

Introduction to Next Steps: a longitudinal study in England

Wednesday 19th April 2023 1pm-2pm



Housekeeping



- Please keep your cameras off and mics muted at all times
- If you have a question, please use the chat function, and please note your question will be visible to all attendees
- Technical issues please email us: <u>ioe.clsevents@ucl.ac.uk</u>
- We would be grateful for your feedback. Please follow the link in the chat (open it now) and complete at the end of the event for the short survey

Thank you for joining us today

Plan for today

- About CLS
- About Next Steps
- Examples of research using Next Steps
- Data by theme
- Next Steps Data Enhancements
- Sample design and attrition
- Resources and Data Access
- Age 32 survey contents
- Q&A to the panel



Questions to the panel

- Vanessa Moulton, Senior Researcher
- and Morag Henderson, Principal Investigator of Next Steps
- Tugba Adali, Survey Manager
- Sarab Rihal, Research Data Manager
- Alison Wu, Study Researcher of Next Steps

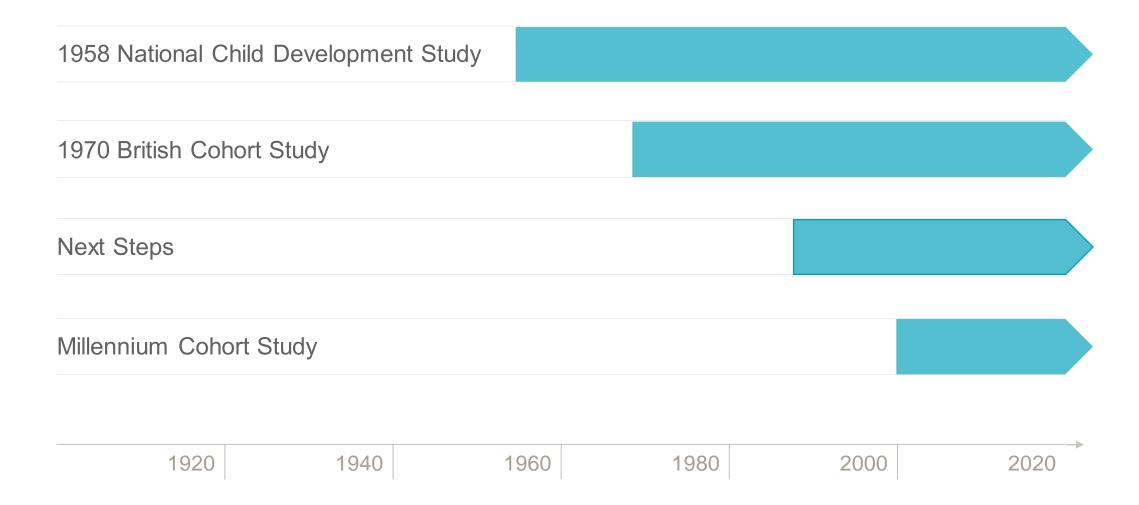


About CLS

- The Centre for Longitudinal Studies is home to four* national longitudinal cohort studies, which follow the lives of tens of thousands of people
- Each of our four studies follows large, nationally representative groups of people born in a given year
- By collecting information from the same people over time, as they live their lives, our studies are powerful resources for answering important research questions



Timeline of the studies



Timeline of the studies

Next Steps follows the lives of around 16,000 young people living in England who were born in 1989/90.

1958 National Child Development Study

1970 British Cohort Study

Next Steps

Millennium Cohort Study

 1920
 1940
 1960
 1980
 2000
 2020

COVID-19 surveys

Wave	Dates	Context	Mode
Wave 1	May 2020	First national lockdown	Web
Wave 2	Sept/Oct 2020	Eased restrictions	Web
Wave 3	Feb/Mar 2021	Third national lockdown	Web → Telephone

Study	Age in 2020
MCS	19
Next Steps	30
BCS70	50
NCDS	62



Other CLS-Affiliated Studies

Early Life Cohort Feasibility Study

 A two-year ESRC funded project which started in April 2021 that will test the feasibility of a new UK-wide birth cohort study

Children of the 2020s Study

- A new nationally representative birth cohort study of babies in England which has been commissioned by the Department for Education (DfE)
- It will include babies born September November 2021, and seeks to recruit over 8,500 families in mid 2022

COVID Social Mobility and Opportunities (COSMO) study

- The study began in 2021 with a representative sample of young people in Year 11 across England
- UKRI funded, led by researchers from the UCL Centre for Education Policy and Equalising Opportunities and the Sutton Trust, in collaboration with CLS



About Next Steps



About Next Steps

- Began in 2004 when study members were aged 13/14 and in Year
- Recruited through schools
- Surveyed annually until 2010 when they were aged 19/20 and then again at age 25
- Covid-19 sweeps, collecting information about living conditions more generally, not just Covid-19 stuff age 30/31
- Currently in the field for age 32/33 data collection



About Next Steps

- Previously run by the now Department for Education (DfE) strong focus on education transitions and transitions to the labour market
- Transferred to CLS in 2013 and the cohort was restarted in early adulthood
- From age 25 onwards the resource became much more multidisciplinary with more similarities with the other CLS cohorts (MCS, BCS70, NCDS)
- Transitions to adulthood
 - time of change in the cohort members' lives: 'big decisions' about careers, families, housing, and health behaviours
- CENTRE FOR LONGITUDINAL STUDIES
- at age 32/33, careers are more established, family formation underway for many, opportunities to examine health and wellbeing

Next Steps A study of people born in 1989/90

		2004 Age 14	2005 Age 15	60 2006 Age 16	2007 Age 17	2008 Age 18	2009 Age 19	2010 Age 20	2015 Age 25	2022 Age 32
	respondent	Study member	Study member	Study member	Study member	Study member	Study member	Study member	Study member	Study member
Parent	response	Parents	Parents	Parents	Parents				Llo opital	
Linked data	בווואפט טמומ	National Pupil Database			Individual Learning Record				Hospital Episodes Statistics, Student Loans Co	
samole	Sample	15,770	13,539	12,439	11,801	10,430	9,799	8,682	7,707	-
A compose	rate	74%	86%	92%	92%	89%	87%	90%	51%	-



Examples of research using Next Steps



Health behaviours



ADDICTION

RESEARCH REPORT

doi:10.1111/add.15345

Socio-economic distribution of e-cigarette use among recent former regular smokers and current smokers at ages 25-26 in England

Thierry Gagné 1 D & Jamie Brown 2,3 D

Department of Epidemiology and Public Health, University College London, London, UK, Department of Behavioural Science and Health, Co-Dire Alcohol Research Group, University College London, London, UK2 and SPECTRUM Consortium, London, UK3

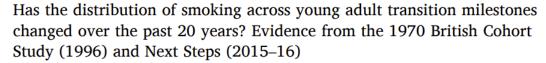
SSM - Population Health 16 (2021) 100941





SSM - Population Health

journal homepage: www.elsevier.com/locate/ssmph



T. Gagné a,b,*, I. Schoon , A. Sacker a,b

- a Department of Epidemiology and Public Health, University College London, UK
- b International Centre for Lifecourse Studies in Society and Health, UK
- c Institute of Education, University College London, UK

ARTICLEINFO

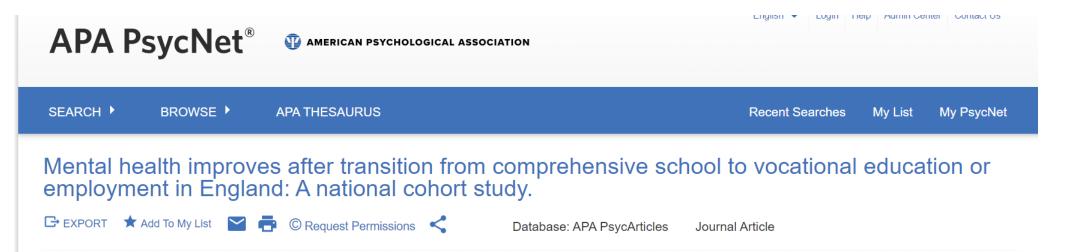
Great Britain Smoking

ABSTRACT

Introduction: Transitions into work and family life during young adulthood exacerbate differences in the progression of smoking over the life-course. Few have considered how changes in smoking and the transition to adulthood in the past two decades have influenced these relationships over time.

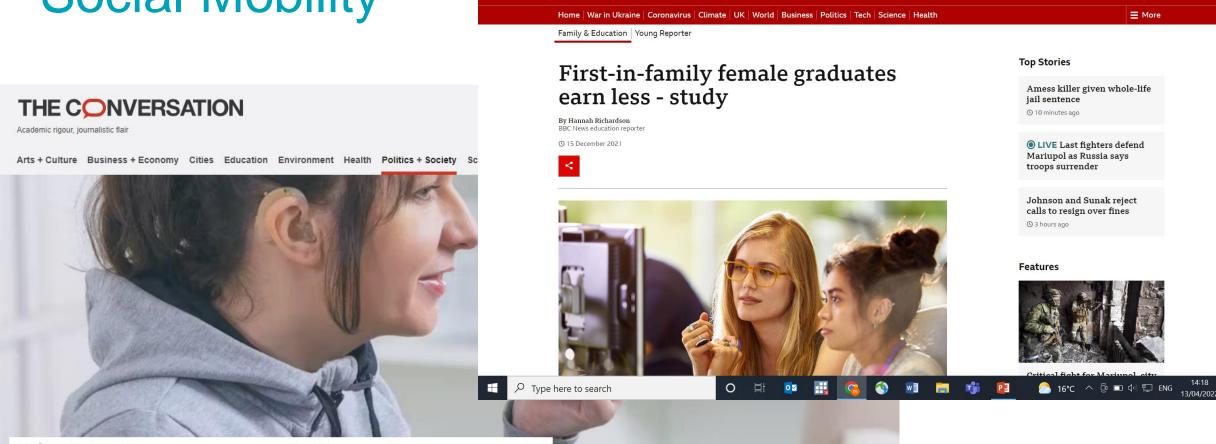
Mental Health and Life Satisfaction







Social Mobility



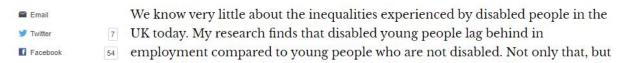
B B C Sign in

NEWS

Disabled young people have less upward social mobility than their peers – and class background makes this worse

Published: January 4 2023 11 59am GMT

Monika Wisniewska/Shutterstock





Q Search



Data, by theme



Themes

- Education
- Physical health
- Mental health and wellbeing
- Family and households
- Employment and resources

...but there are many more





Education



Education

Finances for education

⊚: cohort member

⊙p: cohort member & parent

p: parent

	Age 14	Age 15	Age 16	Age 17	Age 18	Age 19	Age 20	Age 25
Subjects/qualifications being studied for/acquired		0	o	<u></u>	o	o	0	o
Higher education plans	⊚p	o	o	<u></u>	0	<u></u>	o	
Higher education experience					o	o	o	
Attitudes to school/teachers	0	0	o	<u></u>		<u></u>		
Study support & Extra classes	o	o	o					
Future plans	0	0	o	o	<u></u>		o	
Attitudes to the CM's school and involvement in education	p	p	p	p				
Extra-curricular classes	p	p	p	p				
Year 10 subject choices	⊚p	o						
CM's special educational needs	p	p	p					
School history	p	p						

Education in the Covid-19 Surveys

Topic	W1	W2	W3
ТОРІС	(May 2020)	(Sept-Oct 2020)	(Feb-Mar 2021)
Education during pandemic	o	o	o
Disruption of teaching/online learning	©	©	o
Satisfaction with learning provision/academic progress	©	o	o





Physical Health



Physical Health in Next Steps

- Self assessed general health (25)
- BMI, Height, Weight (25)
- Hospital Episodes Statistics (England, linked)
- Physical activity (14, 15, 16, 17, 19, 20, 25)
- Diet (25)
- Long standing illness (14, 15, 16, 17, 18, 19, 20, 25)
- Drugs, smoking and alcohol consumption (14, 15, 16, 17, 18, 19, 20, 25)



Physical health in the COVID-19 surveys

Topic	W1	W2	W3
Topic	(May 2020)	(Sept-Oct 2020)	(Feb-Mar 2021)
Whether has had COVID-19	o	o	o
Whether has had COVID-19 test & results		o	o
Long COVID-19 symptoms			o
Symptoms of COVID-19	o	o	o
Extent of compliance with social distancing	o		o
Whether has downloaded NHS Track & Trace app			o
Whether been offered COVID-19 vaccine; received it & date; if not: how likely to have it; if not likely: reasons			o
Self-rated general health	o	o	o
Long-standing health conditions	o	o	o
Disruption to medical appointments	o	o	o
Difficulty obtaining medication		o	o
Whether in defined vulnerable category	©	<u></u>	o

Health behaviours in the COVID-19 surveys

Topic	W1 (May 2020)	W2 (Sept-Oct 2020)	W3 (Feb-Mar 2021)
Smoking and vaping	o	o	o
Alcohol consumption	o	o	o
Physical activity	o	o	o
Diet (fruit and veg)	o	o	o
Sleep	©	o	o
Weight	©	o	©

Screen time



COVID-19 sweep serology surveys

Available via the UKDS (EUL)

COVID-19 Survey Responses: Next Steps							
Wave 1	1,907						
Wave 2	3,664						
Wave 3	4,239						

Serology response	
Invited	4,826
Consented	2,090
Blood sample returned	1,267

CENTRE FOR LONGITUDINAL STUDIES https://cls.ucl.ac.uk/covid-19-survey/

Serology Survey:

- Participants who took part in one of three COVID-19 Surveys were invited to provide a finger-prick blood sample
- Two antibody tests conducted Nassay and S-assay
 - N-assay more likely to identify naturally occurring antibodies through exposure to virus
 - S-assay more likely to identify antibodies occurring following vaccination
- Same antibody tests conducted in multiple longitudinal studies including ALSPAC, USoc, ELSA, TwinsUK and NSHD (1946 cohort), funded by National Core Studies.



Mental health and Wellbeing



Mental Health and Wellbeing

- General Health Questionnaire-12 (GHQ-12), measured at ages 14, 16, 25 and 30-31
- Standardised tool for measuring presence of symptoms of mental ill health
- Twelve items which capture, for example:
 - Anxiety
 - Trouble sleeping due to worry
 - Feeling under strain
 - Able to concentrate
 - Losing confidence in yourself
- Life satisfaction (a cognitive appraisal of life) measured at age 20, 25 and 30-31



Mental Health and Wellbeing in the COVID-19 Surveys (W1-W3)

Patient Health Questionnaire-2 (PHQ-2):

Over the <u>last 2 weeks</u>, how often have you been bothered by the following problems?

Little interest or pleasure in doing things Feeling down, depressed or hopeless

Generalised-Anxiety Disorder (GAD-2)

Over the <u>last 2 weeks</u>, how often have you been bothered by the following problems?

Feeling nervous, anxious or on edge Not being able to stop or control worrying (Not at all – Nearly every day)

- Control over their life
- Overall life satisfaction
- GHQ-12





Family and Households



Family and households

- Who is in the household
- Relationship to cohort member
- Age/number of siblings
- Biological, step, adoptive parents
- Age of parents when the cohort member was born
- Fertility intentions (25)
- Pregnancy history (25)
- Partnership formation, cohabitation, marriage, divorce, dissolution, formation (25)



Household composition

⊙: cohort member

⊙p: cohort member & parent

p: parent

	Age 14	Age 15	Age 16	Age 17	Age 18	Age 19	Age 20	Age 25
Household composition	p	p	p	p			o	o
Housing tenure	p	р	р	p	o	0	o	o
Languages spoken in the home	р	p	p	p				
Relations with parents/Carer	р	р	р					
Relationships and sexuality						o	o	o
Social connection		o						o
Childcare and caring responsibilities				o	o	o	o	o
Household responsibilities & resources	o p	⊚ p	⊚ р					
Sibling information	p	p						
Reasons for not living with natural parents	p	p	p					

Covid-19 Surveys: Families and households

Topic	W1 (May 2020)	W2 (Sept-Oct 2020)	W3 (Feb-Mar 2021)
Household composition	©	o	o
Changes in household composition	o	o	o
Children	o	o	o
Changes in childcare and schooling arrangements	o	o	o
Non-cohabiting relationships	o	o	o
Relationship satisfaction and family conflict	©	©	o
Household care needs and receipt of care	o	o	<u></u>





Employment and Resources



Employment and Resources

⊙: cohort member

p: parent

	Age 14	Age 15	Age 16	Age 17	Age 18	Age 19	Age 20	Age 25
Current activities	p	p	⊚ p	o	o	o	o	o
Activity history				o	(((o
Jobs and training			o	<!--</td--><td><!--</td--><td>•</td><td>•</td><td>•</td></td>	<!--</td--><td>•</td><td>•</td><td>•</td>	•	•	•
Jobs and training								
Apprenticeships		((((o	(
Reasons for being NEET				o	o	o	o	
Income and benefits	⊚ p	⊚ p	© р	o	o	0	0	o
Job search					o	o	o	o
Attitudes to work						o	o	
Attitudes to debt					o	o		

Covid-19 Surveys: Employment and resources

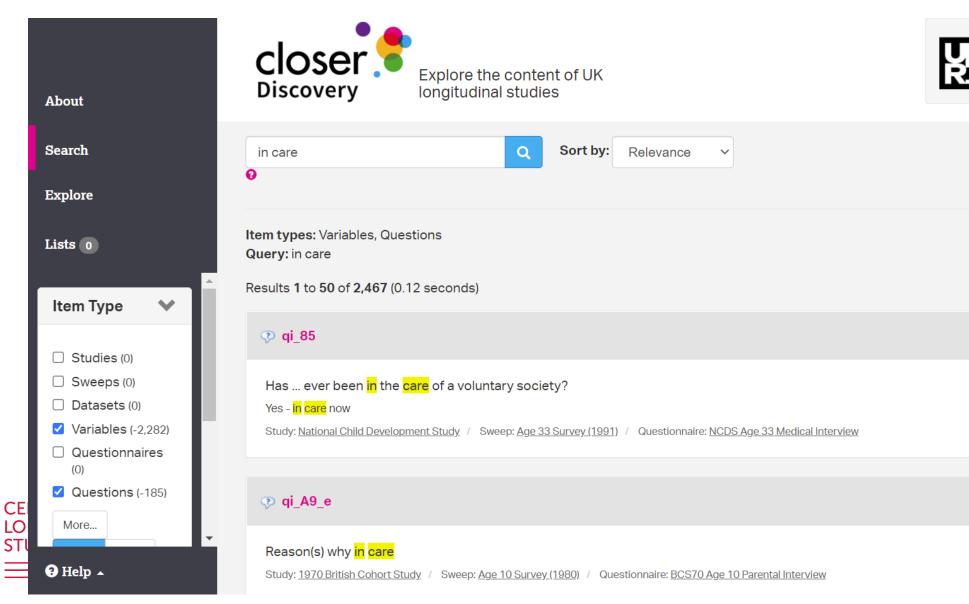
Tonio	W1	W2	W3	
Topic	(May 2020)	(Sept-Oct 2020)	(Feb-Mar 2021)	
Financial situation	o	o	o	
Food security, use of food banks	(a)			
Benefit receipt	o	o	o	
Use of mortgage/rent/debt holidays since outbreak	©	©	©	
Giving/receiving financial help		<u></u>	<u></u>	
Total household income (pre-pandemic and current)			©	



Covid-19 Surveys: Employment and resources

	W1	W2	W3		
Topic	(May 2020)	(Sept-Oct 2020)	(Feb-Mar 2021)		
Employment: Pre-COVID (CM & partner)					
Occupation	o	o	o		
Hours	o	©	o		
Contract Type	©	©	o		
Gross pay			o		
Employment: Current (CM & partner)					
Occupation	o	o	o		
Hours	©	©	o		
Contract type	o	©	o		
Work location	©	©	o		
Gross pay			<u></u>		
Key worker status	©		o		
Job satisfaction		©	o		
Home-working satisfaction		©	o		

SEARCH Closer Discovery



Economic and Social

Research Council



Next Steps Data Enhancements



Currently available linked data (secure access)

- Geo-spatial data which can be linked to other sources (e.g. Green space, number of fast food outlets, pollution data etc.)
- National Pupil Database
- Individualised Learner Records (ILR)
- Student Loans Company Records (SLC)
- Hospital Episode Statistics (HES)



National Pupil Database

Consenting to NPD linkage was a condition of taking part in the Next Steps study

 good coverage, but some were not matched and some have subsequently
 withdrawn from the study so not 100%

The data includes information on:

- Key stage 2 (ages 6-7) and Key stage 3 (ages 11-12) * results
- GCSE results
- A Level results
- Some school level variables, composition of schools including: e.g. % of students in receipt of Free School Meals, % composition of ethnic minority students



Individualised Learning Record

- Contains records of students in vocational education and training post-16
- Data in long format so you can see detailed qualification type, subject, duration (start and end dates)
- Consent for Next Steps was sought at age 25 and 68.2% (5,257) consented to the ILR linkage and of those 69.6% were matched (3,658)
- NS-ILR User Guide can be found <u>here</u>



Student Loans Company Data

- The SLC-NS User Guide is <u>here</u>
- Charlotte Booth, Claire Crawford and Nasir Rajah aim to establish the quality and sample representativeness of this data (self-report versus administrative sources)
- Of the 7,707 respondents at age 25, 58.4% (4,501) consented to SLC linkage and 2,401 (53.3% of consenters) were successfully linked SLC data.
- There are four datasets provided in the linked Next Steps SLC data each have different N:
 - (1) SLC applications (2007-2020) 2,218 unique applicants
 - (2) SLC payments to cohort member (2007-2021) 2,124 unique applicants
 - (3) SLC repayments made by cohort member (2009-2021) 1,929 unique applicants
 - (4) SLC overseas assessment for cohort members overseas (2007-2020) 117 unique applicants



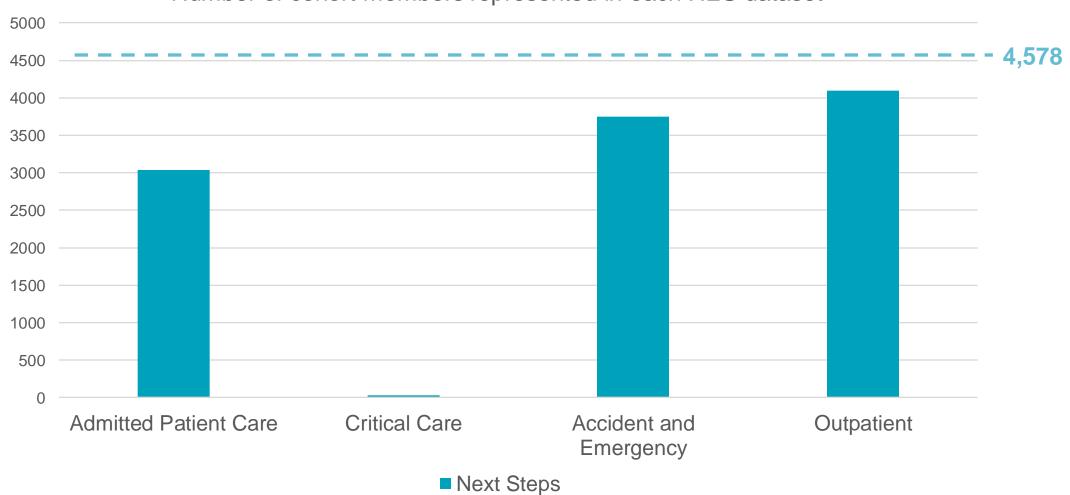
Hospital Episodes Statistics

- There is a HES specialist webinar available on the CLS website training pages
- The HES User Guides are available on UKDS and include a wealth of information
- A very brief overview here of the HES-NS datasets available:
 - ✓ Admitted Patient Care (APC) (2007-2016)
 - ✓ Critical Care (CC) linked to APC records (1997-2016)
 - ✓ Accident and Emergency (A&E) (2009-2016)
 - ✓ Outpatient Care (OP) (2003- 2016)
- These includes information on diagnostic codes, some treatment codes, dates of admission and discharge etc.
- Consent for Next Steps was sought at age 25 and 63.5% (4,895) consented and of those 93.5% were matched in at least one dataset (4,578)

HES – Linkage



Number of cohort members represented in each HES dataset



& Next Steps: Consents to Administrative Sources

	2004 Age 14	2005 Age 15	60 2006 Age 16	2007 Age 17	2008 Age 18	2009 Age 19	2010 Age 20	2015 Age 25	2022 Age 32
National Pupil Database	<u></u>								
Department of Work in Pensions				o	o	o	o	o	Consent sought
Dept for Business, Energy & Industrial Strategy, Higher Education Statistics Agency							o	o	Consent sought
NHS, UCAS, SLC, HMRC, Ministry of Justice. NI number								©	Consent sought
Individualised Learning Record							o		



Sample design and attrition



Sample



- Next Steps is representative of students in secondary schools in England in 2004 (born between 1st September 1989 and 31st August 1990)
- Two stage sampling design for maintained schools
 - Stage 1: schools
 - Deprived schools oversampled by a factor of 1.5
 - Stage 2: pupils within schools
 - Pupils from minority ethnic groups were oversampled
 - In addition, there was an ethnic boost sample (600 young people) at wave 4
- Independent schools and pupil referral units sampled differently

For more information on sample design: <u>SN 5545 - Longitudinal Study of Young People in England - User Guide (ukdataservice.ac.uk)</u>

Design weights



- Design weights: adjust the sample composition to take account of oversampling
- And/or enable the use multi-level modelling or cluster the standard errors by school
 - Primary sampling unit (SampPSU)
 - Strata (SampStratum)

Attrition

- Attrition is the discontinued participation of some individuals in a longitudinal survey for reasons that are unknown and/or beyond the control of the researcher
- Unit non-response (attrition) and item non-response (missing data)
- Types of unit non-response:
 - Non-contact
 - Refusal
 - Inability
- Non-response on the increase in all surveys
- Non-response may not be permanent
- Non-response/attrition can have some important implications



Attrition weights

- Attrition weights: adjust the sample composition to take account of the loss of particular type of respondents.
- Adjustment means giving more importance (weight) to a particular group
- Each sweep has an overall non-response weight
- Overall weights = Design weights x Attrition weights
- Weights are prefixed by sweep number e.g. W1, W2, W3...e.g.

W8FINWT | Weight

Weight: W8 Final Weight



Choosing the correct weight

- The choice of the weight depends on the analysis you are doing
- The weight should correspond to the most recent wave of data you are using
- For instance, if you are using data from waves 1,2, 5 and 8, the wave 8 weights should be used
- svyset [pweight=w8finwt], psu(SampPSU) strata(SampStratum)



Missing Data Strategies

- Using weights is just one of the ways to deal with some aspects of missing data...
- But there are many others including; multiple imputation, completed cases analysis, creating a new category, imputing the mean etc.
- CLS has further documentation on the alternatives and approaches including in the <u>NCDS Missing Data Strategy document</u> which can also be applied to Next Steps
- Training event: <u>Handling missing data in the British cohort studies</u>, 27th April 1pm-430pm





Resources and Data Access



Next Steps: https://cls.ucl.ac.uk/cls-studies/next-steps/



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Next Steps

On this page: Introduction Sweeps COVID-19 survey and data Latest from Next Steps Age 25 initial findings Recent publications Study features Popular documentation Data access Principal Investigator More related content



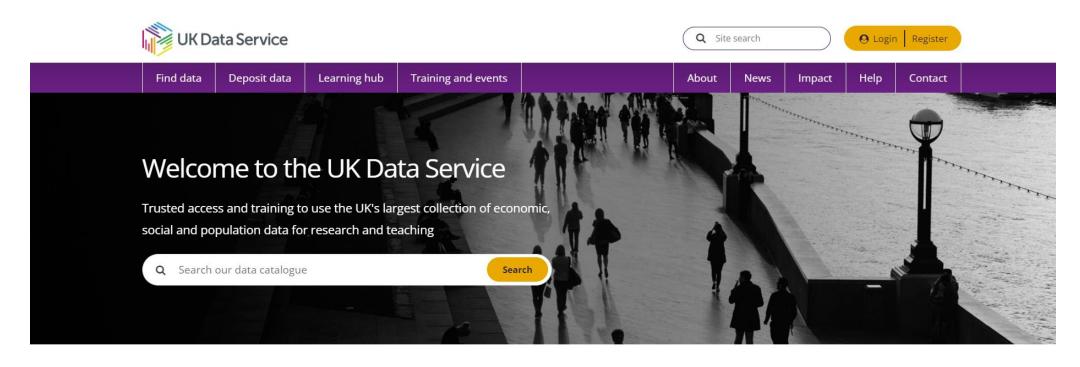


Next Steps, previously known as the Longitudinal Study of Young People in England (LSYPE), follows the lives of around 16,000 people in England born in 1989-90.

Available resources

- User guides
 - Overview of measures; Response and weights
- Questionnaires
 - Exact question wording; Questionnaire routing; Variable names
- Data documentation
 - Data notes; Coding frames; Variables lists, including derived variables
- Technical reports
 - Sample and questionnaire design, development
 - Fieldwork, response, ethics
 - Coding, editing
- Data dictionaries
- Previous journal publications https://cls.ucl.ac.uk/publications-and-resources/

Data <u>freely</u> available to researchers, government analysts and third sector workers: https://ukdataservice.ac.uk/



Key services







Access to different types of data



Access to data held by the UK Data Service varies depending on how the data is classified:

<u>Tier 1:</u> <u>End User Licence</u> (EUL) for access to data with a low level of sensitivity and disclosivity.

- Most of our data are available under this licence.
- Your application is authorised directly by the UK Data Service, and you can download the data directly from there.

<u>Tier 2a</u>: <u>Special Licence</u> (SL) for access to moderately sensitive or disclosive data. Access through the UK Data Service and application approved by CLS before you can download the data.

<u>Tier 2b</u>: <u>Secure Access Licence</u> (SA) for access to the most sensitive and/or potentially disclosive data. Access through the UK Data Service and attend a specialised training course.

https://cls.ucl.ac.uk/data-access-training/data-access/

Accessing the data

- Register and set up an account at the UK Data Service
- Search for the data using the 'find data' tab
 - Next Steps
- Before downloading the data
 - Click on 'Request Access'
 - Click on 'Complete Actions'
 - Agree to standard 'End User Licence'
 - Read and agree extra conditions
 - Choose data format and download zip file (SPSS, STATA or TAB)
- For secure access data, you need to submit a proposal and complete the training the process is outlined <u>here</u>
- There is also a process for accessing other specialist data e.g. geo data, the details can be found <u>here</u>

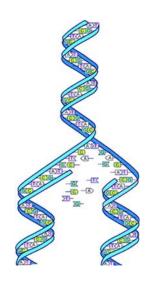


Age 32 Survey Contents



Age 32 Survey Contents

- Family and relationships, and housing
- Employment and finances
- Education
- Health and wellbeing
- Identity, attitudes, and personality
- Childhood circumstances and other life events
- Fertility history and intentions
- Working memory test
- Saliva collection (funding for DNA data extraction and genotyping has been secured)





Age 32 Survey

 Fieldwork due to finish over the summer, data deposit around May 2024





Q&A to the panel



Q&A

- Tugba Adali, Survey Manager
- Sarab Rihal, Research Data Manager
- Alison Wu, Study Researcher of Next Steps
- Vanessa Moulton, Senior Researcher
- Morag Henderson, Principal Investigator of Next Steps





Thank you

Please complete the feedback form

