aaSC:1 have a soft heartn8scq2bbSC:1 often forget to put things back in their proper placen8scq2ccSC:1 get upset easilyn8scq2cdSC:1 do not have a good imaginationn8scq2eeSC:1 talk to a lot of different people at partiesn8scq2ggSC:1 kave a good imaginationn8scq2ggSC:1 talk to a lot of different people at partiesn8scq2ggSC:1 kave and thingsn8scq2ggSC:1 longe my mood a lotn8scq2iiSC:1 an quick to understand thingsn8scq2iiSC:1 don't like to draw attention to myselfn8scq2kkSC:1 take time out for othersn8scq2llSC:1 have frequent mood swingsn8scq2pnSC:1 don't mind being the centre of attentionn8scq2ppSC:1 follow a schedulen8scq2qqSC:1 get irritated easilyn8scq2ttSC:1 get irritated easilyn8scq2ttSC:1 and quiet around strangersn8scq2twSC:1 get personality Inventory-Extraversion score 10-50n8scq2txSC:1 an full of ideasn8scq2txSC:1 an full of ideas<		CC-1 have little to say
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n8scq2mmSC:I have frequent mood swingsn8scq2nnSC:I use difficult wordsn8scq2ooSC:I don't mind being the centre of attentionn8scq2ppSC:I feel others' emotionsn8scq2qqSC:I feel others' emotionsn8scq2qqSC:I follow a schedulen8scq2rrSC:I get irritated easilyn8scq2ssSC:I spend time reflecting on thingsn8scq2ttSC:I am quiet around strangersn8scq2vvSC:I am exacting in my workn8scq2vwSC:I often feel bluen8scq2xxSC:I often feel bluen8scq2xxSC:I am full of ideasnd8ext(Derived) IPIP Personality Inventory-Extraversion score 10-50nd8con(Derived) IPIP Personality Inventory-Conscientiousness score 10-50nd8emo(Derived) IPIP Personality Inventory-Emotional Stability score 10-50	n8scq2kk	SC:I take time out for others
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n8scq2ppSC:I feel others' emotionsn8scq2qqSC:I follow a schedulen8scq2qrSC:I get irritated easilyn8scq2ssSC:I spend time reflecting on thingsn8scq2stSC:I am quiet around strangersn8scq2uuSC:I make people feel at easen8scq2vvSC:I am exacting in my workn8scq2xxSC:I often feel bluen8scq2xxSC:I am full of ideasnd8ext(Derived) IPIP Personality Inventory-Extraversion score 10-50nd8agr(Derived) IPIP Personality Inventory-Conscientiousness score 10-50nd8emo(Derived) IPIP Personality Inventory-Emotional Stability score 10-50	n8scq2nn	SC:I use difficult words
n8scq2qqSC:I follow a schedulen8scq2rrSC:I get irritated easilyn8scq2rsSC:I spend time reflecting on thingsn8scq2ssSC:I am quiet around strangersn8scq2uuSC:I make people feel at easen8scq2vvSC:I am exacting in my workn8scq2xwSC:I often feel bluen8scq2xxSC:I am full of ideasnd8ext(Derived) IPIP Personality Inventory-Extraversion score 10-50nd8agr(Derived) IPIP Personality Inventory-Conscientiousness score 10-50nd8emo(Derived) IPIP Personality Inventory-Emotional Stability score 10-50	n8scq2oo	SC:I don't mind being the centre of attention
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nd8ext(Derived) IPIP Personality Inventory-Extraversion score 10-50nd8agr(Derived) IPIP Personality Inventory-Agreeableness score 10-50nd8con(Derived) IPIP Personality Inventory-Conscientiousness score 10-50nd8emo(Derived) IPIP Personality Inventory-Emotional Stability score 10-50	n8scq2ww	SC:I often feel blue
nd8agr(Derived) IPIP Personality Inventory-Agreeableness score 10-50nd8con(Derived) IPIP Personality Inventory-Conscientiousness score 10-50nd8emo(Derived) IPIP Personality Inventory-Emotional Stability score 10-50	n8scq2xx	SC:I am full of ideas
nd8con(Derived) IPIP Personality Inventory-Conscientiousness score 10-50nd8emo(Derived) IPIP Personality Inventory-Emotional Stability score 10-50	nd8ext	(Derived) IPIP Personality Inventory-Extraversion score 10-50
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	nd8con	(Derived) IPIP Personality Inventory-Conscientiousness score 10-50
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	nd8int	(Derived) IPIP Personality Inventory-Intellect Score 10-50

## 3.4.2 Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)

WEMWBS is a 14 positively worded item scale with five response categories. It covers most aspects of positive mental health (positive thoughts and feelings) including both hedonic and eudaimonic perspectives (Tenner et al, 2007). Scores range between 14 and 70 and higher scores indicate higher levels of well-being.

Variable name	Variable label
n8scq3a	SC:I've been feeling optimistic about the future
n8scq3b	SC:I've been feeling useful
n8scq3c	SC:I've been feeling relaxed
n8scq3d	SC:I've been feeling interested in other people
n8scq3e	SC:I've had energy to spare
n8scq3f	SC:I've been dealing with problems well
n8scq3g	SC:I've been thinking clearly
n8scq3h	SC:I've been feeling good about myself
n8scq3i	SC:I've been feeling close to other people
n8scq3j	SC:I've been feeling confident
n8scq3k	SC:I've been able to make up my own mind about things
n8scq3l	SC:I've been feeling loved

n8scq3m	SC:I've been interested in new things
n8scq3n	SC:I've been feeling cheerful
nd8wemwb	(Derived) Warwick Edinburgh Mental Well-Being Scale

#### 3.4.3 SF-36

SF-36 is a widely used multi-purpose health survey comprised of 36 questions. It yields an 8-scale profile of functional health and well-being scores as well as psychometrically-based physical and mental health summary measures and a preference-based health utility index (Ware, Snow, Kosinski, & Gandek, 1993).

Each of the 8 scales are scored between 0 and 100 with higher scores indicating higher levels of health.

Variable name	Variable label
n8scq4a	SC:Vigorous activities, such as running, lifting heavy objects.
	participating in strenuous sports
n8scq4b	SC:Moderate activities, such as moving a table, pushing a vacuum
	cleaner, bowling, or playing golf
n8scq4c	SC:Lifting or carrying groceries
n8scq4d	SC:Climbing several flights of stairs
n8scq4e	SC:Climbing one flight of stairs
n8scq4f	SC:Bending, kneeling or stooping
n8scq4g	SC:Walking more than one mile
n8scq4h	SC:Walking half a mile
n8scq4i	SC:Walking 100 yards
n8scq4j	SC:Bathing or dressing yourself
n8scq5a	SC:Past 4 wks phys Health led to cut down amount of time spent on work/other activities
n8scq5b	SC:Past 4 wks phys Health led to accomplished less than would like
n8scq5c	SC:Past 4 wks phys Health led to limited in the kind of work or other activities able to do
n8scq5d	SC:Past 4 wks phys Health led to difficulty performing work/other activities
n8scq6a	SC:Past 4 wks emo probs led to cut down amount of time you spent work or other activities
n8scq6b	SC:Past 4 wks emo probs led to accomplished less than would like
n8scq6c	SC:Past 4 wks emo probs led to not done your work/other activities a carefully as usual
n8scq7	SC:Past 4 wks, what extent has phys health/emo probs ifamily friend etc.
n8scq8	SC:How much bodily pain have you had during the past 4 weeks?
n8scq9	SC:During the past 4 weeks, how much did pain interfere with your
	normal work (including both work outs
n8scq10a	SC:Did you feel full of life?
n8scq10b	SC:Have you been a very nervous person?
n8scq10c	SC:Have you felt so down in the dumps nothing could cheer you up?
n8scq10d	SC:Have you felt calm and cheerful?
n8scq10e	SC:Did you have a lot of energy?
n8scq10f	SC:Have you felt downhearted and low?
n8scq10g	SC:Did you feel worn out?
n8scq10h	SC:Have you been a happy person?

n8scq10i	SC:Did you feel tired?
n8scq10j	SC:Has you health limited your social activities (like visiting friends,
	relatives, etc.)?
n8scq11a	SC:I seem to get ill a little easier than other people
n8scq11b	SC:I am as healthy as anybody I know
n8scq11c	SC:I expect my health to get worse
n8scq11d	SC:My health is excellent
nd8phhe	(Derived) SF-36 Physical functioning score
nd8rlmp	(Derived) SF-36 Role-limitations due to physical health
nd8rlme	(Derived) SF-36 Role-limitations due to emotional problems
nd8enfa	(Derived) SF-36 Energy/fatigue score
nd8emwb	(Derived) SF-36 Emotional Well-Being score
nd8socf	(Derived) SF-36 Social Functioning score
nd8pain	(Derived) SF-36 Pain score
nd8genh	(Derived) SF-36 General health score

## 3.4.4 Medical Outcomes Study Sleep Scale

4 items from a 12 item scale measuring quality of sleep (Hays & Stewart, 1992).

Variable name	Variable label
n8scq12	SC:During the last 4 weeks, what was usual time taken to fall asleep
n8scq13	SC:During the last 4 weeks, average number of hours sleep per night
n8scq14	SC:During the last 4 weeks, how often did you waken and have troub
	falling back to sleep
n8scq15	SC:During the last 4 weeks, how often did you sleep enough to feel
	rested upon waking ?

## 3.4.5 CASP-12 / 14

CASP-12/14 is a scale designed to measure quality of life in the 'third age' by using Likert-scaled questions which cover four theoretical domains: control, autonomy, self-realisation and pleasure. The 2008-9 follow up used 14 items from the full 19 item scale (Wiggins et al, 2004) summary scores based on both 12 and 14 items are included in the dataset. Users are encouraged to to use CASP-12 as this is the recommended variable for analysts (Wiggins, 2008). Scores range between 0 and 36 for the 12 item score and between 0 and 42 for the 14 item score, with higher scores indicating higher levels of well-being.

Variable name	Variable label
n8scq19a	SC:My age prevents me from doing the things I would like to
n8scq19b	SC:I feel what happens to me is out of my control
n8scq19c	SC:I feel left out of things
n8scq19d	SC:I can do the things I want to do
n8scq19e	SC:Family responsibilities prevent me from doing what I want to do
n8scq19f	SC:I feel that I can please myself what I do
n8scq19g	SC:Shortage of money stops me from doing things I want to do
n8scq19h	SC:I look forward to each day
n8scq19i	SC:I feel that my life has meaning
n8scq19j	SC:I enjoy the things that I do
n8scq19k	SC:On balance I look back on my life with a sense of happiness
n8scq19l	SC:I feel full of energy these days

n8scq19m	SC:I feel that life is full of opportunities
n8scq19n	SC:I feel that the future looks good for me
nd8csp12	(Derived) Overall CASP-12 Quality of Life Score
nd8csp14	(Derived) Overall CASP-14 Quality of Life Score

#### 4. NCDS 2008-9 Followup Dataset

The dataset for the NCDS 2008-9 follow-up has been supplied to the UK Data Archive in the form of an SPSS dataset as follows:

National Child Development Study - Data collected in 2008/9 (at age 50)

Details of the CAPI/CASI program and copies of paper questionnaires may be found in the following, which also accompany the data deposit:

NCDS 2008-2009 Follow-up: Questionnaire Documentation NCDS 2008-2009 Follow-up: Self-completion Questionnaire

All variables from the paper self-completion questionnaire have been included in the data set, with the exception of answers to Q21, an open question asking cohort members to imagine that they are 60 years old and to write a few lines about the life they are leading. This is available as a separate deposit.

Additional information about the variable names, labelling of variables and about CASI variables, cognitive assessment variables, paper self-completion variables, identifiers and derived variables is given below.

#### 4.1 Variable names

As noted above, the core interview (including the cognitive assessment module) was conducted using CAPI and CASI and as such the variable names in the dataset are based on those automatically allocated by the CAPI program (Blaise).

Within the Blaise programming code, each question has a variable name (rather than number), made up of a maximum of 8 characters, and this is used as the root of the variable name on the dataset. Where the question is repeated (eg: the same question is asked for each birth, relationship, job, qualification, etc. reported), Blaise automatically allocates a number suffix (eg: name, name2, name3, name4).

Unfortunately, where the variable name in the Blaise program was originally more than 6 characters long, Blaise truncates the name to allow for the suffix. As a result, there is not always a simple match between the Blaise program documentation and the data. To facilitate matching between dataset variables and CAPI questions, variable labels are prefixed by the CAPI name.

As many of the questions asked in the core interview were identical to the questions asked in the 2004/5 sweep the variable names allocated by Blaise were also identical. In order to ensure that variable names in the 2008/9 data are different to those in the 2004/5 data, all variables in the 2008/9 data set have been given the prefix n8. In some cases the variable names have also been truncated in order to limit the name to 8 characters. Where a variable was included in the 2004/5 sweep the variable name has, as far as possible, been kept identical for the 2008/9 sweep although prefixed with "n8" rather than "n7".

In addition it should be noted that a number of derived variables have been included in the deposited dataset. Names of these variables are given the prefix "nd8" and variable labels are given the prefix "(Derived"). A list of all derived variables in this deposit is provided in Appendix 1.

A number of variables are automatically derived within the CAPI program. These variables have the usual "n8" prefix but the variable labels are "prefixed" or "suffixed" with "(Recoded)"

Variables from the paper self-completion questionnaire are derived from the question numbers as they appear on the printed questionnaire and prefixed with "n8sc". They have the following form: n8scq1a, n8scq1b, n8scq2a, n8scq2b etc.

#### 4.2 Variable labels

The variable labels included in the dataset relating to the core interview are also initially derived from the CAPI/CASI program. In exporting the SPSS dataset from Blaise, labels based on the wording of questions were automatically allocated. The variable labels have been individually reviewed. Where necessary, labels have been modified in an effort to ensure that labels are comprehensible and accurate.

Variable labels for the data derived from the paper questionnaire have been derived from the question wording used on the printed questionnaire.

#### 4.3 Value labels

The value labels are similarly derived from the Blaise program or printed questionnaire. Value labels have been individually reviewed and amended, where necessary.

#### 4.4 Missing values

Missing values are consistently labelled as follows (unless otherwise stated):

- -9 = Refusal
- -8 = Don't Know
- -2 = Schedule not applicable
- -1 = Item not applicable

For some variables, additional missing values may occur. They will be in the range -3 to -6 and have been labelled to indicate the reason the data is missing.

#### 4.5 Variable order

The order in which variables appear in the dataset broadly follows the order of sections, and of questions within sections, of the survey instruments – CAPI/CASI or paper. However, for the core interview elements (CAPI, CASI, cognitive assessments) the order is determined by the structure of the Blaise program, which does not necessarily hold each question in the order in which they are put to the respondent. This change in order is typically, but not exclusively, associated with question sequences which are repeated to produce grid-like data structures (eg: birth, relationship, job, qualification histories etc).

## 4.6 CASI Self-completion

The CASI self-completion was administered toward the end of the core interview. The interviewer handed the laptop computer used for the interview to the cohort member and explained how they should complete the questionnaire. Where the cohort member was unable or reluctant to use the laptop, the interviewer assisted, and if necessary administered the self-completion as an interview. The variables which hold the data for the CASI self-completion are given the prefix "CASI".

## 4.7 Relationship histories

The relationship history module sought to collect a complete record of all cohabiting relationships within the appropriate reference period. It should be noted that researchers wishing to examine cohort members' relationships are advised to use the NCDS Partnership Histories dataset deposited at the UK Data Archive. This dataset currently contains data for the cohort members' partnerships for the period 1974 to 2008.

Post-fieldwork editing and cleaning of the relationship history data collected in the previous sweep of the study (the 2004-5 follow-up) revealed that there were a few problems with the routing of the questions in this module which lead to flaws in the information obtained about the period between the 1999/2000 follow-up and the 2004/5 follow-up. Details of the problems are provided below:

- 1. Cohort members who were cohabiting at the time of the 1999/2000 follow-up and also cohabiting at the time of the 2004/5 follow-up but with a different partner, were not asked about the end of the relationship they were having with the person they were cohabiting with at the time of the 1999/2000 follow-up.
- 2. A number of cohort members who were cohabiting at the time of the 2004/5 follow-up, reported that their current partner was the same partner that they had at the time of the 1999/2000 follow-up, but at the time of the 2000 survey reported not having a partner.
- 3. When recalling details about previous partnerships, cohort members who were not married at the time they moved in with an ex-partner but who subsequently did get married, were not asked whether they got divorced or when.
- 4. In both the 1999/2000 follow-up and the 2004/5 follow-up there were a number of cohort members who reported being married or living with their current partner in the relationship history module but did not report a spouse or partner in the household grid.
- 5. There were also a number of cohort members with missing information about their marital and/or legal marital status at the time of the 1999/2000 follow-up or the 2004/5 follow-up.

Cases where any of the above applied were flagged as 'repair cases'. A revised introduction to the relationship history module was triggered for these cases where it was explained that when they were interviewed as part of the 2004/5 follow-up there was a problem with the data that was collected about their relationship history and that as a result it was necessary to recollect. These cohort members were then asked for a full relationship history from the date of their 1999/2000 follow-up interview through to the date of their 2008/2009 follow-up interview.

The raw relationship history data as collected is not included in this deposit. The data has been presented as ex-partner variables, current partner variables and new partner variables.

Ex-partner variables relate to spouses or civil partners that the cohort member had separated from at the time of the last interview (or 2000 if repair case) but had not divorced or legally dissolved their relationship.

n8EPEndY	Exp@last relswp: If amended year stopped living w/ ex-part as couple
n8EPEndM	Exp@last relswp: If amended month stopped living w/ ex-part as couple
n8EPDiv	Exp@last relswp: Whether divorced ex-partner
n8EPDivY	Exp@last relswp: Year CM and ex-partner legally dissolved their rel
n8EPDivM	Exp@last relswp: Month CM and ex-partner legally dissolved their rel

Current partner variables relate to partners that the cohort member was living with as a partner at the time of the last interview or 2000 if repair case:

n8CPStY	Currpart@last relswp: Year CM started living with curr partner (Ffamend)
n8CPStM	Currpart@last relswp: Month CM started living with partner (FFamend)
n8CPSex	Currpart@last relswp: Sex of partner current (Ffamend)
n8CPMSL	Currpart@last relswp: Previous marital status of partner (Ffamend)
n8CPSep	Currpart@last relswp: Whether partner legally separated (Ffamend)
n8CPAge	Currpart@last relswp: Age of partner @start living w/ CM (Ffamend)
n8CPMC	Currpart@last relswp: Whether CM and partner got married
n8CPMCY	Currpart@last relswp: Year CM got married to partner
n8CPMCM	Currpart@last relswp: Month CM got married to partner
n8CPMCC	Currpart@last relswp: Wh married to partner before started living tog
n8CPRTg	Currpart@last relswp: Wh CM and partner still live as a couple
n8CPHwE	Currpart@last relswp: How relationship with the partner ended
n8CPEnY	Currpart@last relswp: Yr stopped living as couple with partner
n8CPEnM	Currpart@last relswp: Month stopped living as couple with partner
n8CPdiv	Currpart@last relswp: Whether divorced partner
n8CPMoY	Currpart@last relswp: Year partner died
n8CPMoM	Currpart@last relswp: Month partner died
n8CPDvY	Currpart@last relswp: Year CM and partner legally dissolved rel.
n8CPDvM	Currpart@last relswp: Month CM and partner swp legally dissolved rel
n8CPMore	Currpart@last relswp: Whether any more relationshps since

New partner variables relate to any new partners that the cohort member has had since the time of the last interview:

n8nsty01-03	Newrel: Year CM First Started Living With Partner
n8nstm01-03	Newrel: Month CM First Started Living With Partner
n8nsex01-03	Newrel: Sex Of Partner
n8nmsl01-03	Newrel: Previous Marital Status Of Partner
n8nsep01-03	Newrel: Whether Partner Had Legally Separated
n8nage01-03	Newrel: Age Of Partner When First Started Living With CM
n8nmc01-03	Newrel: Whether CM And Partner Got Married
n8nmcy01-03	Newrel: Year CM Got Married To Partner
n8nmcm01-03	Newrel: Month CM Got Married To Partner
n8nmcc01-03	Newrel: Whether Married To Partner Before Living Together
n8nrtg01-03	Newrel: Whether CM & Partner Still Live Together As Couple

n8nhwe01-03	Newrel: How The Relationship With The Partner Ended	
n8neny01-03	Newrel: Year Stopped Living With Partner As A Couple	
n8nenm01-03	Newrel: Month Stopped Living With Partner As A Couple	
n8ndiv01-03	Newrel: Whether Divorced Partner	
n8nmoy01-03	Newrel: Year Partner Died	
n8nmom01-03	Newrel: Month Partner Died	
n8ndvy01-03	Newrel: Year CM And Partner Legally Dissolved Rel.	
n8ndvm01-03	Newrel: Month CM And Partner Legally Dissolved Rel.	
n8npmo01-03	Newrel: Whether The CM Has Any More Rels. To Report	

## 4.8 Unfolding Brackets

A feature of the income questions (benefit income, gross and net) in NCDS8 is the use of a series of questions referred to as 'unfolding brackets' which are triggered if a respondent refuses or is unable to provide an exact answer. The questions are designed to elicit a minimum and maximum value which define a range or "closed band" within which the actual value lies.

On entering the unfolding brackets, respondents are asked to say whether they have more, less or about the same as a particular value. This question is repeated using different values (which will be a lower or higher value depending on the answer to the preceding question).

The procedure stops at the point when either an upper and lower bound is provided, the respondent refuses or says "don't know", or the respondent places themselves in the top or bottom bracket.

The unfolding bracket questions are randomly ordered for each respondent such that any possible 'anchoring' effects (i.e. where people use the suggested figure as a reference point and make adjustments to it to reach their answer) from the procedure are averaged across the distribution, and the bracket values are selected on the basis of the density of the underlying financial variable.

Variable	Variable name	Number of cohort members
Benefit income	N8IAA01-N8IAA21	Unfolding brackets entered for
		18 of the 21 benefits listed.
		Number of cohort members
		range from 2 (for guardians
		allowance) to 496 (for child
		benefit)
Other regular sources of	N8INCSRCE	830
income		
Total savings	N8SAVTOT	1760
Net earnings from employment	N8CNETPY	402
Gross earnings from	N8CGROPY	861
employment		
Net profit from self-	N8SEPRIT	244
employment		
Earnings from self-employment	N8SEEARN	360
Income from 'other' jobs	N8OJNETW	59

Unfolding brackets were used on the following variables:

A detailed description of the use of unfolding brackets for the variables listed can be found in Appendix 3.

The unfolding bracket variables have not been included in this deposit but are available in a separate file available from the archive.

## 4.9 Reference dates for retrospective data/histories

The 2008/9 follow-up gathered retrospective information on housing situation, relationships, pregnancies, economic activity and qualifications. The majority of cohort members had participated in one of the last two follow-ups which took place in 1999/2000 and 2004/5. For such cohort members the reference date for retrospective questions was the date of their last interview. For the small number of cohort members (n=372) who had not participated in either of these follow-ups the reference date was generally the 1st January 2000; the exception to this was the pregnancy history module which for these cohort members used their 16th birthday as the reference date so that a full pregnancy history was collected.

## 4.10 Occupational coding of employment data

All occupational coding of employment data was carried out by NatCen with the exception of of RGSC (Registrar Generals Social Class 1991) and SEG (socio-economic group) for partner's job. The occupational coding for RGSC and SEG for partner's job was carried out by CLS using the SOC2000 codes and lookup tables downloaded from the CAMSIS website (www.camsis.stir.ac.uk).

#### 4.11 Derived variables

A number of derived variables (including the overall scores from the various scales employed in the questionnaire) have been included in the dataset. The variable names all have the prefix 'ND8' and the variable label are endorsed '(Derived)'. A full list is provided in Appendix 1.

## 4.12 Errors / inconsistencies

The use of CAPI/CASI should ensure that all filters have been correctly followed within the datasets relating to these elements of the core interview, and that the data is consistent throughout. However, post-fieldwork checking of the data has uncovered a small number of errors and inconsistencies. In addition, a small number of problems have been identified in terms of the wording of questions put to cohort members.

These errors and inconsistencies are documented here.

#### 4.12.1 Errors

#### 1) Batch 2 feed-forward data

A technical error which occurred as the second batch of feed-forward data was loaded caused 25 cohort members to be routed past certain blocks / variables. The blocks/variables which these cases were not routed to (and as a result have '-6 misrouted' values for these block intro variables/ variables in the data) are as follows: IntWho, HlthGen, KHIStat, MHProbs, Cognitive Function block, Smoking & Drinking

block, Diet & Exercise block, Height & Weight block, Social Participation block, Social Support block, CASI block and the Consents block.

## 2) Absent child grid

A routing error meant that if a cohort member wished to amend the spelling of a child's name who was no longer in the household (nothere = 2) they were not routed to the Absent Children module when they should have been. Variables N8ABPN02-05 (HHgrid number of absent child) are set to -6 (misrouted away from absent child module) for these cases (2 in loop2; 16 in loop3; 5 in loop4 and 3 in loop5).

## 3) Older children

The older children variables Actstat – Chilmon should have been asked of all children aged 16 and over. In total these questions were asked in relation to 15,403 children but a routing error meant that they were not asked in relation to a further 594 children when they should have been. Variables N8PNO02-08 (HHgrid number of absent child) are set to -6 (misrouted away from older child module) for these cases (88 in loop2; 211 in loop3; 149 in loop4; 86 inloop5; 33 in loop6; 19 in loop7 and 8 in loop8).

## 4) Unfolding brackets – Net / gross income (Cohort member and partner)

Respondents who were unable or unwilling to provide full details about their net and gross income from employment were asked a series of questions known as 'unfolding brackets'. These questions are designed to elicit a minimum and maximum value which define a range or "closed band" within which the actual value lies (see questionnaire documentation for further details). All cohort members who refused/did not know or gave an 'other' period at cnetprd, cgroprd or pnetprd should have been asked the relevant unfolding bracket questions about the income they receive monthly, but 40, 33 and 53 cases were not routed to the unfolding bracket questions for cnetprd, cgroprd or pnetprd respectively. The 'other period' unfolding bracket variables, 'entry point' and 'result' have been coded as -6 (misrouted away from unfolding brackets questions) and the 'other period' unfolding bracket variables for 'minimum value', 'maximum value' have been coded as -8 (don't know) for these cases.

## 5) Menopause block

11 cases were not routed to this module due to a problem with the 'Gender' variable at the start of fieldwork. This error was rectified on the first day of fieldwork but a number of interviews had already taken place. Variable N8MENINT is coded -6 (misrouted away from menopause block) for these 11 cases.

## 6) Cognitive function block

## Letter Cancellation

The letter cancellation task was completed on paper, in the cognitive assessment booklet. This booklet should have been returned to NatCen for scoring. In 151 cases the task had not been completed properly meaning the test could not be scored; in other cases the booklets were either not returned or were lost in the post meaning that the number of tests recorded as complete by the interviewer (n=9,593) is higher than the number of actual scores (n= 9,442). Variables N8CFROW, N8CFCOL, N8CFCOR, N8CFMIS,N8CFTOT,N8CFRC have been coded -6 (Test forms not completed/received) for these 151 cases.

#### Delayed Word-List Recall

Several interviewers did not conduct the delayed word-list recall test correctly. The result of this is that 57 cohort members coded as completing the cognitive function module (CFINT=1) have no score on this particular test (CFLisD). Variable N8CFLISD has been coded as -6 (delayed memory test not performed) for these 57 cases.

## 4.12.2 Inconsistencies

In order to minimise post-interview editing, data entered into the CAPI program was automatically subjected to a large number of consistency error checks. These checks comprised of 'hard' checks and 'soft' checks. Hard checks must be resolved by the interviewer at the time of the interview, but soft checks could be suppressed by the interviewer. Where a soft check was suppressed, interviewers were instructed to record a note explaining the situation which could be inspected later during the editing process. As would be expected in a study with such a large sample size there are instances where this did not happen which has lead to some inconsistencies.

For example, a small number of cohort members state in the household grid that a partner living in the household at the time of last interview is no longer there but in the relationship history module state that they are still living with this person. There are also some instances where the name of the current partner recorded in the household grid does not match the name of the current partner recorded in the relationship history module. There are also some inconsistencies in terms of the data collected about pregnancies and births, for example, a small number mention a recently born child in the household / absent child grid but do not provide details of this child in the pregnancy block (and vice-versa).

## 4.12.3 Question wording problems

## AUDIT

The first official AUDIT question covering regularity of drinking has a five point scale (Never, Monthly or less, 2-4 times a month, 2-3 times a week, 4 or more times a week). This question was replaced with variable 'n8drinks' in the Smoking and Drinking module; n8drinks had an eight point scale (On most days, 2 to 3 days a week, once a week, 2 to 3 times a month, once a month, less often or only on special occasions, never nowadays, never had an alc. drink). The variable 'n8drinks' was recoded to match (as closely as possible the first AUDIT question).

However, an error in the programming of the CASI module meant that the wording of the answer codes for n8Audi02 to n8Audi08 differed slightly from the official version of the AUDIT questionnaire.

AUDIT questions 2 to 8 use the following codeframe: Never, Less than monthly, Monthly, Weekly, Daily or almost daily. However the programming error meant that questions n8audi02 to n8audi08 used the following codeframe: Never, Less than monthly, Monthly, Two to three times a week, Four or more times a week. When calculating overall AUDIT scores 'two to three times per week' has been treated as 'weekly' and 'four or more times a week' has been treated as 'daily or almost daily'.

The two code-frames are roughly comparable but the differences could affect the way the questions were answered meaning AUDIT scores may not be strictly comparable to AUDIT scores collected using the official wording.

#### **Attitudes to Pensions and Retirement**

The CASI module included six questions on attitudes to pensions and retirement which were taken from the DWP's Attitudes to Pensions survey which took place in 2006: n8pensec, n8penwrk, n8worret, n8affsvr, n8rtfaro and n8enouic. The DWP survey used a five-point scale for these questions (strongly agree, agree, neither agree nor disagree, disagree, strongly disagree) but an error meant that NCDS cohort members were asked to answer using a six-point scale (strongly agree, agree, somewhat agree, somewhat disagree, disagree, strongly disagree etc.). As such responses to the two surveys may not be entirely comparable.

## 4.13 Further information

Queries about any aspect of the data should be sent to CLS using the feedback page on the CLS website: <u>www.cls.ioe.ac.uk/feedback</u>.

## 5. Survey development and piloting

Each element of the 2008/9 follow-up was rigorously tested prior to the commencement of main-stage fieldwork.

#### 5.1 First pilot

A first pilot took place between the 28th November and the 24th December 2007 with specially recruited members of the public aged 46-55 in 12 areas. This first pilot comprised the first test of the questions and accompanying procedures for both the 'core' interview and the paper self-completion questionnaire. The pilot sought to measure the length of the interview and to identify any routing or filter errors within the program. It was also important to identify any problematic questions (in terms of comprehension or sensitivity) and any administrative or procedural difficulties.

65 individuals completed the 'core' interview (CAPI interview, CASI interview and cognitive assessments) and 42 individuals completed the paper self-completion questionnaire.

The pilot was generally very successful and both the core interview and the paper questionnaire were well received. The key issue was that the core interview was considerably longer than its target length, and as such substantial cuts were required in advance of the second pilot or 'dress rehearsal'.

#### 5.2 Dress Rehearsal

The dress rehearsal took place in 8 areas between the 7th April and the 8th May 2008. It was intended as a test of all changes made as a result of the pilot stage and as a full procedural test of all survey instruments, documents and procedures prior to main stage fieldwork. The dress rehearsal took place with actual cohort members so that in addition to further testing of the elements above it was possible to test contacting and tracing procedures.

In total 77 cohort members completed a core interview, of whom 72 also completed the paper selfcompletion questionnaire. (The data collected from respondents who participated in the Dress Rehearsal has not been included in this deposit).

As was found in the first pilot, each of the four elements (CAPI interview, CASI interview, cognitive assessments and paper self-completion questionnaire) were well received by the participating cohort members. The post-pilot cuts to the core interview were found to be sufficient to have adequately reduced the interview length so it was not necessary to make any further revisions in advance of the main stage.

#### 6. Fieldwork

#### 6.1 Fieldwork period

Fieldwork began in August 2008 and ran until May 2009. The month and year in which respondents were interviewed is included in the deposit (variables: n8intmon and n8intyr).

#### 6.2 Issue of sample and fieldwork waves

The issued sample was comprised of 12,316 cohort members and was issued to the fieldwork contractor in two batches.

The first (and largest batch) was issued in advance of the start of fieldwork and was comprised of 11,707 cohort members who had either:

- 1) Participated in NCDS6 (2000), NCDS Biomedical Survey (2002) or NCDS7 (2004) and had not subsequently died, emigrated or permanently withdrawn from the study (n=11,320).
- 2) Not participated in any of the above but had confirmed their address by responding to a birthday card mailing or in some other fashion since 2000 (n=387).

The second batch of sample was issued to the fieldwork contractor in December 2008 and was comprised of 609 previously untraced cases for whom new contact details had been obtained either from a tracing exercise conducted in collaboration with the Department of Work and Pensions (DWP) or a tracing exercise conducted via the National Health Service Central Register.

Sample was subsequently issued to interviewers in 8 overlapping waves. The first batch of sample was issued to the first six waves of fieldwork and the second batch of sample was issued to the seventh wave of fieldwork. A 'mop-up' wave ran was conducted towards the end of the fieldwork period which provided a final opportunity to reach those who were difficult to contact in the earlier waves.

Wave	Fieldwork start date	Number of cohort members
Wave 1	11th August	2561
Wave 2	15th September	2471
Wave 3	13th October	1850
Wave 4	10th November	1734
Wave 5	8th December	1778
Wave 6	12th January 2009	1313
Wave 7	18th February 2009	609
Mop-Up	30 <sup>th</sup> March 2009	-
Total		12,316

#### 6.3 Making contact

In advance of any contact from NatCen, cohort members were sent a pre-notification mailing which advised that the 2008-9 follow-up would soon be starting. The pre-notification mailing was accompanied by a summary report entitled 'Now we are Fifty' which provided cohort members with a summary of some of the key findings to have emerged from the study since it began in 1958. The prenotification mailing was mailed to cohort members in 4 batches:

- 1) Cases allocated to Waves 1 and 2 were mailed 3-4 weeks in advance of the start of Wave 1 fieldwork.
- 2) Cases allocated to Waves 3 and 4 were mailed 3-4 weeks in advance of the start of Wave 3 fieldwork.
- 3) Cases allocated to Waves 5 and 6 were mailed 3-4 weeks in advance of the start of Wave 5 fieldwork.
- 4) Cases allocated to Wave 7 were mailed 3-4 weeks in advance of the start of Wave 7 fieldwork.

Where pre-notification letters were returned because the cohort member no longer lived at the mailed address these cases were prioritised for tracing by the CLS tracing team.

Each wave of fieldwork was preceded by the mailing of an advance letter which advised cohort members that an interviewer would be calling shortly. Once contact had been established interviewers attempted to arrange appointments to conduct the core interview (CAPI, CASI and cognitive assessments). Paper self-completion questionnaires were then posted to cohort members with a letter confirming the date and time of the appointment, so that in most cases the questionnaire could be collected by the interviewer when they visited the cohort member's home to conduct the interview.

In cases where interviewers established that a cohort member was no longer living at the issued address they were expected to make reasonable efforts to trace that individual. Interviewer tracing methods included contacting the new occupants of the issued address, contacting 'stable contacts' using contact details provided to them and talking to neighbours. Where the interviewer failed to find the cohort member the case was passed back to the CLS tracing team for further investigation.

In the small number of cases where the cohort member was unable to understand or respond to questions put by the interviewer, short proxy interviews were undertaken with a family member or carer.

#### 6.4 Pre-fieldwork tracing

Between follow-ups efforts are made by CLS, through the mailing of an annual birthday card and other activities, to maintain contact with as many members as possible. Prior to fieldwork, the CLS Tracing Team attempted to obtain a current address for as many cohort members as possible.

The methods used by the CLS tracing team in advance of fieldwork include the use of:

- Contact details previously provided by the cohort member (for themselves and for relatives and friends)
- Other information contained in study records
- Telephone number databases
- Postcode databases

- Electoral register databases
- National Health Service Central Register records of NHS registration, emigrations and deaths

In addition to the efforts of the tracing team, a major tracing exercise of cohort members was undertaken in September 2007 in collaboration with the DWP. DWP attempted to match the details of cohort members who had not been contacted for some time against benefit records. Where details of cohort members were matched to DWP records, tracing letters were sent by DWP where an address different to that held by CLS was identified. Those receiving benefits were sent an opt-out letter and those not receiving benefits were sent an opt-in letter.

NCDS cohort members are also 'flagged' on the National Health Service Central Register (NHSCR). In advance of fieldwork, CLS also gained the agreement of ONS that tracing letters could be mailed to untraced cohort members via Health Authorities identified on the NHSCR.

Updated address information collected via these two methods was not obtained until after fieldwork had started; previously untraced cases for whom new addresses became available were therefore allocated to Wave 7. If new address information was obtained via DWP or NHSCR tracing for cohort members already issued then these new details were provided to NatCen so that interviewers could use them to help with their tracing efforts.

#### 6.5 Briefing

All interviewers involved in the 2008-9 follow-up attended a one-day briefing in advance of commencing their assignments. The briefings covered the background to the NCDS, contact and tracing procedures, the CAPI and CASI interview, conducting the cognitive assessments, collecting contact information, collecting consents and the use of survey documents.

## 7. Data coding and editing

The NCDS interview included a number of open-ended questions where the verbatim answers of cohort members were keyed by interviewers, and a rather larger number of questions where precodes are provided for answers but provision is also made to record additional information where the precode 'other' is used. Following the start of the survey, these questions were reviewed by the research team (both at NatCen and CLS) to identify the appropriate coding frames.

Where possible, coding frames that had been employed for earlier NCDS surveys were adopted, although it was sometimes necessary to include additional codes. In other instances, it was necessary to develop a coding frame from scratch. Coding was undertaken by NatCen.

A major advantage of the use of CATI is the reduced need for post-fieldwork editing – the majority of checks for validity, range and consistency can be incorporated into the CAPI/CASI program. Inevitably, however, there were checks, which were overlooked, or not initially thought necessary. These checks were incorporated into the DP activities undertaken by NatCen after the survey.

Further details of the editing and coding are to be found in the following, which also accompanies the data deposit: NCDS 2008-2009 Follow-up: Technical Report.

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# Appendices

N8GOR	Government Office Region at Interview
N8CNTRY	Country at Interview
N8REGION	Standard (Statistical) Region (SSR) at Interview
ND8MS	(Derived) Marital status for all CMs (merging n8hms and n8ms)
ND8COHAB	(Derived) Whether CM cohabiting as a couple (merging n8cohab and n8hcohab)
ND8SEX	Cohort members birth sex
ND8ETHNC	(Derived) Ethnic group that CM regards self as belonging to (inc FF data)
ND8NUMHH	(Derived) Total number of people in household
ND8ALHH	(Derived) Cohort member lives alone (derived hhgrid)
ND8SPPHH	(Derived) Cohort member lives with a spouse or partner
ND8SPSEX	(Derived) Partner or spouse sex
ND8MUMHH	(Derived) Is cohort member's natural Mum in household
ND8DADHH	(Derived) Is cohort member's natural Dad in household
ND8PARHH	(Derived) Do both parents live with cohort member
ND8NCHHH	(Derived) Number of cohort member's natural children in household
ND8NCH16	(Derived) Number of CM's natural children in HH over 16 years of age
ND8OCHHH	(Derived) Number of cohort member's non-bio children in household
ND8OCH16	(Derived) Number of other (non-bio) children in HH over 16 years of age
ND8PELFT	(Derived) Number of persons left the household since last sweep
ND8LF01	(Derived) No. of spouses/civil partners left the hh since last sweep
ND8LF02	(Derived) No. of partners left the hh since last sweep
ND8LF03	(Derived) No. of own children left the hh since last sweep
ND8LF04	(Derived) No. of adopted children left the hh since last sweep
ND8LF05	(Derived) No of children of curr spouse/partner left the hh since last sweep
ND8LF06	(Derived) No. of children of previous spouse/partner left HH since last sweep
ND8LF07	(Derived) No. of fostered children left the hh since last sweep
ND8LF08	(Derived) No. of full siblings left the hh since last sweep
ND8LF09	(Derived) No. of half/step/adopted siblings left the hh since last sweep
ND8LF10	(Derived) No. of brothers/sisters-in-law left the hh since last sweep
ND8LF11	(Derived) No. of natural mother left the hh since last sweep
ND8LF12	(Derived) No. of adoptive mother left the hh since last sweep
ND8LF13	(Derived) No. of natural father left the hh since last sweep
ND8LF14	(Derived) No. of adoptive father left the hh since last sweep
ND8LF15	(Derived) No. of stepmothers left the hh since last sweep
ND8LF16	(Derived) No. of stepfathers left the hh since last sweep
ND8LF17	(Derived) No. of parents in law left the hh since last sweep
ND8LF18	(Derived) No. of grandparents left the hh since last sweep
ND8LF19	(Derived) No. of grandchildren left the hh since last sweep
ND8LF20	(Derived) No. of other blood relatives left the hh since last sweep
ND8LF21	
	(Derived) No. of other in-laws left the hh since last sweep

## Appendix 1 - List of derived and recoded variables

ND8LF23	(Derived) No. of landlords left the hh since last sweep
ND8LF23 ND8LF24	(Derived) No. of lodgers left the hh since last sweep (Derived) No. of lodgers left the hh since last sweep
ND8LF25	(Derived) No. of employers left the hh since last sweep
ND8LF26	(Derived) No. of nannys/au pairs left the hh since last sweep
ND8LF27	(Derived) No. of children of non-relative adult left the hh since last sweep
ND8LF28	(Derived) No. of others left the hh since last sweep
ND8NCHAB	(Derived) Number of absent natural children of cohort member
ND8OCHAB	(Derived) Number of cohort member's non-bio children in household
ND8NCHTT	(Derived) Total number of cohort member's natural children (in HH and absent)
ND8OCHTT	(Derived) Total number of cohort member's non-bio children (in HH and absent)
ND8NUMRM	(Derived) Number of rooms in the house (n8numrms)
ND8MALIV	(Derived) Whether cohort member's mother alive (incl prev swp data)
ND8PALIV	(Derived) Whether cohort member's father alive (incl prev swp data)
ND8HRCA1	(Derived) Total hours spent caring for own parents
ND8HRCA2	(Derived) Total hours spent caring for own or partners parents
ND8STBE	(Derived) In receipt of State Benefits (n8stbe)
ND8NBEN	(Derived) Total number of benefits received
ND8ECACT	(Derived) Cohort Member's main activity (n8econ02)
ND8THRW1	(Derived) Total number of hours worked per week (excl.unpaid overtime)
ND8THRW2	(Derived) Total number of hours worked per week (incl.unpaid overtime)
ND8NS3P	(Derived) NS-SEC analytic 3 class version - person level
ND8NS8P	(Derived) NS-SEC analytic 8 class version including cat8 - person level
ND8NSSEP	(Derived) NS-SEC long version including cat14 - person level
ND8ANYVO	(Derived) CM has obtained a vocational qualification since last interview
ND8ACHQ1	(Derived) Highest academic qualification CM obtained in 2008 survey
ND8ANVQ1	(Derived) Highest NVQ level from an academic qualification in 2008 survey
ND8VNVQ1	(Derived) Highest NVQ level from a vocational qualification in 2008 survey
ND8NVQ1	(Derived) Highest NVQ level from an academic or vocational qual in 2008
ND8HACHQ	(Derived) Highest academic qualification - info from 1991,2000,2004 and 2008
	(Derived) Highest academic qualification (GHM) - info from
ND8HAGHM	1991,2000,2004,2008
ND8HANVQ	(Derived) Highest NVQ level from an academic qual - 1991,2000,2004 and 2008
ND8HVNVQ	(Derived) Highest NVQ level from a vocational qual - 1991,2000,2004 and 2008
ND8HNVQ	(Derived) Highest NVQ level academic or voc qual - 1991,2000,2004 and 2008
ND8KHLDS	(Derived) [KHLDSBL] Wh. CM registered disabled (incl all CMs/proxys)
ND8KHLLT	(Derived) [KHLLT] Wh. health limits everyday activities (incl all CMs/proxys)
ND8SMOKE	(Derived) Smoking habits (n8smokig & n8nfcigs)
ND8JOBIN	(Derived) Overall job involvement score (1-6)
ND8MAL	(Derived) Total Malaise score (9 questions)
ND8MALG	(Derived) Total Malaise score - grouped
ND8AUDIT	(Derived) Total AUDIT score
ND8AUDG	(Derived) AUDIT Group
ND8EXT	(Derived) IPIP Personality Inventory - Extraversion score 10-50*
ND8AGR	(Derived) IPIP Personality Inventory - Agreeableness score 10-50*
ND8CON	(Derived) IPIP Personality Inventory - Conscientiousness score 10-50*

ND8EMO	(Derived) IPIP Personality Inventory - Emotional Stability score 10-50*
ND8INT	(Derived) IPIP Personality Inventory - Intellect Score 10-50*
ND8WEMWB	(Derived) Warwick Edinburgh Mental Well-Being Scale
ND8PHHE	(Derived) SF-36 Physical functioning score
ND8RLMP	(Derived) SF-36 Role-limitations due to physical health
ND8RLME	(Derived) SF-36 Role-limitations due to emotional problems
ND8ENFA	(Derived) SF-36 Energy/fatigue score
ND8EMWB	(Derived) SF-36 Emotional Well-Being score
ND8SOCF	(Derived) SF-36 Social Functioning score
ND8PAIN	(Derived) SF-36 Pain score
ND8GENH	(Derived) SF-36 General health score
ND8CSP12	(Derived) Overall CASP-12 Quality of Life Score
ND8CSP14	(Derived) Overall CASP-14 Quality of Life Score

\* NOTE: The derived variables nd8ext, nd8agr, nd8con, nd8emo and nd8int which are included in the deposited data were incorrectly derived and will be re-deposited as soon as possible. In the mean time users are advised to re-create these variables using the syntax provided in Appendix 2 Section A.

## Appendix 2 - Syntax used to derive scores to questionnaire scales

\* \* \* BLOCK 23 CASI Derived vars Section A: nd8jobin = Overall job involvement score (1-6) \*\*\*\* Kanungo's scale of job involvement (recoded to match coding employed by Frone and Rice (1987)) \*\*\*\* Scores for Kanungo work involvement items 1,3 and 5 are reversed in order for higher score to repressent higher job involvement recode n8comjb1 n8comjb3 n8comjb5 (6=1)(5=2)(4=3)(3=4)(2=5)(1=6) (else=copy) into n8comjb1r n8comjb3r n8comjb5r . execute. value labels n8comjb1r n8comjb3r n8comjb5r (1) strongly disagree (2) disagree (3) somewhat disagree (4) somewhat agree (5) agree (6) strongly agree. var labels n8comjblr CASI: Whethr most imp things in CMs life relate to presjob (reverse scored)'. var labels n8comjb3r 'CASI: Whether CM personally involved in his/her job (reverse scored) '. var labels n8comjb5r 'CASI: Whether most CMs interests centre around their job (reverse scored)'. missing values n8comjb1r n8comjb3r n8comjb5r (-9 thru - 1). formats n8comjb1r n8comjb3r n8comjb5r (F2.0). execute. \*\*\*\*\* Job involvement scale is mean of 4 items with 6 responses (items 1,3 and 5 reverse coded to give higher scores=more job involved). compute nd8jobin=(n8comjb1r+ n8comjb2+n8comjb3r+n8comjb5r)/4. execute. variable labels nd8jobin '(Derived) Overall job involvement score (1-6)'. missing values n8comjb1r (). execute. if n8comjb1r = -1 nd8jobin = -1. execute. missing values n8comjb1r (-9 thru -1). if (sysmis(nd8jobin)) nd8jobin = -2. value labels nd8jobin -1 'Item not applicable: not employed' -2 'Incomplete information'. missing values nd8jobin (-1, -2). execute.

delete variables n8comjb1r n8comjb3r n8comjb5r.

\*\*\*\*Count number of items answered yes.

count nd8mal =  $n8mal02 \ n8mal03 \ n8mal05 \ n8mal09 \ n8mal12 \ n8mal14 \ n8mal16 \ n8mal20 \ n8mal21 \ (1).$ 

\*\*\*\*exclude cases with sufficient missing values to potentially push them into high malaise group (Scores of 4+).

count n8miss = n8mal02 n8mal03 n8mal05 n8mal09 n8mal12 n8mal14 n8mal16 n8mal20 n8mal21 (-9,-8,-2,-1).

if ((nd8mal + n8miss) ge 4 and n8miss>0) nd8mal = -2.

\*\*\*\*recode into 2-category variable - Low malaise and high malaise.

recode nd8mal (0 thru 3=1) (4 thru highest = 2) (-2=-2) into nd8malg. missing values nd8mal nd8malg (-2). variable labels nd8mal '(Derived) Total Malaise score (9 questions)'. variable labels nd8malg '(Derived) Total Malaise score - grouped'. value labels nd8mal -2 'incomplete info' . value labels nd8malg 1'Low malaise 0-3' 2' High malaise 4+' -2'incomplete info' . exe.

delete variables n8miss.

\*\*\*\*AUDIT1 covering regularity of drinking has a five point scale (Never, Monthly or less, 2-4 times a month, 2-3 times a week, 4 or more times a week). \*\*\*\*This question was replaced with variable 'Drinks' in the Smoking and Drinking Module which had an 8 point scale \*\*\*\*(On most days, 2 to 3 days a week, once a week, 2 to 3 times a month, once a month, less often or only on special occasions, never nowadays, never had an alc. drink). \*\*\*\*Recode 'Drinks' to match Audit question. \*\*\*\*Recode remaining variables to standardised AUDIT scoring.

```
recode n8drinks (1=4) (2=3) (3=2) (4=2) (5=1) (6=1) (7=0) (8=0) (else =
copy) into nd8audit1.
recode n8Audi02 n8Audi03 n8Audi04 n8Audi05 n8Audi06 n8Audi07 n8Audi08
(1=0) (2=1) (3=2) (4=3) (5=4) (else = copy) into nd8audit2 nd8audit3
nd8audit4 nd8audit5 nd8audit6 nd8audit7 nd8audit8.
recode n8Audi09 n8Audi10 (1=0) (2=2) (3=4) (else = copy) into nd8audit9
nd8audit10.
missing values nd8audit1 nd8audit2 nd8audit3 nd8audit4 nd8audit5 nd8audit6
nd8audit7 nd8audit8 nd8audit9 nd8audit10 (-9 thru - 1).
compute nd8audit = nd8audit1 + nd8audit2 + nd8audit3 + nd8audit4 +
nd8audit5 + nd8audit6 + nd8audit7 + nd8audit8 + nd8audit9 + nd8audit10.
if n8drinks = 7 or n8drinks = 8 nd8audit = -1.
if (sysmis(nd8audit)) nd8audit = -2.
execute.
****Scores of 8 or more are likely to be signs of harmful or hazardous
drinking.
****Scores of 13 or more for women and 15 or more for men are likely to
indicate alcohol dependence.
if nd8audit < 8 nd8audg = 1.
if ((n8cmsex = 1 AND (nd8audit ge 8 and nd8audit le 14))) OR ((n8cmsex = 2
and (nd8audit ge 8 and nd8audit le 12))) nd8audg = 2.
if (n8cmsex = 1 and nd8audit ge 15) or (n8cmsex = 2 and nd8audit ge 13)
nd8audq = 3.
if nd8audit = -1 nd8audg = -1.
if nd8audit = -2 nd8audg = -2.
exe.
missing values nd8audit nd8audg (-1,-2).
variable labels nd8audit '(Derived) Total AUDIT score'/ nd8audg '(Derived)
AUDIT Group'.
value labels nd8audit -1 'Item not applicable - does not drink alcohol' -2
'Incomplete information'.
value labels nd8audg -1 'Item not applicable - does not drink alcohol' -2
'Incomplete information' 1 'Unproblematic drinking' 2 'Harmful or
hazardous drinking' 3 'Alcohol dependent'.
delete variables nd8audit1 nd8audit2 nd8audit3 nd8audit4 nd8audit5
nd8audit6 nd8audit7 nd8audit8 nd8audit9 nd8audit10.
* * *
                       Derived vars
                                     BLOCK 25
                                                  Paper self
                                   Derived vars
                                                 BLOCK 25
completion
Paper self completion
*****
```

save outfile="G:\db\DataStore\working\ncds\2008data\final data\temp dvcheck.sav ". get file="G:\db\DataStore\working\ncds\2008data\final data\temp dvcheck.sav". missing values n8scq1a to n8scq2xx (). \* \* \* Section A: nd8ext/ nd8agr/ nd8con/ nd8emo/ nd8int IPIP Personality Inventory \* \* \* Section B: nd8wemwb=WEMWBS \* \* \* Section C: nd8phhe/ nd8rlmp/ nd8rlme/ nd8enfa/ nd8emwb/ nd8socf/ nd8pain/ nd8genh=SF-36 \* \* \* Section D: nd8csp12=CASP 12 \* \* \* Derived vars BLOCK 25 Paper self completion Section A: nd8ext/ nd8agr/ nd8con/ nd8emo/ nd8int IPIP Personality Inventory \*\*\*\*Section A - IPIP Personality Pool \*\*\*\*Section A1 - Extraversion recode n8scq2f n8scq2p n8scq2z n8scq2jj n8scq2tt (1=5) (2=4) (3=3) (4=2) (5=1) (else = copy) into nd8ext1 nd8ext2 nd8ext3 nd8ext4 nd8ext8. recode n8scq2a n8scq2k n8scq2u n8scq2ee n8scq2oo (else = copy) into nd8ext5 nd8ext6 nd8ext7 nd8ext9 nd8ext10. count extmiss = nd8ext1 nd8ext2 nd8ext3 nd8ext4 nd8ext5 nd8ext6 nd8ext7 nd8ext8 nd8ext9 nd8ext10 (-9 thru -1). compute nd8ext = nd8ext1+ nd8ext2+ nd8ext3+ nd8ext4+ nd8ext5+ nd8ext6+ nd8ext7+ nd8ext8+ nd8ext9+ nd8ext10. if extmiss > 0 nd8ext = -2. variable labels nd8ext '(Derived) IPIP Personality Inventory -Extraversion score 10-50'. value labels nd8ext -2 'incomplete information'. missing values nd8ext (-2). exe. \*\*\*\*Section A2 - Agreeableness recode n8scq2b n8scq2l n8scq2v n8scq2ff (1=5) (2=4) (3=3) (4=2) (5=1) (else = copy) into nd8agr1 nd8agr2 nd8agr3 nd8agr4. recode n8scq2g n8scq2q n8scq2aa n8scq2kk n8scq2pp n8scq2uu (else = copy) into nd8agr5 nd8agr6 nd8agr7 nd8agr8 nd8agr9 nd8agr10. count agrmiss = nd8agr1 nd8agr2 nd8agr3 nd8agr4 nd8agr5 nd8agr6 nd8agr7 nd8agr8 nd8agr9 nd8agr10 (-9 thru -1). compute nd8agr = nd8agr1+ nd8agr2+ nd8agr3+ nd8agr4+ nd8agr5+ nd8agr6+ nd8agr7+ nd8agr8+ nd8agr9+ nd8agr10. if agrmiss > 0 nd8agr = -2. variable labels nd8agr '(Derived) IPIP Personality Inventory -Agreeableness score 10-50'.

```
value labels nd8agr -2 'incomplete information'.
missing values nd8agr (-2).
exe.
****Section A3 - Conscientiousness
recode n8scq2h n8scq2r n8scq2bb n8scq2ll (1=5) (2=4) (3=3) (4=2) (5=1)
(else = copy) into nd8con1 nd8con2 nd8con3 nd8con4.
recode n8scq2c n8scq2m n8scq2w n8scq2qq n8scq2qq n8scq2vv (else = copy)
into nd8con5 nd8con6 nd8con7 nd8con8 nd8con9 nd8con10.
count conmiss = nd8con1 nd8con2 nd8con3 nd8con4 nd8con5 nd8con6 nd8con7
nd8con8 nd8con9 nd8con10 (-9 thru-1).
compute nd8con = nd8con1+ nd8con2+ nd8con3+ nd8con4+ nd8con5+ nd8con6+
nd8con7+ nd8con8+ nd8con9+ nd8con10.
if conmiss > 0 nd8con = -2.
variable labels nd8con '(Derived) IPIP Personality Inventory -
Conscientiousness score 10-50'.
value labels nd8con -2 'incomplete information'.
missing values nd8con(-2).
exe.
****Section A4 - Emotional Stability
recode n8scq2d n8scq2n n8scq2x n8scq2cc n8scq2hh n8scq2mm n8scq2rr
n8scq2ww (1=5) (2=4) (3=3) (4=2) (5=1) (else = copy) into nd8emo1 nd8emo2
nd8emo3 nd8emo4 nd8emo5 nd8emo6 nd8emo7 nd8emo8.
recode n8scq2i n8scq2s
                          (else = copy) into nd8emo9 nd8emo10.
count emomiss = nd8emo1 nd8emo2 nd8emo3 nd8emo4 nd8emo5 nd8emo6 nd8emo7
nd8emo8 nd8emo9 nd8emo10 (-9 thru-1).
compute nd8emo = nd8emo1+ nd8emo2+ nd8emo3+ nd8emo4+ nd8emo5+ nd8emo6+
nd8emo7+ nd8emo8+ nd8emo9+ nd8emo10.
if emomiss > 0 nd8emo = -2.
variable labels nd8emo '(Derived) IPIP Personality Inventory - Emotional
Stability score 10-50'.
value labels nd8emo -2 'incomplete information'.
missing values nd8emo (-2).
exe.
****Section A5 - Intellect
recode n8scq2j n8scq2t n8scq2dd (1=5) (2=4) (3=3) (4=2) (5=1)(else = copy)
into nd8int1 nd8int2 nd8int3.
recode n8scq2e n8scq2o n8scq2y n8scq2ii n8scq2nn n8scq2ss n8scq2xx (else
= copy) into nd8int4 nd8int5 nd8int6 nd8int7 nd8int8 nd8int9 nd8int10.
count intmiss = nd8int1 nd8int2 nd8int3 nd8int4 nd8int5 nd8int6 nd8int7
nd8int8 nd8int9 nd8int10 (-9 thru -1).
compute nd8int = nd8int1+ nd8int2+ nd8int3+ nd8int4+ nd8int5+ nd8int6+
nd8int7+ nd8int8+ nd8int9+ nd8int10.
if intmiss > 0 nd8int = -2.
variable labels nd8int '(Derived) IPIP Personality Inventory - Intellect
Score 10-50'.
value labels nd8int -2 'incomplete information'.
missing values nd8int (-2).
exe.
```

delete variables nd8ext1 nd8ext2 nd8ext3 nd8ext4 nd8ext5 nd8ext6 nd8ext7 nd8ext9 nd8ext10 nd8agr1 nd8agr2 nd8agr3 nd8agr4 nd8agr5 nd8agr6 nd8agr7

nd8agr8 nd8agr9 nd8agr10 nd8con1 nd8con2 nd8con3 nd8con4 nd8con5 nd8con6 nd8con7 nd8con8 nd8con9 nd8con10 nd8emo1 nd8emo2 nd8emo3 nd8emo4 nd8emo5 nd8emo6 nd8emo7 nd8emo8 nd8emo9 nd8emo10 nd8int1 nd8int2 nd8int3 nd8int4 nd8int5 nd8int6 nd8int7 nd8int8 nd8int9 nd8int10 extmiss agrmiss conmiss emomiss intmiss. fre nd8ext nd8agr nd8con nd8emo nd8int. \*\*\*\*\* \* \* \* Derived vars BLOCK 25 Paper self Section B: nd8wemwb=WEMWBS completion \*\*\*\*Section B - WEMWBS - Responses to 14 5 item questions are summed so scores range between 14 and 70. compute nd8wemwb = n8scq3a + n8scq3b + n8scq3c + n8scq3d + n8scq3e + n8scq3f + n8scq3g + n8scq3h + n8scq3i + n8scq3j + n8scq3k + n8scq3l + n8scq3m + n8scq3n. if (sysmis(nd8wemwb)) nd8wemwb = -2. missing values nd8wemwb (-2). value labels nd8wemwb -2 'incomplete information'. variable labels nd8wemwb '(Derived) Warwick Edinburgh Mental Well-Being Scale'. fre nd8wemwb. \* \* \* Derived vars BLOCK 25 Paper self completion Section C: nd8phhe/ nd8rlmp/ nd8rlme/ nd8enfa/ nd8emwb/ nd8socf/ nd8pain/ nd8genh=SF-36 \*\*\*\*Section C - SF-36 \*\*\*\*Rename variables recode n8HlthGn n8khlstt n8scq4a n8scq4b n8scq4c n8scq4d n8scq4e n8scq4f n8scq4q n8scq4h n8scq4i

n8scq4j n8scq5a n8scq5b n8scq5c n8scq5d n8scq6a n8scq6b n8scq6c n8scq7 n8scq8 n8scq9 n8scq10a n8scq10b n8scq10c n8scq10d n8scq10e n8scq10f n8scq10g n8scq10h n8scq10i n8scq10j n8scq11a n8scq11b n8scq11c n8scq11d (else = copy) into sf361 sf362 sf363 sf364 sf365 sf366 sf367 sf368 sf369 sf3610 sf3611 sf3612 sf3613 sf3614 sf3615 sf3616 sf3617 sf3618 sf3619 sf3620 sf3621 sf3622 sf3623 sf3624 sf3625 sf3626 sf3627 sf3628 sf3629 sf3630 sf3631 sf3632

sf3633 sf3634 sf3635 sf3636. exe. \*\*\*\*Recode so that all variables are on a scale from 0 to 100 with 100 indicating highest levels of health. recode sf361 sf362 sf3620 sf3622 sf3634 sf3636 (1=100) (2=75) (3=50) (4=25) (5=0) (else = copy). recode sf363 sf364 sf365 sf366 sf367 sf368 sf369 sf3610 sf3611 sf3612 (1=0) (2=50) (3=100) (else = copy). recode sf3613 sf3614 sf3615 sf3616 sf3617 sf3618 sf3619 (1=0) (2=100) (else = copy). recode sf3621 sf3623 sf3626 sf3627 sf3630 (1=100) (2=80) (3=60) (4=40) (5=20) (6=0) (else = copy). recode sf3624 sf3625 sf3628 sf3629 sf3631 (1=0) (2=20) (3=40) (4=60) (5=80) (6=100) (else = copy). recode sf3632 sf3633 sf3635 (1=0) (2=25) (3=50) (4=75) (5=100) (else=copy). exe. \*\*\*\*The following sections calculate scores for 8 domains. \*\*\*\*In each section the relevant recoded variables are summed and then divided by the number of questions answered. \*\*\*\*Section C1 - Physical functioning count physmiss = sf363 sf364 sf365 sf366 sf367 sf368 sf369 sf3610 sf3611 sf3612 (-8,-9,-1,-7). recode sf363 sf364 sf365 sf366 sf367 sf368 sf369 sf3610 sf3611 sf3612 (-8=0) (-9=0) (-1=0) (-7=0). if physmiss < 10 nd8phhe = (sf363 + sf364 + sf365 + sf366 + sf367 + sf368 + sf369 + sf3610 + sf3611 + sf3612) / (10-physmiss). if physmiss = 10 nd8phhe = -2. missing values nd8phhe (-2). variable labels nd8phhe '(Derived) SF-36 Physical functioning score'. value labels nd8phhe -2 'Information incomplete'. exe. \*\*\*\*Section C2 - Role limitations due to physical health count rlmpmiss = sf3613 sf3614 sf3615 sf3616 (-7,-8,-9.-1). recode sf3613 sf3614 sf3615 sf3616 (-7=0) (-8=0) (-9=0) (-1=0). if rlmpmiss < 4 nd8rlmp = (sf3613 + sf3614 + sf3615 + sf3616 ) / (4rlmpmiss). if rlmpmiss = 4 nd8rlmp = -2. missing values nd8rlmp (-2). variable labels nd8rlmp '(Derived) SF-36 Role-limitations due to physical health'. value labels nd8rlmp -2 'Information incomplete'. exe. \*\*\*\*Section C3 - Role limitations due to emotional problems count rlmemiss = sf3617 sf3618 sf3619 (-7,-8,-9,-1).

```
recode sf3617 sf3618 sf3619 (-7=0)(-8=0) (-9=0) (-1=0).
if rlmemiss < 3 nd8rlme = (sf3617 + sf3618 + sf3619) / (3-rlmemiss).
if rlmemiss = 3 \text{ nd}8rlme = -2.
missing values nd8rlme (-2).
variable labels nd8rlme '(Derived) SF-36 Role-limitations due to emotional
problems'.
value labels nd8rlme -2 'Information incomplete'.
exe.
****Section C4 - Energy/fatigue
count enfamiss = sf3623 sf3627 sf3629 sf3631 (-7,-8,-9,-1).
recode sf3623 sf3627 sf3629 sf3631 (-7=0) (-8=0) (-9=0) (-1=0).
if enfamiss < 4 nd8enfa = (sf3623 + sf3627 + sf3629 + sf3631) / (4-
enfamiss).
if enfamiss = 4 \text{ nd8enfa} = -2.
missing values nd8enfa (-2).
variable labels nd8enfa '(Derived) SF-36 Energy/fatigue score'.
value labels nd8enfa -2 'Information incomplete'.
exe
****Section C5 - Emotional well-being
count emwbmiss = sf3624 sf3625 sf3626 sf3628 sf3630 (-7,-8,-9.-1).
recode sf3624 sf3625 sf3626 sf3628 sf3630 (-7=0) (-8=0) (-9=0) (-1=0).
if emwbmiss < 5 nd8emwb = (sf3624 +sf3625+ sf3626+ sf3628+ sf3630) / (5-
emwbmiss).
if emwbmiss = 5 \text{ nd8emwb} = -2.
missing values nd8emwb (-2).
variable labels nd8emwb '(Derived) SF-36 Emotional Well-Being score'.
value labels nd8emwb -2 'Information incomplete'.
exe.
****Section C6 - Social Functioning
count socfmiss = sf3620 sf3632 (-7, -8, -9, -1).
recode sf3620 sf3632 (-7=0) (-8=0) (-9=0) (-1=0).
if socfmiss < 2 nd8socf = (sf3620 + sf3632) / (2-socfmiss).
if socfmiss = 2 \text{ nd8socf} = -2.
missing values nd8socf(-2).
variable labels nd8socf '(Derived) SF-36 Social Functioning score'.
value labels nd8socf -2 'Information incomplete'.
exe.
****Section C7 - Pain
count painmiss = sf3621 \ sf3622 \ (-7, -8, -9, -1).
recode sf3621 sf3622 (-7=0) (-8=0) (-9=0) (-1=0).
if painmiss < 2 \text{ nd8pain} = (sf3621 + sf3622) / (2-painmiss).
if painmiss = 2 \text{ nd8pain} = -2.
missing values nd8pain (-2).
variable labels nd8pain '(Derived) SF-36 Pain score'.
value labels nd8pain -2 'Information incomplete'.
exe.
****Section C8 - General Health
count genhmiss = sf361 sf3633 sf3634 sf3635 sf3636 (-6,-7,-8,-9,-1).
```

```
recode sf361 sf3633 sf3634 sf3635 sf3636 (-6=0) (-7=0) (-8=0) (-9=0) (-
1=0).
if genhmiss < 5 nd8genh = (sf361 +sf3633+ sf3634+ sf3635+ sf3636) / (5-
genhmiss).
if genhmiss = 5 \text{ nd8genh} = -2.
missing values nd8genh(-2).
variable labels nd8genh '(Derived) SF-36 General health score'.
value labels nd8genh -2 'Information incomplete'.
exe.
****Remove surplus variables
delete variables sf361
sf362
sf363
sf364
sf365
sf366
sf367
sf368
sf369
sf3610
sf3611
sf3612
sf3613
sf3614
sf3615
sf3616
sf3617
sf3618
sf3619
sf3620
sf3621
sf3622
sf3623
sf3624
sf3625
sf3626
sf3627
sf3628
sf3629
sf3630
sf3631
sf3632
sf3633
sf3634
sf3635
sf3636
physmiss
rlmpmiss
rlmemiss
enfamiss
emwbmiss
socfmiss
painmiss
genhmiss.
exe.
```

\* \* \* Derived vars BLOCK 25 Paper self Section D: nd8csp12=CASP 12 completion \*\*\*\*Section D - CASP 12 \*\*\*\*Recode to 0-3 scale (reverse coding where appropriate so that higher scores represent higher quality of life). recode n8scq19a n8scq19b n8scq19c n8scq19g (1=0) (2=1) (3=2) (4=3) (else = copy) into casp1 casp2 casp3 casp4. recode n8scq19d n8scq19f n8scq19h n8scq19i n8scq19j n8scq19l n8scq19m n8scq19n (1=3) (2=2) (3=1) (4=0) (else = copy) into casp5 casp6 casp7 casp8 casp9 casp10 casp11 casp12. exe \*\*\*\*Count number of missing values count caspmiss = casp1 casp2 casp3 casp5 casp7 casp4 casp6 casp8 casp9 casp10 casp11 casp12 casp13 casp14 (-9,-8,-1). count caspmiss = casp1 casp2 casp3 casp4 casp5 casp6 casp7 casp8 casp9 casp10 casp11 casp12 (-9,-8,-1). compute nd8csp12 = casp1 + casp2 + casp3 + casp4 + casp5 + casp6 + casp7 +casp8 + casp9 + casp10 + casp11 + casp12.exe. if caspmiss > 0 and caspmiss <12 nd8csp12 = -2. if caspmiss = 12 nd8csp12 = -3. missing values nd8csp12 (-9 thru -1). value labels nd8csp12 -2 'Incomplete information' -3 'No questions answered'. variable labels nd8csp12 '(Derived) Overall CASP-12 Quality of Life Score'. exe. delete variables casp1 casp2 casp3 casp5 casp7 casp4 casp6 casp8 casp9 casp10 casp11 casp12 caspmiss. \* \* \* Derived vars BLOCK 25 Paper self completion Section D: nd8csp14=CASP 14 \*\*\*\*Section D - CASP 14 \*\*\*\*Recode to 0-3 scale (reverse coding where appropriate so that higher scores represent higher quality of life).

```
recode n8scq19a n8scq19b n8scq19c n8scq19e n8scq19g (1=0) (2=1) (3=2) (4=3)
 (else = copy) into casp1 casp2 casp3 casp5 casp7.
recode n8scq19d n8scq19f n8scq19h n8scq19i n8scq19j n8scq19k n8scq19l
n8scq19m n8scq19n (1=3) (2=2) (3=1) (4=0) (else = copy)
into casp4 casp6 casp8 casp9 casp10 casp11 casp12 casp13 casp14.
exe.
****Count number of missing values
count caspmiss = casp1 casp2 casp3 casp5 casp7 casp4 casp6 casp8 casp9 casp10
casp11 casp12 casp13 casp14 (-9,-8,-1).
compute nd8csp14 = casp1 + casp2 + casp3 + casp5 + casp7 + casp4 + casp6 + c
casp8 + casp9 + casp10 + casp11 + casp12 + casp13 + casp14.
exe.
if caspmiss > 0 and caspmiss <14 nd8csp14 = -2.
if caspmiss = 14 nd8csp14 = -3.
missing values nd8csp14 (-9 thru -1).
value labels nd8csp14 -2 'Incomplete information' -3 'No questions answered'.
variable labels nd8csp14 '(Derived) Overall CASP-14 Quality of Life Score'.
```

```
exe.
delete variables casp1 casp2 casp3 casp5 casp7 casp4 casp6 casp8 casp9 casp10
```

casp11 casp12 casp13 casp14 caspmiss.

## Appendix 3 – Detailed description of the use of unfolding bracket variables

In the benefits section of the family income module, unfolding bracket questions are asked for each of the 21 benefits listed, where: the amount of benefit received (N8IAAnn variables) or the period it was received for (N8IAPnn variables) are unknown (set to -8 or -9). If the cohort member does not give an amount for the benefit, the 'period it was received for' question is not asked. Thus the only unfolding bracket questions that get asked are in the 'ELSE' section ([IAOB] ) for 'Other Period'. Minimum and maximum benefit amounts per month (MINV and MAXV variables) can be used to estimate the amount of benefit received.

In the income sources section of the family income module, unfolding bracket questions are asked where the amount of income received from the sources listed in the previous month is not known (830 cohort members with variable N8INCSRE set to -8 or -9). Non-missing values of the minimum and maximum unfolding bracket variables (N8INCSMN and N8INCSMX) can be used to estimate the previous months income from the sources listed.

In the savings section of the family income module, unfolding bracket questions are asked where the total amount of savings is not known (1760 cohort members with variable N8SAVTOT set to -8 or -9). Non-missing values of the minimum and maximum unfolding bracket variables (N8SAVTMN and N8SAVTMX) can be used to estimate the total amount of savings.

In the employee net pay section of the employment module, unfolding bracket questions are asked where the amount of net pay or the period covered is not known (402 cohort members with variables N8CNETPY/N8CNETPD set to -8 or -9 or N8CNETPD =6 (other period after backcoding from text). Depending on the value for the period variable (week/fortnight/month/year/other period) the relevant set of unfolding bracket questions are asked and non-missing values for minimum and maximum amount (MINV and MAXV variables) can be used to estimate the cohort members weekly amount of net pay. The computed weekly amount variable, N8CNETWK, is set to -8 (don't know) for these cohort members.

In the employee gross pay section of the employment module, unfolding bracket questions are asked where the amount of gross pay or the period covered is not known or some other period is specified (861 cohort members with variables N8CGROPY/N8CGROPD set to -8 or -9 or N8CGROPD=6). Depending on the value for the period variable (week/fortnight/month/year/other period) the relevant set of unfolding bracket questions are asked and non-missing values for minimum and maximum amount (MINV and MAXV variables) can be used to estimate the cohort members weekly amount of net pay. The computed weekly amount variable, N8CGROWK, is set to -8 (don't know) for these cohort members.

In the self-employed net profit section of the employment module, unfolding bracket questions are asked where the amount of net profit is not known (244 cohort members with variable N8SEPRIT=-8,-9). Non-missing values of the minimum and maximum unfolding bracket variables (N8SEPRMN and N8SEPRMX) can be used to estimate the total amount of self-employed net profit.

In the self-employed earnings section of the employment module, unfolding bracket questions are asked where the amount of self-employed earning is not known (360 cohort members with variable N8SEEARN=-8,-9). Non-missing values of the minimum and maximum unfolding bracket variables (N8SEPRMN and N8SEPRMX) can be used to estimate the total amount of self-employed net profit.

In the other job income section of the employment module, unfolding bracket questions are asked where the amount of take-home pay for odd jobs etc is not known (59 cohort members with

variable N8OJNETW=-8,-9). Non-missing values of the minimum and maximum unfolding bracket variables (N8OJNEMN and N8OJNEMX) can be used to estimate the total amount of other job income.

In the CM partner's net pay section of the partner's job module, unfolding bracket questions are asked where the amount of partner's net pay or the period covered is not known (1661 cohort members with variables N8PNETPY/N8PNETPD set to -8 or -9). Depending on the value for the period variable (week/fortnight/month/year/other period) the relevant set of unfolding bracket questions are asked and non-missing values for minimum and maximum amount (MINV and MAXV variables) can be used to estimate the cohort members weekly amount of net pay. The computed weekly amount variable, N8PNETWK, is set to -8 (don't know) for these cohort members.

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