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# Webinar National Child Development Study (NCDS) & the 1970 British Cohort Study (BCS70)

15 May 2018

**Brian Dodgeon** 



# **Centre for Longitudinal Studies**



- Centre for Longitudinal Studies (CLS) is responsible for the conservation, development and dissemination of three British Birth Cohort Studies (1958, 1970, Millennium) and also Next Steps (formerly, the Longitudinal Study of Young People in England)
- Funded as a resource centre by ESRC 2015 -2020, we provide free data to research community (UK Data Archive)
  - Documentation, guidance & training
- Conduct research
  - Multidisciplinary, substantive & methodological (survey and statistical)
  - CCRP healthy lifestyles and social mobility 2015-2018
  - International collaborations & visits



CENTRE FOR LONGITUDINAL STUDIES

2 pm Introduction to NCDS & BCS70 Brian Dodgeon

2.30 pm What's New in NCDS and BCS70 Matt Brown

2.50 pm Measures of Wellbeing in NCDS and BCS70 Martina Narayanan

3.10 pm General questions and answers with the CLS cohort study team

3.30 pm Finish

# Introduction to the National Child Development Study & 1970 British Cohort Study

Brian Dodgeon

### Intro to NCDS & BCS70

- Study design, sweeps and sample
- How to access the data
- Documentation available
- Missing data / dealing with attrition

Study Design: Timeline of the studies						
National Child D	evelopment Study	/ 1958				
British Cohort S	study 1970					
Next Steps						
Millennium Coho	rt Study					
1920	1940	1960	1980	2000	2020	





- Fully representative samples of the GB/UK population
- Based on one week's c17k babies
- Followed up from birth into adulthood
- Multi-purpose & multidisciplinary
- Resources for the research and policy communities

# Resource for research and policy communities

- Long term outcomes of experiences and decisions in early life
- Medium and short-term outcomes & links between different life domains (e.g. health and employment)
- Descriptions of individual trajectories careers, relationships, fertility, poverty and disadvantage
- Intergenerational transmission of advantage and disadvantage and the processes involved
- The links between social change and the changing experiences of different cohorts

# Brief overview of NCDS

- Longitudinal birth cohort study of all babies born in a single week in GB, N=17,415
- 98.1% of all babies took part in the first birth survey
- High retention, >9k in recent sweeps (study in touch with 12.5k of original 18k)
- Multidisciplinary content spanning social and biomedical
- Outstanding contribution to science and policy across many areas



### NCDS study timeline



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### NCDS 58 A study of everyone born in one week in 1958



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### Topics covered by life stage



රීලී Birth	School years	Adult
Family	Family	Family (partners, children)
Parental employment	Parental employment	Employment
Obstetric history	Financial circumstances	Income
Smoking in pregnancy	Housing	Housing
Pregnancy	Health	Health
(problems, antenatal care)	Behaviour	Health-related behaviour
Labour	School	Courses and qualifications
(length, pain relief, problems)	Views and expectations	Basic skills
Birth (problems, sex, weight, length)	Attainment	Cognitive ability
(problems, sex, weight, length)		Views and expectations

# Childhood cognition



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Age 7	Age 11	Age 16
Southgate Reading Test Copying Designs Test Draw-a-man Test Problem Arithmetic Test	Reading comprehension test Mathematics comprehension Test NFER General Ability Test (Douglas, 1964) Copying-designs Test	Reading comprehension Mathematics comprehension

# Age 44/5 biomedical sweep



Approximately 9,000 study members took part at age 44/5 (2002/3)

- Biosamples: blood, saliva
- Blood pressure, pulse
- Standing and sitting height
- Weight, waist and hip circumferences
- Respiratory symptoms, ventilatory function (FEV1 and FVC)
- Visual acuity (near and distant), refractive error
- Hearing thresholds
- Depression and anxiety disorder (CIS-R)
- Chronic widespread pain
- Use of medications
- Alcohol use (AUDIT)
- Food frequency questionnaire, exercise habits

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Early & late morning saliva cortisol

Glycosylated haemoglobin fibrinogen Tissue plasminogen activator Von Willebrand factor C-reactive protein Triglycerides Total and HDL cholesterol Total and allergen-specific immunoglobulin E Insulin-like growth factor 1 Vitamin D DNA Lymphoblastoid cell lines Genetic data

Epigenetic data (N=240+300 underway)

### Access to genetic data and biological samples via META-DAC

# METADAC

School of Social & Community Medicine, University of Bristol

Home » Data Access Committee » ELSA » Understanding Society »	1958BC »	Approved Projects »
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#### About the 1958 birth cohort

Home / About the 1958 birth cohort

Jump to: Social Studies and Biomedical Data Genetic Data DNA and Biospecimens Linked Resources

#### metadac.ac.uk/1958bc-resource-types/

CENTRE FOR LONGITUDINAL STUDIES Genetic data: use in phenotype/genotype linkage (eg, GWAS, Mendelian randomisation).

Biological samples: apply to further assay whole blood, serum, saliva at 44/45y

# Brief Overview of BCS70

Began as British Births Survey Data collected about births and families of just over 17,000 babies born in England, Wales, Scotland and Northern Ireland in one week in 1970

N.Ireland members not followed up after birth survey (unless they moved to GB) Early focus was medical but with each sweep the scope has broadened:

- Childhood sweeps: educational and physical development
- Transitions into adult life: Family formation, employment etc.
- Formation and maintenance of adult identity.



### BCS70 Sources of information



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# Childhood Topics 1



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Parents	Birth	General
Smoking (0, 5, 10, 16)	Smoking in pregnancy	General health
Drinking (10, 16)	Pregnancy	Child development
Pregnancy history	Labour	Specific conditions
Maternal mental health (5, 10,	Birth weight / length etc	Disabilities/ special needs
16)	Problems at birth	Hospital admissions
	Breastfeeding	Use of services
		Immunisation
		Medication
		Accidents
		Menstruation

# Childhood Topics 2



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Childhood physical assessments	Lifestyle	Behavioural and mental
Height (5,10,16) Weight (5,10) Head circumf (5,10,16) Audiometry (10, 16) Laterality Speech Co-ordination Blood pressure/ pulse Vision	Diet (10, 16) Eating problems (5; 10; 16) Exercise (10, 16) Sedentary behaviour (5,10,16) Dental and physical hygiene (16) Sexual activity (16) Smoking (10, 16) Drink and Drugs (16)	Behavioural problems (5, 10) Mental health (10, 16) Wellbeing (16) Personality (10) Locus of control, self-esteem, social judgement (10) Sleeping problems (5,10,16)

# Childhood cognition



Age 5	Age 10	Age 16
Copying designs English picture vocabulary Human figure drawing (draw-a-man) Complete a profile Schonell graded reading assessments	Shortened Edinburgh Reading Test Pictorial language comprehension test Friendly maths test Spelling British Ability Scales (BAS) Two verbal subscales (word definitions and word similarities) and two non-verbal subscales (digit recall and matrices).	Arithmetic Vocabulary Spelling Reading comprehension BAS Matrices

### Cross cohort comparisons





**1958 1970** 



# Accessing NCDS & BCS70 data from the UK Data Service

### www.ukdataservice.ac.uk

Explore		ection of social, econ data resources	omic and
1.111.		Search data	- Q
About the UK Data S	ervice	Guides and resources	
		Dataset guides Topic guides Methods and software guides Guides to exploring online See more >	Video tutorials See our range of training videos
See dat Data types	ta from all over the w	vorld Bro	wse our data map
Census data	Modules Longitudinal Data		Employer Perspectives Survey, 2016
International macrodata	Aggregate Data Survey Data	1 18 mp and	Employer Perspectives Survey, 2016: Special Licence Access
Longitudinal studies	Data Skills Modules	Our impact	National Child Development Study:
Qualitative/mixed methods	Learn more about longitudinal, survey and aggregate data in our	Find out how data from the UK Data Service collection are used to inform	"Imagine you are 25" Essays (Sweep 2, Age 11), 1969
UK surveys	new Data Skills Modules	research, influence policy and develop skills.	Biographical Interviews in Eastern Germany in 2007-08

### NCDS & BCS70 Data – How do I download it?

- Register with UK Data Service
  - http://www.ukdataservice.ac.uk/
  - Give details of research use
- Types of access
  - End User Licence (normal access to anonymised data)
  - Special Licence sensitive and disclosive data (including area data)
  - Secure access (very disclosive data) cannot be downloaded, instead accessed remotely
- Choice of formats for download:
  - SPSS
  - STATA
  - TAB-delimited

# The UK Data Service Website

### www.ukdataservice.ac.uk



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different methods commonly used to

analyse these data.

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Key data						٩
Data by theme	UK surveys	Cross-national	Longitudinal	International	Census data	O Data 🛛 Websi
Data by geography		surveys	studies	macrodata		
Open data	Business	Qualitative /	Administrative			10
How to access	microdata	mixed methods	data			
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	internationally	-renowned cohort st	udies.			Read our introductory guide to
		data from longitudin				quantitative analysis of chang time using different types of da
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· Discover case studies relating to longitudinal studies

#### 1970 British Cohort Study

The 1970 British Cohort Study (BCS70) follows the lives of more than 17,000 people born in England, Scotland and Wales in a single week of 1970. Over the course of cohort members' lives, the BCS70 has has broadened from a strictly medical focus at birth to collect information on health, physical, educational and social development,

the lives of groups of Scotland's children from infancy through to their teens, and aims to provide important new information on young children and their families in Scotland.

Millennium Cohort Study

The Millennium Cohort Study (MCS), which began in 2000, is conducted by the Centre for Longitudinal Studies (CLS). It aims to chart the conditions of social, economic and health advantages and disadvantages facing children born at the start of the 21st century.

#### National Child Development Study

The National Child Development Study (NCDS) is a continuing longitudinal study that seeks to follow the lives of all those living in Great Britain who were born in one particular week in 1958. Conducted by the Centre for Longitudinal Studies (CLS), the aim of the study is to improve understanding of the factors affecting human development over the whole lifespan.

#### Next Steps

Next Steps (also known as the Longitudinal Study of Young People in England (LSYPE1)) is a major longitudinal study of young people. The study began in 2004, when its sample of young people were aged between 13 and 14.

#### Our Future

Our Future (also known as the Longitudinal Study of Young People in England (LSYPE2)), is a major longitudinal study of young people that began in 2013. It aims to track a sample of over 13,000 young people from the age of 13/14 annually through to the age of 20 (seven waves).

#### Understanding Society

The Understanding Society study, or the United Kingdom Household Longitudinal Study

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	who were born in o understanding of th	ne particular week e factors affecting	in 1958. Conducte human developme	ed by the Centre for Lor ent over the whole lifes	ngitudinal Studies (CLS pan. It collects informati	he lives of all those living in Grea ), the aim of the study is to impro on on physical and educational rticipation and attitudes.	ove	

#### DATA ACCESS

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- ➡ GN 33004 | NATIONAL CHILD DEVELOPMENT STUDY, 1958-
- + GN 33395 | NATIONAL CHILD DEVELOPMENT STUDY: SPECIAL LICENCE ACCESS
- ➡ GN 33497 | NATIONAL CHILD DEVELOPMENT STUDY, 1999-: SECURE ACCESS
- + <u>GN 33521 | NATIONAL CHILD DEVELOPMENT STUDY AND 1970 BRITISH COHORT STUDY (BCS70): COMBINED</u> STUDIES

SN	Study Description	Access	Download
		Online	/ Order 📃
5560	A National Child Development Study Response and Outcomes Dataset, 1958-2013	-	↓ 🗆
6940	A National Child Development Study: Partnership Histories, 1974-2013	$\sim$	↓ 🗆
6942	A National Child Development Study: Activity Histories, 1974-2013	$\sim$	↓ 🗆
7669	A National Child Development Study: Sweep 9, 2013	$\sim$	↓ 🗆
6691	A Social Participation and Identity, 2007-2010	-	↓ 🗆
6752	A National Child Development Study: Understanding Individual Behaviour, 2010	$\sim$	↓ 🗆
6137	A National Child Development Study: Sweep 8, 2008-2009	~	↓ 🗆
6978	A National Child Development Study: Sweep 8, 2008-2009: Imagine You are 60	-	↓ 🗆
5579	A National Child Development Study: Sweep 7, 2004-2005	$\sim$	↓ 🗆
5217	A National Child Development Study: Sweeps 5-6 Partnership Histories, 1974-2000	-	↓ 🗆
5578	A National Child Development Study: Sweep 6, 1999-2000	$\sim$	↓ 🗆
5600	A National Child Development Study: Employment Histories, 1974-2000	-	↓ 🗆
4992	A National Child Development Study: 37-Year Sample Survey, 1995	$\sim$	↓ 🗆
4324	A National Child Development Study: Sweep 5 Parent Migration Dataset, 1991	$\sim$	↓ 🗆
5567	A National Child Development Study: Sweep 5, 1991	~	↓ 🗆
2364	A National Child Development Study: Teaching Sets, 1958-1981	-	↓ 🗆
5566	<u>A National Child Development Study: Sweep 4, 1981, and Public Examination Results, 1978</u>	<b>~</b>	↓ □
2025	A National Child Development Study: Sweep 4 Feasibility Study and Tobacco Research Council Study, 1978	-	↓ □
2024	A Warnock Study of Handicapped School Leavers, 1976	-	↓ 🗆
1858	& Social Consequences of Unemployment, 1964-1971	-	↓ 🗆
5565	A National Child Development Study: Childhood Data, Sweeps 0-3, 1958-1974	~	↓ 🗆
5790	A National Child Development Study: Sample of Essays (Sweep 2, Age 11), 1969	-	↓ 🗆
8313	A         National Child Development Study: "Imagine you are 25" Essays (Sweep 2, Age 11),           1969	-	↓ □

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# NCDS & BCS70 documentation on CLS website

### www.cls.ioe.ac.uk

LONGITUDINIAL	sitemap media News Events tre for Longitudinal S	Studies	6	Institute of Education
Home of the 1958, 1970, M	lillennium and Next Steps Cohort Studie	es		Search
Homepage	32 7. Imagine that you are now 25 years old. Write about the life y at the age of 25. (You have 30 minutes to do this).	rou are leading, your interests, your I	ome life and your wo	
About CLS				
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1958 National Child Development Study	X day of work at the office to nit reading books. I'l retter	tow Great woring a	unday ch,	For cohort members
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<ul> <li>Our staff</li> </ul>	me. Don't forget the book I'm	m the elimnac of	the story.	12 Dec 200
CLS research	Did the Baby Boomers fulfil the	eir childhood <u>drea</u>	ms?	Edd war in an
Publications and resources	In 1969, more than 10,000 11-year-olds were their lives would be like at 25. Almost 50 year	asked to write an essay ir	nagining what	Teenage girls set their sights on
Students	see how their lives have unfolded			lower paying jobs than boys, new research finds
Contact us	r			
	News		Events	< >
Search	Children from lower social classes in heavier than their more advantaged		Webinar: Int birth cohort	troduction to the 1958 and 1970 British s
Publications	21st March 2018		15th May 20	018 14:00 to 16:00
>	Disadvantaged children born at the start o weighed up to 5kg more in their childhood teenage years than those from more privil backgrounds, a new study has found.	and early	Development	line will introduce the 1958 National Child Study and the 1970 British Birth Cohort Study ne and more experienced users.
Recent Tweets	a day ago Book your place on our free webinar on 15 May. It will give an introduction to the National Child Development Study. https://t.co/GfpidFQ2uo	a day ago The @ESRC Longitudin. Strategic Review is out r the response from @CLI home to four of th https://t.co/vGABH8MM0	al Studies Iowl Read Scohorts,	2 days ago Did the Baby Boomers fulfil their childhood dreams? (gCL Scohorts followed up with participants of NCDS who wrole ess. https://t.co/jBwU4GORDx
	Centre for Longitudinal Studies, Institute of Educatio	n		Site by

nemisys

Tel: +44 (0)20 7612 6875

### What documentation is available?

- User Guides
  - Survey details, making sense of the variables available, conventions used
- Full Questionnaires
  - Face-to-face/postal/telephone/self-completion & online versions
  - Index of variable names linked to questions
- Technical Reports
  - Sample design, development work
  - Conduct of fieldwork, survey response
  - Coding, editing and data preparation
- Explore variables at UK Data Service
  - NESSTAR software
  - Shows frequency counts of all variables on request
  - Create user account to explore variables further:
    - Cross-tabulations
    - Charts

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Home of the 1958, 1970, Millennium and Next Steps Cohort Studies

#### Homepage

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- Next Steps (LSYPE)
- Millennium Cohort Study
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- CLS research
- Publications and resources
- Students
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- Imagine that you are now 25 years old. Write about the life you are leading, your interests, your home life and your work at the age of 25. (You have 30 minutes to do this).
- The alarm clock goes for the start of arother day Another X day of work at the office. How Emed boring all I do is nit reading books. I'd better got get up. Wednesday ets, Half-day! Roll on Voldmerborh. Why could I he aminer instead of a langer (whe doesn't do a thing). Better catch the bus. Don't forget the book I'm on the climax of the story.

#### Did the Baby Boomers fulfil their childhood dreams?

In 1969, more than 10,000 11-year-olds were asked to write an essay imagining what their lives would be like at 25. Almost 50 years later we spoke to a number of them to see how their lives have unfolded



Search

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Teenage girls set their sights on lower paying jobs than boys, new research finds





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Disadventened electrony lange at the start of the Odet contract

#### Events



Webinar: Introduction to the 1958 and 1970 British birth cohorts 15th May 2018 14:00 to 15:30

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Home of the 1958, 1970, Millennium and Next Steps Cohort Studies

#### Homepage

About CLS

1970 British Cohort Study

- History of the study
- About the sample
- Published work
- Accessing the data
- Data enhancements
- Data Linkage
- Data Dictionary
- Surveys and documentation
- 1958 National Child Development Study
- Next Steps (LSYPE)
- Millennium Cohort Study
- Our staff
- CLS research
- Publications and resources

#### Welcome to the 1970 British Cohort Study

#### Principal Investigator: Prof Alice Sullivan

The 1970 British Cohort Study (BCS70) follows the lives of more than 17,000 people born in England, Scotland and Wales in a single week of 1970. Over the course of cohort members lives, the BCS70 has collected information on health, physical, educational and social development, and economic circumstances among other factors.

The BCS70 is managed by CLS and funded by the Economic and Social Research Council.

You can find out more about the 1970 British Cohort Study by viewing an interview with its Principal Investigator, Alice Sullivan below.

#### A conversation with Alice Sullivan, P... 🕓





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#### Are you a 1970 cohort member?

#### Tell us about your research

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CLS tracks published work using cohort data in order to help other researchers avoid duplication and also demonstrate the value of the studies to the research community.

#### Email clsfeedback@ioe.ac.uk

#### Useful links

- UK Data Service
- CLS working papers series

#### Downloads

#### Home of the 1958, 1970, Millennium and Next Steps Cohort Studies

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#### Homepage

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1970 British Cohort Study

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- BCS 2016
- BCS 2012
- BCS 2008
- **BCS 2004**
- BCS 2000
- BCS 1996
- BCS 1986
- BCS 1980
- BCS 1975
- BCS 1970
- Sub-Studies

#### Surveys and documentation

These pages contain specific information on each sweep of the 1970 British Cohort Study (BCS70).

#### Need more help?

If you can't find the help you need on these pages, please contact our user support team.



#### Tell us about your research

CLS tracks published work using cohort data in order to help other researchers avoid duplication and also demonstrate the value of the studies to the research community.

#### Email clsfeedback@ioe.ac.uk

#### 1970 British Cohort Study

- History of the study
- About the sample
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- Surveys and
- documentation
- BCS 2016
- BCS 2012
- BCS 2008
- > BCS 2004
- BCS 2000
- Questionnaires
- Technical Reports
- User Guides
- Data notes
- BCS 1996
- BCS 1986
- BCS 1980
- BCS 1975
- BCS 1970
- Sub-Studies

The BCS70 Age 30 survey took place between 1999 and 2000.

#### Response:

11,261 cohort members took part in total.

#### Design:

A 60 minute face-to-face interview comprising a CAPI (Computer-Assisted Personal Interview) and a CASI paper self-completion questionnaire.

More information about the coverage of each element of the survey and the downloadable questionnaires are provided here. A full description of the design of the Age 30 survey is provided here.

#### Data:

The data are available from the UK Data Service. Guidance on how to use the data is provided here.

#### Funding:

Fieldwork was funded by the Economic and Social Research Council (ESRC) and Government departments under the coordination of the Office for National Statistics: Department for Education and Employment (the major funder), Department of Health, Department of Social Security, the Home Office, ONS themselves, the Scottish Office and the Basic Skills Agency.



#### CENTRE FOR LONGITUDINAL STUDIES

#### Download this data from the UKDS

#### Fast facts:

- Survey age: Age 30
- Survey year: 1999 and 2000
- Response: 11,261
- UK Data Service reference code: 5558
- PI: Jane Elliott, IOE
- Fieldwork agency: NatCen
- Funder: ESRC

#### Downloads

- The design and conduct of the 1999-
- 2000 surveys of the National Child Development Study and the 1970 British Cohort Study

BCS70 ethical review and consent

#### ? | : | | WHYMOVE

:	SHOW CARD C.	
:	What are the main reasons for you intending to move?	
:	SET[6] OF :	
:	(1) Buy	"want to buy"
:	(2) Larger	"want larger home"
:	(3) Better	"want better home"
:	(4) Cheaper	"need cheaper home"
:	(5) Job	"job change/nearer work"
:	(6) Spouse	"spouse or partner job change"
:	(7) Nearer	"to be nearer relative(s)"
:	(8) Afford	"can no longer afford it"
:	(9) Evicted	"evicted/repossessed"
:	(10) Break	"relationship breakdown"
	(11) NewRel	"new relationship"
:	(12) Move	"move to better area"
	(13) Child	"for children's education"
	(14) Want	"just want change"
	(15) Place	"want place of own" "Deabless with aciablesses"
	(16) Probs	"Problem with neighbours"
	(17) Other	
	ENDIF	
: ENDIF		
: IF (YEARNOW > ChkDate) THEN		
:		
?   :   HOMELESS : YES/NO		
:   Since ^1986/1991, has there been a time when you were homeless, by that I mean that you had to move out of a place and had nowhere permanent to live?		
:   IF (HOMELESS = Yes) THEN		
:		
?   :     NUMHOMLS : 150		
:  How many times has this happened since ^1986/1991?		



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## Missing Data -Attrition in NCDS & BCS70









Response in BCS70

#### Non-response / attrition



- Distinction between *unit non-response* (ie non-participation) and *item non-response* (participant refuses some specific questions)
- Types of unit non-response: Non-contact by fieldworkers/tracing team Refusal Inability to respond Emigration Death
- Unit non-response may not be permanent

#### Attrition Bias – why does it matter?

- Attrition reduces statistical power and biases associations, affecting the generalisability of results.
- Longitudinal birth cohort data enables us to better understand the nature of attrition, and account for it. It is more likely in: Men than women; Those from lower social class backgrounds; Those lacking basic skills
- A range of methods are available for us to account for attrition

#### What can we do about attrition?



- Principled approaches to missing data handling:
- Inverse probability weighting: Attrition weights constructed using binary logit response models, equal to the inverse of the probability of participating in the study
- Multiple imputation (various forms of)
- FIML: Missing data directly dealt with in the estimation of the likelihood

#### CLS Missing Data Strategy

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Data driven approach to identify the key predictors of non-response in NCDS & BCS70 (and the other two CLS cohorts)

So far, analyses carried out just for NCDS – report and user guide coming soon

List of "auxiliary" variables (predictors of non-response) for users to adapt to their specific analysis and fully explore the richness of NCDS to reduce bias due to missing data

Predictors of non-response include social class, region, health status, literacy...

We have shown that by using auxiliaries we are able to restore sample representativeness in NCDS despite attrition

For more info see: George B. Ploubidis (2017) <u>Presentation on CLS 'missing data strategy</u>', at the Royal Statistical Society, 26<sup>th</sup> October 2017, <u>event</u> on Large longitudinal studies: design and methodology



## What's new in NCDS and BCS70.

## Matt Brown

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#### Current Survey – Age 46



- Paper self-completion questionnaire
- Face-to-face interview with cognitive assessments - 50 minutes
- Nurse visit (biomeasures) 50 minutes
- Accelerometry
- Online diet questionnaire

#### Funding: ESRC, MRC, British Heart Foundation

## Age 46 Survey – Questionnaire content

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- Household composition
- Relationships
- Children / Grandchildren
- Social contact
- Housing
- Employment/Income
- Health (Physical and mental health/well-being)
- Smoking (including e-cigarettes)
- Drinking
- Exercise / Physical activity
- Sleep
- Diet (Online diet questionnaire 2 x 24 hour recall)

## Age 46 Survey – Cognitive assessments



- Word list recall immediate and delayed memory
- Animal naming executive function
- Letter cancellation concentration / attention to detail

Same assessments as per NCDS Age 50 Survey (and ELSA, 1946 cohort) – but first time assessments conducted with participants aged under 50

#### Age 46 Survey - Biomeasures



- First objective measures of health since childhood
- Assess longitudinal predictors of health in mid-life
- Use as a baseline for ageing
- To measure risk factors before disease and functional decline apparent
- Cross-cohort analyses (especially with 1958 cohort)

#### Age 46 Survey - Biomeasures



- Height / Weight / Body Fat / Waist / Hip
- Blood pressure
- Grip strength
- Balance assessment
- Blood sample (Analytes/ DNA extraction / storage)
- Activity monitoring (Accelerometry)

#### Age 46 Survey - Accelerometry

- Thigh worn ActivPal device worn for 7 days
- Accelerometer and also measures postural allocation to accurately distinguish between different types of sedentary activity (standing, sitting, sleeping) and transitions between



## Accelerometry

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#### activ PAL Thurs 21st June 2012 - Wed 27th June 2012



## Online diet questionnaire

- Oxford WebQ developed and hosted by CEU, Oxford
- Inventory of food and drink consumed on previous day
- Completed on 2 of 7 days following home visit
- Nutrient intake calculated

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Age 46 Survey - Timetable
```



#### Main stage of data collection – July 2016 to July 2018

- Data available April 2019
- Accelerometry data late 2019

## Next up – Age 50 Survey (though funding tbc)

- Face to face interview 60 to 75 minutes
- Cross-cohort comparability with NCDS Age 50 Survey

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- Online consultation re: questionnaire content – Summer 2018
- Consultative conference October 2018
- Piloting and development 2019
- Main stage of data collection 2020

#### **Recent data deposits**



- Partnership histories 1986 to 2013
- Economic activity histories 1986 to 2013

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## Next up – Age 61 Survey

- Paper self-completion questionnaire
- Face-to-face interview with cognitive assessments 75 minutes
- Nurse visit (biomeasures) 50 minutes
- Life history paper questionnaire 30 minutes (1 in 3 sub-sample)
- Online diet questionnaire (2x24 hour recall – as per BCS70)

#### Funding: ESRC, MRC, NIH, DWP



### Age 61 Survey – Questionnaire content

#### Family, relationships and identity:

Social networks, relationships with partners, parents, children, friends, neighbourhood, social capital, social and political participation, attitudes and values, religion, expectations.

## Age 61 Survey – Questionnaire content

#### Finances and employment:

Work, income, wealth (savings and debts, pensions, and housing), retirement plans, inheritance (receiving and giving) and other transfers, financial literacy, education

### Age 61 Survey – Questionnaire content

#### Health, well-being and cognition:

Physical health, mental health, medical care, medication, smoking, drinking, diet, exercise, cognitive function (as per NCDS Age 50 and BCS70 Age 46)

## Age 61 Survey – Biomeasures

- Anthropometry Height, weight, bodyfat, waist, hip
- Physical function Grip strength, balance, walking speed
- Blood pressure sitting/standing/postexercise (step-test)
- Blood sample wide range of analytes (home centrifugation)

## Age 61 Survey – Life History Questionnaire

- Life-history questionnaire
  - Funded by NIH purpose is to validate retrospective data collected by other NIH funded studies (e.g. ELSA, SHARE, HRS)
  - o 1 in 3 sub-sample
  - Paper questionnaire

#### **Recent data deposits**

Age 11 essays project

*'Imagine you are now 25 years old. Write about the life you are leading, your interests, your home life and your work at the age of 25'.* 





#### **Recent data deposits**



- Economic activity histories 1974 to 2013
- Partnership histories 1974 to 2013

Upcoming linked data – NCDS and BCS70

- Consents collected from NCDS and BCS70 participants to link to:
- NHS records
- Economic records (HMRC and DWP)
- Release of first sets of linked data forthcoming:
  - Hospital Episodes Statistics
  - HMRC PAYE data, Self-assessment



# Measures of wellbeing in NCDS and BCS70

Martina Narayanan

#### Measures of wellbeing in NCDS and BCS70

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- How do we define mental health and wellbeing?
- Measures of wellbeing in NCDS and BCS70
- Examples of previous work

#### Different terms for the same thing?

- Mental health
- Wellbeing
- Life satisfaction
- Quality of Life

#### Different terms for the same thing?



- Mental health = Mental ill-health?
- Wellbeing
- Life satisfaction
- Quality of Life

#### Different terms for the same thing?



- Mental health = Mental ill-health?
- Wellbeing
- Life satisfaction
- Quality of Life

Until recently, majority of previous research has focused on mental illness and symptoms of mental ill-health!

#### World Health Organisation defines health as



"the state of complete physical, mental and social *wellbeing* and <u>not merely the absence of disease</u> or infirmity" (WHO, 1948)
#### World Health Organisation defines health as



"the state of complete physical, mental and social *wellbeing* and <u>not merely the absence of disease</u> or infirmity" (WHO, 1948)

That means: Mental health ≠ absence of mental illness

### Measures of wellbeing in the CLS studies











- Follow this link to get the complete variable overview for all CLS studies:

https://drive.google.com/open?id=1DBL4STIr0OxMSIgJUvrn38AtWwiphH9B



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#### When?

Wave	Year	Age CM	Subject	Dataset	Variable name	Scale	Description
3	1974	16	Parent	5565	n2417		Satisfaction with school
3	1974	16	Cohort member	5565	n2877		Satisfaction places to meet
5	1991	33	Child (Mother report)	5567	n516834		Happy at school
5	1991	33	Child (Mother report)	5567	n516843		Satisfaction with school
5	1991	33	Cohort member	5567	n509769	Self efficacy	Self efficacy
5	1991	33	Cohort member	5567	n509770	Self efficacy	Self efficacy
5	1991	33	Cohort member	5567	n509771	Self efficacy	Self efficacy



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Мо	ore details	
		$\mathbf{+}$
Item	Response categories	Approx. nr. cases
To what extent has the parent been satisfied with child's education at present school?	1 = satisfied, 2 = satisfied in some ways but not in others, 3 = dissatisfied	11492
How satisfied are you with places for young people to meet in your neighborhood?	1 = satisfied, 2 = uncertain, 3 = dissatisfied, 4 = Not bothered	11931
Is child happy at his/her school?	1 = Yes, 2 = No	2671
Overall, have you been satisfied with child's education at present school?	1 = very satisfied, 2 = satisfied, 3 = neither, 4 = dissatisfied, 5 = very dissatisfied	2705

### Types of variables on wellbeing



General wellbeing	Domain specific wellbeing
Single items, e.g.: - Life satisfaction	Single items, e.g.: - Job satisfaction
"On a scale 0 to 10 …" "All things considered, how happy are you?"	<ul> <li>Satisfaction with work/life balance</li> <li>Relationship satisfaction</li> <li>Satisfaction with housing</li> </ul>
Scales, e.g.:	- Happy at school (Child) / Satisfaction with school (Parent)
<ul><li>WEMWBS</li><li>Quality of Life (CASP)</li></ul>	- Satisfaction with area you live in
- GHQ	Scales, e.g.:
<ul><li>SF-36</li><li>Compared with others</li></ul>	<ul><li>Self efficacy</li><li>What am I like (self esteem)</li></ul>

#### Types of variables on wellbeing



General wellbeing	Domain specific wellbeing			
Single items, e.g.: - Life satisfaction "On a scale 0 to 10" "All the satisfaction of the satisfact	nd BCS			
"All things considered, how happy are you?	- Relationship satisfaction			
	- Satisfaction with housing			
Scales, e.g.:	- Happy at school (Child) / Satisfaction with school (Parent)			
- WEMWBS	- Satisfaction with area you live in			
- Quality of Life (CASP)				
- GHQ	Scales, e.g.:			
- SF-36	- Self efficacy			
- Compared with others	- What am I like (self esteem)			

"Here is a scale from 0 to 10, where '0' means that you are completely dissatisfied and '10' means that you are completely satisfied. Please enter the number which corresponds with how satisfied or dissatisfied you are with the way life has turned out so far."

Measured in several cohort studies:

- NCDS: Age 33, 42, 46, 50
- BCS: Age 26, 30, 34, 42

#### Life satisfaction over the life course (NCDS)



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#### Life satisfaction by number of children (NCDS)





#### Life satisfaction over the life course: Comparing cohorts NCDS and BCS





#### Job satisfaction over the life course: Comparing cohorts NCDS and BCS





#### Types of variables on wellbeing



General	wellbeing	Domain specific wellbeing		
<ul> <li>Single items, e.g.:</li> <li>Life satisfaction     "On a scale 0 to 10     "All things considered</li> <li>Scales, e.g.:     WEMWBS     Quality of Life (CA</li> </ul>	" ed, how happy are you?" WEMWBS NCDS and BCS	<ul> <li>Single items, e.g.:</li> <li>Job satisfaction</li> <li>Satisfaction with work/life balance</li> <li>Relationship satisfaction</li> <li>Satisfaction with housing</li> <li>lappy at school (Child) / Satisfaction with school (Parent) atisfaction with area you live in</li> </ul>		
<ul> <li>GHQ</li> <li>SF-36</li> <li>Compared with oth</li> </ul>	ners	Scales, e.g.: - Self efficacy - What am I like (self esteem)		

# Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)



14 items, including positive affect, psychological functioning (autonomy, competence, self acceptance, personal growth) and interpersonal relationships

Measured in:

- NCDS: Age 50
- BCS: Age 42

# Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)



14 items, including positive affect, psychological functioning (autonomy, competence, self acceptance, personal growth) and interpersonal relationships

Measured in:

- NCDS: Age 50
- BCS: Age 42

# Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)





Source: Elliott et al. 2014. Neighbourhood cohesion and mental wellbeing among older adults: A mixed methods Approach. Social Science & Medicine, 107, 44 – 51.

#### **Institute of Education**



### General Q&A with the CLS cohort team

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### Please complete a short web survey to provide feedback on the webinar:

https://www.surveymonkey.co.uk/r/5870webinar