

Growing Up in IrelandData Workshop

March 6th, 10:00-12:00

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Research and Evaluation Unit Department of Children, Equality, Disability, Integration and Youth

> **Fás Aníos in Éirinn** Growing Up in Ireland

Housekeeping....

- Workshop will be 2hrs long
 - Quick break after ~50mins
- Q+A at end of each subsection
 - Please stay on mute at all other times
 - Technical issues:
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 <u>derek.nolan@equality.gov.ie</u>
- Please complete short survey afterwards

Workshop Structure

1) Introduction to Growing Up in Ireland

- Study background
- Sample design
- Study design

2) Accessing and Understanding the GUI Data

- Online resources, technical documents
- Applying for AMF / RMF
- Familiarising yourself with the data

3) Using the Data

- Matching files
- Using weights

1) Introduction to *Growing Up in Ireland*

- Study Background
- Sample Design
- Study Design

History of the Study

- Growing Up in Ireland (GUI) is the national longitudinal study of children and young people
- Established by the Irish Government in 2006
 - Proposals for a study from 1980s-90s
 - Dearth of Irish data on key areas of child research
 - Ref: UK's National Child Development Study
- Funded by the Department of Children, Equality, Disability Integration and Youth (DCEDIY)
- Initially carried out by a consortium of researchers led by the Economic and Social Research
 Institute (ESRI) and Trinity College Dublin, with data archived by the CSO
- Now managed and overseen by DCEDIY, in association with the Central Statistics Office (CSO)

Objectives of GUI

- Provide evidence to create effective and responsive policies and services for children, young people and their families
- Study the lives of children/young people in Ireland
- Establish what is typical/normal, as well as what is atypical/problematic
- Identify the key factors that most help or hinder children's development
- Establish the effect of early child experiences on later life
- Identify the persistent adverse effects that lead to social disadvantage, educational difficulties, ill health, deprivation etc.
- Obtain children's views and opinions on their lives

About GUI

- Growing Up in Ireland is a longitudinal study that conducts surveys with young people and their families at different ages
- These ages are typically associated with developmental milestones (reaching secondary school, Leaving Cert, college, etc.)
- It utilises a fixed panel design that tracks the same children with no additions in between waves

- GUI was originally a dual cohort study (Cohort '98 and Cohort '08)
 - New cohort being added in 2024

Longitudinal Design

- Longitudinal design involves interviewing same sample of respondents on several occasions
 - Tracks the progress / development of the same child (and family) over time
 - Differs from cross-sectional design use different respondents each time

WHY?

Longitudinal design allows us to consider...

- Effects of early childhood experiences on later development
- What specific factors matter (educational, emotional, environmental)
- When and how it is best to intervene to support children/families
- The effectiveness of interventions and policies
- Change over time and dynamics of behaviour

International Examples of Child Cohort Studies

- The Irish Longitudinal Study of Aging (TILDA)
- Longitudinal Study of Australian Children (LSAC) started in 2004
- Millennium Cohort Study, UK 2001
- Australian Temperament Project 1983
- Dunedin Multidisciplinary Health and Development Study 1972/73
- British Cohort Study 1970
- National Child Development Study, UK 1958
- National Survey of Health and Development 1946
- Danish National Birth Cohort 1997
- Norwegian Mother and Child Cohort Study 2000
- National Longitudinal Survey of Children and Youth, Canada–1994

Extensive list available here: https://en.wikipedia.org/wiki/Longitudinal_study

Data Collection

COVID Survey

Cohort '98 Wave 1 8,500 9-yearolds recruited

2008

Wave 2
Age 13 interview

2012

Wave 3
Age 17/18
interview

Wave 4
Age 20
interview

Wave 5 Age 25 interview

Start of 2006 Growing Up in Ireland

> Cohort '08

Wave 2 (3 yrs)

2010

Wave 3 (5 yrs)

2014

Wave 4* (7 yrs)

2016

Wave 5
Age 9
interview

2018

Wave 6
Age 13
interview

2022

11,000 9-montholds recruited

Wave 1

COVID Survey

2020

What Data are Available?

Cohort '08

Wave	Age	Fieldwork	Archived
1	9 months	Sept 08 – Apr 09	Yes
2	3 years	Dec 10 – July 11	Yes
3	5 years	Mar 13 – Sept 13	Yes
4	7 years	Feb 16 – Sept 16	Yes
5	9 years	Completed July 2018	Yes
	COVID Survey	December 2020	Yes
6	13 years	Completed 2022	Yes
7	17 years	Not yet commenced	N/A

Cohort '98

Wave	Age	Fieldwork	Archived	
1	9 years	Aug 07 – Jun 08	Yes	
2	13 years	Aug 11 – Mar 12	Yes	
3	17 years	Oct 15 – July 16	Yes	
4	20 years	Completed Apr 2019	Yes	
	COVID Survey	December 2020	Yes	
5 25 years		Begun	N/A	

Examples of Policy Impact

DRCD

Civic engagement rural areas

Art Council

strategic planning for children's cultural participation

DES

Review of career guidance

DCEDIY

Covid: schools re-opening ECCE take up Early Learning impacts Work life balance issues BOBF priorities ABC evaluation Housing conditions & child outcomes Parenting relationships Migrant children Discrimination

NCCA

Transitions to primary school

DoH

Medical card usage Population health planning Screen time

HRB

Pathways and drug use

DECCAE/ComReg

Mobile phones and learning

HSE

Young people's health behaviours Sex and sexual behaviour among young people

NDA

Parental educational expectations of children with disabilities

Institute of Public Health

Advising on upcoming legislation Vaping Gambling

NCSE

Estimating special needs prevalence Educational outcomes for students with SEN

Examples of Research Impact

Trinity College

Digital media, screen time & mental health Ethnicity & breastfeeding rates Chronic illness and educational failure Folic acid & cleft palate in infants

UCC

Individual, family and environmental effects physical activity Childhood obesity and the local food environment

Treoir

Unmarried and solo parent experiences

NUIG

Overweight, obesity and health Socioeconomic profile of childhood disability

Dental Hospital, **Trinity**

Dental problems across GUI waves

NCI

home learning environments and disadvantage

Maynooth University

Children & grandparents Effects of school age childcare on outcomes

HEA/Trinity gambling and participation in sport over time

ESRI

Attitudes to the Irish language Ante natal care pathways Access to GP services and GP fees Energy poverty and child health Primary to post primary transitions

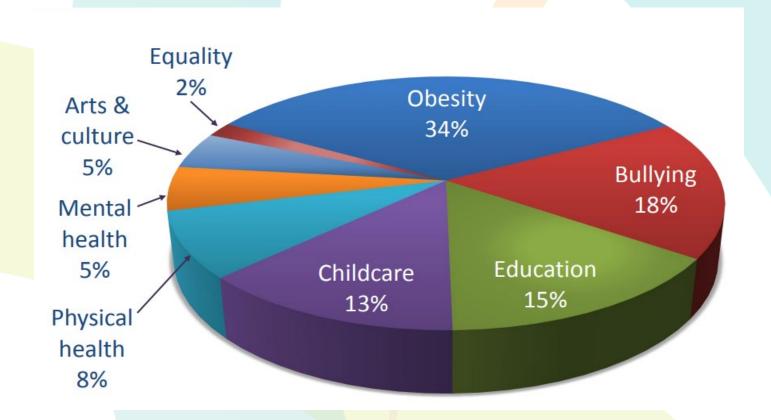
Mary I Limerick

Home learning environment and cognitive development Gender and attitudes to maths Determinants of active commuting to school

DCU

Parent book reading at 9 months and vocabulary development at 3

GUI in Dáil Debates (100 times 2007- 18)



1) Introduction to *Growing Up in Ireland*

- Study Background
- Sample Design
- Study Design

Sample Representativeness

1 in every 6 children from each cohort is a GUI participant





















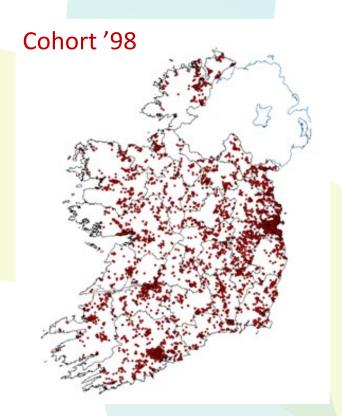




Infant Cohort: 11,134 out of 75,173 babies born in 2008

Child Cohort: 8,568 out of 53,969 kids born in 1998

Samples Distribution





Cohort '98 Sampling

56,500 9-year-olds in population

- Random sample of 8,500 9-year-olds resident in Ireland
 - 14% of all 9-year-olds

- Two stage, clustered sample design
 - Stratified random sample of Primary schools
 - Random sample of children within school

Cohort '98 Sampling

- 1,105 schools randomly selected from pool of over 3,000
- 910 schools participated in the sample 82.3% response rate at school level

Introductory letter and info sheets sent to principal

List of all 9 year olds – if <40 all selected. If >40, a random sample selected

Cohort '08 Sampling

- 73,662 infants (less than one year old) in population
- Random sample of 11,000 9-month-olds resident in Ireland
- Child Benefit Register used as sampling frame
- Sampled over 7 month period
- Simple, systematic selection procedure, random start and constant sampling fraction

Follow-up at Subsequent Waves

- Tracing information collected at Wave 1
 - PPSN
 - Family / friend contact details
- Initial contact to child's home from Head Office
- Face-to-face visit from interviewer
- If possible, same interviewer as Wave 1
- ~85-90% response rate at subsequent waves
- Fixed panel design

Sample sizes at each wave

Cohort '08

Wave	1	2	3	4	5	6
Sample	11,134	9,793	9,001	5,344*	8,032	6,723

Cohort '98

Wave	1	2	3	4
Sample	8,568	7,525	6,216	5,190

In between waves, the sample size can change for 3 main reasons:

- the child has emigrated / deceased
- 2. the child/family was unable to be reached
- 3. the child/family gave a "hard refusal" to be included.

In the event of the latter case, those children are removed from any future waves, decreasing the total valid sample in between waves

Re-weighting the Sample

- Data can be re-weighted to account for differential attrition across waves
- Differential attrition leads to differences between structure of completed sample (at any wave) and wider population
 - According to key socio-demographic indicators
- Re-weighting ensures sample is representative of the population (*at time of recruitment, Wave 1)
- Re-weighting should be carried out prior to any analysis
- * Covered in detail in final section of workshop

1) Introduction to *Growing Up in Ireland*

- Study Background
- Sample Design
- Study Design

Respondents

Multiple sources of information:

- Primary Caregiver interview (PCG)*
- Secondary Caregiver interview (SCG)**
- Child interview
- Child cognitive tests
- Principal questionnaire
- Teacher questionnaire
- Physical measurements
- Time-use diaries
- * PCG self-defined as person who provides most care to the child / knows child best usually mother
- **SCG self-defined as resident spouse/partner of PCG usually father

Securing Informed Consent

- Information Sheets, Consent and Assent forms sent to families of selected children
- Multiple mail shots sent to the families
- Signed consent and assent before any work undertaken with the children

Example of 'Edge Cases', Cohort '98 at 17 years

- Data becomes increasingly complex as multiple patterns of participation become possible
- Parent and Young Person (YP) give consent individually. This may lead to fragmentary cases
- YP deemed to be most important source of information from Wave 3 onwards
- Only the 6,216 cases containing a YP interview included in the AMF/RMF (214 Parent interviews with no YP are not published)
- SES for 59 cases with no Parent interview can be taken from the previous wave

Wave 3				
			Yes	
Interview from YP	No	-	214	214
	Yes	59	6,157	6,216

Fieldwork

- Interviews conducted face-to-face in the home, where possible
- Main interview administered by interviewer on Computer Assisted Personal Interview (CAPI) basis
- Sensitive interview self-administered on Computer Assisted Self Interview (CASI) basis
- Principal/teacher questionnaires self-completed on pen-and-paper basis
- Food-frequency and Time-use Diaries left behind and posted to field office on pen and paper

Cohort '08 – Age 13 interview

- Due to the COVID-19 pandemic, it was not possible to conduct in-person interviews and the interviews were administered **online**
- As a result, the surveys were shorter than originally planned, leading to some loss in crosscohort and longitudinal consistency
- The Primary Caregiver (PCG), Secondary Caregiver (SCG) and Young Person (YP) were interviewed, along with a Principal questionnaire
- All interviews were sensitive and confidential
- Topics included diet, physical activity, the transition to secondary school, mental health, pastimes, and screen time

Summary of information recorded - Cohort '98

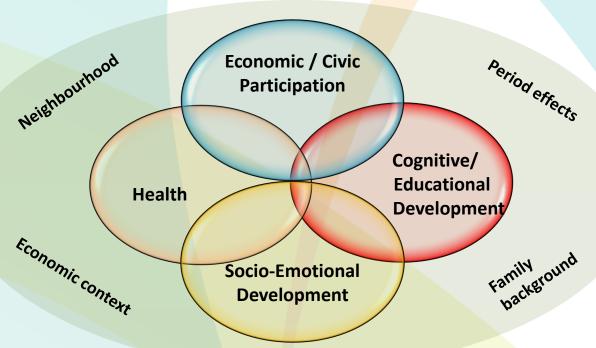
Wave	PCG	SCG	Child	Cognitive Tests	Principal	Teacher	Physical Measures	Time Use
1 (9yr)	Υ	Υ	Υ	Υ	Y	Y	Υ	Υ
2 (13yr)	Υ	Υ	Y	Y	Y		Υ	Υ
3 (17yr)	Y	Y	Y	Y	Y		Y	Y
4 (20yr)	Y		Y	Y			Y	Υ

Summary of information recorded - Cohort '08

Wave	PCG	SCG	Child	Cognitive Tests	Principal	Teacher	Physical Measures	Time Use
1 (9mth)	Υ	Υ					Υ	
2 (3yr)	Y	Υ		Υ			Υ	
3 (5yr)	Y	Y		Y	Y	Y	Y	
5 (9yr)	Y	Y	Y	Y	Y	Y	Y	Υ
6 (13yr)	Y	Y	Y	Y	Y			Υ

Multi-disciplinary Coverage

Fig – Key Domains/Topics of Research



Main Outcome Domains

- Socio-emotional, behavioural well-being
- Physical health
- Education / cognitive development
- Economic and civic participation
- Family background characteristics
- + Classificatory variables*

Socio-emotional, Behavioural Well-being

Themes:

- Child's relationships
- Child's lifestyle (habits & routines) / play and activities
- Child's socio-emotional development
- Family context/parenting
- Marital/Partner relationship
- Non-resident parent

Physical Health

Themes:

- Pregnancy, birth, breastfeeding, etc.
- Child's general health / longstanding condtions
- Healthcare utilisation
- Child's nutrition / diet
- Child's physical activity levels/exercise
- Physical measurements (Expanded in waves 3 and 4)
- Risky behaviours
- Parental health and lifestyle

Education / Cognitive Development

Themes:

- Childcare arrangements
- Child's education / home learning environment
- Child's cognitive development
- Child's attitudes to school
- Educational performance
- Further/higher education
- Teacher characteristics and perception of child
- Principal / school characteristics

Economic and Civic Participation

Themes:

- Young Person's economic status
- Young Person's labour force experience
- Young Person's Income
- Political and community engagement
- Religion and spirituality
- Confidence in state institutions
- Perceived discrimination

Family Background Characteristics

Themes:

- Family social class
- Family income
- Sociodemographic information
- Parental education
- Parental employment
- Family structure

Classificatory Variables

Themes:

- Household composition
- Parental Health and lifestyle
- Socio-demographics
- Neighbourhood and community

Time-Use Diary

- 96 15-minute slots in the day from 00:0<mark>0-00</mark>:15 to 23:45-24:00
- List of activities tick box to indicate which activity was being undertaken in each time slot
- Completed by Study Child and/or Primary Caregiver
- Specified diary day to ensure an even spread of weekday and weekend data
- Returned via pre-pay envelope

		00.00 am 15 30 45				02.00 am 03.00 am 15 30 45 15 30 45		45	15 30 45		15 30 45 1		15 30 45		1	07.00 am 15 30 45		: I i	08.00 am 15 30 45		09.00 am 15 30 45		10.00 am 15 30 45		11.00 am 15 30 45								
 SLEEPING / RESTING (including time trying to get to sleep, trying to get up) 			_		_	_		_		_		_		_	_		-	-		+		-	▶							ш			
PERSONAL CARE OR GETTING READY (showering, washing, dressing, brushing teeth or hair, doing make- up, getting changed or ready for school, for training, for going out or for going to bed)			\perp	Ц	\perp						Ш			Ц			1	\perp	Ш	1		1	Þ	•						Ш	Ц	\perp	
3. EATING (breakfast, lunch, dinner, tea)	_		_	ш	_					_	ш			ш			_		ш	_	\perp	_	ㅗ	-		_			ш	ш	ш	_	ш
4. TRAVELLING (to or from school or elsewhere)	_			ш							\perp						_			_			┸		_	*				ш			\perp
5. AT SCHOOL/COLLEGE																										\vdash		_		+	-	-	\rightarrow
6. AT WORK				П															П	\perp		\perp	\perp							\Box			
7. DOING HOMEWORK OR STUDY																																	
8. JUST HANGING AROUND WITH FRIENDS (outside or inside)				П															Ш	\perp			\perp							\Box			
9. SPENDING TIME WITH FAMILY																																	
10. PLAYING WITH OR EXERCISING A PET				П															П	\perp			\perp							\Box			
11. AT THE GYM, PLAYING SPORT OR DOING PHYSICAL EXERCISE (training, matches)																																	
12. ATTENDING A SPORTS EVENT																			П	\perp													\perp
13. USING THE INTERNET / EMAILING (including social networking, browsing etc)																																	
14. PLAYING COMPUTER GAMES (e.g. Playstation, PSP, X-Box or Wii)																			П	\mathbf{I}													\perp
15. TALKING ON THE PHONE OR TEXTING				ш																													\perp
16. MUSIC LESSONS (OR PRACTICING MUSIC), DRAMA, CLASSES ETC																				_													\perp
17. WATCHING TV, FILMS, VIDEOS OR DVDS				ш																													\perp
18. LISTENING TO MUSIC																			П	Т													\perp
19. READING FOR PLEASURE OR INTEREST (NOT FOR SCHOOL/COLLEGE/STUDY)	1																Т	Т	П	Т			Т							\Box			
20. HOUSEWORK (preparing food, tidying bedroom, feeding pets)																			П	Т													\Box
21. HOBBIES AND OTHER LEISURE ACTIVITIES				П	_[_[LΤ	Т				Γ									
22. OUT SHOPPING TO BUY THINGS (groceries, clothes etc).				П							П					ΙП			LΤ	Т			Г										
23. GOING TO DISCOS OR BARS, ETC.				П	_[_[Т				Γ									
24. GOING TO PARTY OR OTHER SOCIAL EVENT (in people's houses)				П												\Box			LΤ	Т			Г										
25. OTHER 1 (SPECIFY)	Т		Т	П	T	Т			ТП	Т	П		Т		Т	П	т	┰	П	Т	Т	$\neg \top$	Т	Т		т	П	$\neg \neg$	П	TT		Т	

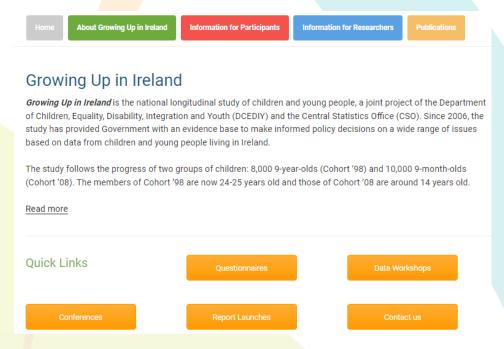
2) Accessing and Understanding the Data

- Online Resources
- Familiarising yourself with the Data
- Applying for the AMF/RMF

GUI Website

www.growingup.gov.ie

- First & best resource for study info & technical documents
 - Questionnaires
 - Design reports
 - Summary guides
 - Data dictionaries
 - Official GUI publications
 - Other publications
 - Conference archive
 - Data workshop archive



Questionnaires – growingup.gov.ie

- * Very useful resource for survey content
- All questionnaires available online
 - All waves, both cohorts
 - Respondents: PCG, SCG, child, teacher/principal
 - Questionnaires: main, self-complete (sensitive)
- Online questionnaires reflect interviews
 - Instructions to interviewers
 - Routing
 - Exact question & response category wording
 - * Minor redactions (if scales under copyright)

WAVE 6 OUESTIONNAIRES - AGE 13 YEARS

Parents/Guardian Questionnaires:

- · Primary Caregiver Main Questionnaire
- · Primary Caregiver Self-Complete Questionnaire
- · Secondary Caregiver Main Questionnaire
- · Secondary Caregiver Self-Complete Questionnaire
- · Primary Caregiver Twin Questionnaire

Young Person Questionnaires:

- Young Person Main Questionnaire
- · Young Person Self-Complete Questionnaire
- · Young Person Short & Proxy Questionnaire

Teacher / Principal Questionnaires:

School Principal's Questionnaire

Questionnaires – growingup.gov.ie

L5. How many bedrooms do you have in your hon [INTERVIEWER IF A STUDIO APARTMENT RECOR	
L6.Do you feel that your current accommodation	(excluding location) is suitable for your family's needs?
Yes	No
L7. [CARD L7] Why is that? a. Too small	Yes No
b. Not a child-friendly layout	
d. Other (specify)	
L8. [Card L8] Which of these descriptions BEST d [INTERVIEWER: IF RESPONDENT IS ON MATERNI RETURN TO, SHE SHOULD BE CODED AS 0]	lescribes your usual situation in regard to work? ITY LEAVE AND SHE HAS A JOB WHICH SHE INTENDS TO
O. Currently on maternity leave, but have a job to return to	4. Student full-time

Technical Documents – growingup.gov.ie

Summary Guides:

- Background to the study
- Sample design
- Instrument development
- Fieldwork and implementation
- Structure / content of the datasets

Design Reports:

- Similar content to summary guide +...
- Conceptual framework
- Consultation process
- Ethical considerations
- Justification for questions
- Psychometric info on scales

Technical Documents – growingup.gov.ie

Summary Data Dictionary:

- Short version of data dictionary
- Lists variable name and label
- Colour coded by questionnaire

9yr Name	9yr Label
id	Household ID code
WGT_9YRa	Weighting Factor - 9yr Full sample (Xsectional)
WGT_9YRb	Weighting Factor - 9yr Reduced sample (Longitudinal)
xxwave1	Family participated in Wave 1 - 9 months
xxwave2	Family participated in Wave 2 - 3 years
xxwave3	Family participated in Wave 3 - 5 years
xxwave4	Family participated in Wave 4 - 7/8 years
xxwave5	Family participated in Wave 5 - 9 years
PCGstatw5	PCG same as Wave 3
SCGstatw5	SCG if present is same as Wave 3
b5_partner	A1b. Do you have a spouse/partner who lives here with you in the household?
b5pcA4	A4. Total number of people in household - Wave 5
p1sexw5	Person 1 gender Wave 5 Grid (PCG)
p1yearsw5	Person 1 age Wave 5 Grid (PCG)
p2sexw5	Person 2 gender Wave 5 Grid (Study Child)
p2yearsw5	Person 2 age Wave 5 Grid (Study Child)
p3sexw5	Person 3 gender Wave 5 Grid
p3yearsw5	Person 3 age Wave 5 Grid

Data Dictionary:

- All info in summary data dictionary +...
- Value labels (answer cats.)

MMM5

		Value
Standard Attributes	Position	316
	Label	M5. Do you have any family living in this area
	Type	Numeric
	Measurement	Nominal
Valid Values	1	yes
	2	no
Missing Values	8	Refusal
	9	Dontknow

MS14

		Value
Standard Attributes	Position	317
	Label	S14. Current Marital Status
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Married and living with husband / wife
	2	Married and separated from husband / wif
	3	Divorced
	4	Widowed
	5	Never married
Missing Values	9	Dontknow

Official Publications – growingup.gov.ie

Key Findings

- Produced after each wave of data collection.
- 3-4 domain-specific short reports, detailing a selection of key descriptive findings







Official Publications – growingup.gov.ie

Descriptive Reports

- Produced for each wave
- Wider scope than KFs
 - Some are theme-specific
- More in-depth analysis
 - correlations, regression, long. trends
- Not exhaustive
 - Many variables not included in analysis

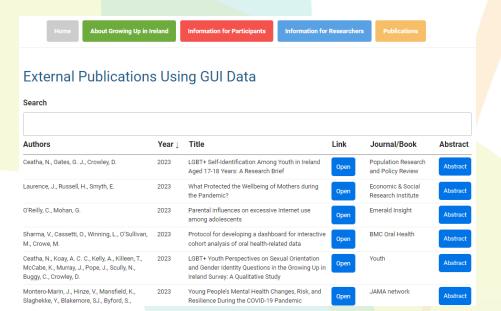




External Publications – growingup.gov.ie

An up-to-date list of External Publications

- Journal articles, reports
- * Must use GUI data



BMC Public Health Home About Articles Submission Guidelines Collections Join The Editorial Board Research | Open access | Published: 21 March 2022 The clustering of physical activity and screen time behaviours in early childhood and impact on future health-related behaviours: a longitudinal analysis of children aged 3 to 8 years Original Investigation | Public Health September 21, 2023 Young People's Mental Health Changes, Risk, and Resilience During the COVID-19 Pandemic Jesus Montero-Marin, PhD1,2,3; Verena Hinze, PhD1; Karen Mansfield, PhD1; et al. » Author Affiliations | Article Information JAMA Netw Open. 2023;6(9):e2335016. doi:10.1001/jamanetworkopen.2023.35016

Exploring cumulative disadvantage in early school leaving and

planned post-school pathways among those identified with

special educational needs in Irish primary schools

BERA

BERJ British Educational Research Journal

ORIGINAL ARTICLE | ① Open Access | ② (1)

Eamonn Carroll X, Selina McCoy, Georgiana Mihut

Conference Archive

- 15 Annual Research Conferences to date
- Showcase new research using GUI data
- 20-30 research presentations per conference
- Ref: Book of abstracts, conference programme
- Useful resource for researchers:
- What research has been conducted to date?
- What topics / interactions can I explore?



Growing Up in Ireland Annual Conference 8th Nov 2023

oom 1: Stratocaster A&B

9:00	Welcome - Laura McGarrigle, Assistant Secretary, DCEDIY										
9:10	Address by Minister Roderic O'G	forman TD									
9:25	Update on Growing Up in Ireland	l by Ciara Pidgeon, DCEDIY, and C	SO SO								
9.45	Five-minute room change										
	Room 1: Stratocaster A&B	Room 2: Alhambra	Room 3: Stratocaster C								
	Session A	Session B	Session C								
	Chair: Dr Anne Nolan, ESRI	Chair: Dr Eoin McNamara, DCEDIY	Chair: Dr Jan Skopek, TCD								
9:50	Volunteering among young adults in Ireland Emer Smyth	Identifying high-risk subgroups for self-harm in adolescents and young adults: a longitudinal latent class analysis of risk markers David McEvoy	Impact of bullying and parent-child conflict on self-concept: Analysis using secondary data from waves 1 and 2 of Growing up in Ireland Survey Kayla O'Flaherty								
10:10	Caregiving among young adults: antecedents and outcomes Helen Russell	Young adult functional outcomes of childhood psychopathology Niamh Dooley	The relationship between victimisation, depressive symptom and self-concept in 9-year-old children Mary Bollard								
10.30	Coffee break										
	Room 1: Stratocaster A&B	Room 2: Alhambra	Room 3: Stratocaster C								
	Session D	Session E	Session F								
	Chair: Dr Ciara Reynolds, IPH	Chair: Dr Anna Visser, Dept. of An Taoiseach	Chair: Marian Brattman, Tusla								
11.00	The association between gambling and mental health outcomes for young people in Ireland Gretta Mohan	Digital use and digital inequality among Irish children from different ethnic backgrounds Melissa Bohnert	A latent class analysis of mental health symptoms in primary schoo children: Exploring associations wit school attendance problems Jane Sharpe								
11.20	Use of pornography and sexual health and wellbeing in young adulthood: Evidence from Growing Up in Ireland Anne Nolan	Narrowing English language achievements gaps by migration background and the role of school Frances McGinnity	Externalising behaviour among primary school children Emer Smyth								
11.40	Associations between parental and child drinking behaviours Eoin McNamara	Lone parent benefit reform in Ireland: beyond the labour market effects Claire Keane	Disruptions and discontinuities in child development: The impact of the pandemic on children's psychological distress Ross MacMillan								

ISSDA and CSO Websites

ISSDA:

- www.ucd.ie/issda/data/guichild/ Cohort '98
- www.ucd.ie/issda/data/guiinfant/ Cohort '08

CSO:

- https://www.cso.ie/en/surveys/householdsurveys/growingupinirelandsurvey/
- How to apply for data*
- Provide relevant technical documents and supplementary documentation

* Covered in detail in next section

2) Accessing and Understanding the Data

- Online Resources
- Familiarising yourself with the Data
- Applying for the AMF/RMF

Familiarise Yourself with the Data

Suggested steps to familiarise yourself with the data...

- 1. Questionnaires general overview of the structure/content of all interviews
- **2. Summary data dictionaries** search for specific topics, keywords
- 3. Design reports find info on methodology and justification/validity of items
- **4. Publications / conference presentations explore findings to date, significant trends & interactions, potential analysis techniques**

5. AMF analysis

Data File Characteristics

- Wide format data file, available in SPSS / Stata / SAS
 - All data relating to a child (and their family) contained in a single entry (one row)
- Not all questions will be on a data file (AMF vs RMF)
 - Sensitive information (from self-complete questionnaire)
 - Details that might compromise anonymity / confidentiality
- Variable labels are shortened version of questionnaire wording
 - Same for value labels
- Check value labels on the data file
 - may not exactly match questionnaire answer categories, if categories have been collapsed
 - e.g. Likert scale responses grouped together: satisfied + very satisfied

Data View - SPSS

ta GUI Da	ta 9VearCohort sav	[DataSet3] - IRM 9	SPSS Statistics Data	Editor							
File Edit	_	ransform <u>A</u> nalyz			Window Help						
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						♣ MMA2	♣ MMA3	♣ MMA4	♣ mma5ap1		♣ mma5rm
1	1000	.30	1.97	0	2			2		32.00	
2	2000	1.85	12.23	0	2			2		45.00	
3	3000	1.08	7.10	0	2			2		29.00	
4	4000	.86	5.67	0	2			2		48.00	
5	5000	.89	5.86	0	2	2	1	2	2	33.00	
6	6000	.32	2.11	0	2			2		37.00	
7	7000	1.71	11.30	0	2	2	1	2	2	35.00	
8	8000	.56	3.71	0	2	2	1	2	2	50.00	
9	9000	.69	4.53	0	2	2	1	2		34.00	
10	10000	.81	5.34	0	2	2	1	2	2	35.00	
11	11000	.96	6.33	0	2	2	1	2	2	34.00	
12	12000	.69	4.56	0	2	2	1	2	2	36.00	
13	13000	1.94	12.79	0	2	2	1	2	2	30.00	
14	14000	2.40	15.79	0	2	2	1	2	2	48.00	
15	15000	1.93	12.71	0	2	2	1	2	2	28.00	
16	16000	.60	3.98	0	2	2	1	2	2	36.00	
17	17000	.59	3.90	0	2	2	1	2	2	32.00	
18	18000	.63	4.16	0	2	2	1	2	2	34.00	
19	19000	1.79	11.78	0	2	2	1	2	2	41.00	

Variable View – SPSS

ta GUI D	ata_9YearCohort.	cav [DataSet3]	_ TRM SDSS S	tatistics Data	Editor						_ -0
File Edit	_	Transform		Graphs Utili		Window Help					
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					A 25 E		14 🔷 🥒	ABC			
	Name	Туре	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	ID	Numeric	8	0	Household ID	None	None	10	≣ Right		ゝ Input
2	Wgt_9yr	Numeric	8	2		None	None	10	≣ Right		ゝ Input
3	Gross_9yr	Numeric	8	2		None	None	11	≣ Right		> Input
4	Partner	Numeric	8	0	Partner in hou	{0, No partner}	None	10	≅ Right		> Input
5	Int_type	Numeric	8	0	Household inte	{1, Both caregivers i	None	10	≅ Right		> Input
6	MMA2	Numeric	1	0	A2. Record ge	{1, male}	8, 9	6	≣ Right	🚜 Nominal	> Input
7	MMA3	Numeric	2	0	A3.Resps relat	{1, biological parent}	98, 99	6	≣ Right	🚜 Nominal	> Input
8	MMA4	Numeric	2	0	A4.How many	{1, one}	98, 99	6	≣ Right	🚜 Nominal	ゝ Input
9	mma5ap1	Numeric	1	0	Gender P1	{1, male}	8, 9	9	≣ Right	🚜 Nominal	> Input
10	MMagep1	Numeric	8	2	Age Person 1	{26.00, 26 years or I	None	10	≣ Right		> Input
11	mma5rmp1	Numeric	2	0	Relationship m	{1, Husband/wife}	98, 99	9	≣ Right	🚜 Nominal	> Input
12	mma5rcp1	Numeric	2	0	Relationship St	{1, Husband/wife}	98, 99	10	≣ Right	& Nominal	> Input
13	mma5pesp1	Numeric	1	0	PES P1	{1, Pre-school}	8, 9	5	≅ Right	& Nominal	> Input
14	mma5ap2	Numeric	1	0	Gender P2	{1, male}	8, 9	9	≅ Right	& Nominal	> Input
15	MMagep2	Numeric	8	2	Age Person 2	None	None	10	≣ Right		> Input
16	mma5rmp2	Numeric	2	0	Relationship m	{1, Husband/wife}	98, 99	10	≅ Right	& Nominal	> Input
17	mma5rcp2	Numeric	2	0	Relationship St	{1, Husband/wife}	98, 99	10	≣ Right	🚜 Nominal	> Input
18	mma5pesp2	Numeric	1	0	PES P2	{1, Pre-school}	8, 9	6	≣ Right	🚜 Nominal	> Input
19	mma5ap3	Numeric	1	0	Gender P3	{1, male}	8, 9	9	≣ Right	& Nominal	➤ Input
20	MMagep3	Numeric	8	2	Age Person 3	{50.00, 50 years and	None	10	≣ Right		➤ Input
21	mma5rmp3	Numeric	2	0	Relationship m	{1, Husband/wife}	98, 99	10	≅ Right	& Nominal	➤ Input
22	mma5rcp3	Numeric	2	0	Relationship St	{1, Husband/wife}	98, 99	10	≅ Right	& Nominal	> Input

Classificatory Variables

- Core set of classificatory variables included in all data files
- Primarily socio-demographic indicators
- Useful for (initial) bivariate analysis
- Control for these in adjusted regression models

Variable Name (e.g. Wave 2)	Variable
p2sexW2	Child's gender
B2_hhtype4	Household type: 4-category, # of parents & children
B2_partner	PCG has spouse/partner living in the home
B2_EIncQuin	Equivalized household income quintile: deciles also available
B2_hsdclass	Family social class: professional, skilled manual, etc
B2region	Region: urban or rural

Scales

- Standardized measures (set of questions/answer cats) measuring an underlying concept
- Examples in GUI:

SDQ - SMFQ - Pianta scale

CES-D - FAST / AUDIT

- Widely-established instruments
 - Used consistently across both cohorts and numerous waves
 - Allow for inter- and intra-cohort comparison
 - Used in comparable international studies too
- Tested for reliability, validity, replicability refer to Design Reports (scoring, psychometrics)
- AMF contains scale totals, RMF may include individual items (if not subject to copyright)
 - Derived variables (scale/subscale totals) found towards end of data file
 - e.g. b2_SDQconduct (SDQ), bpc2_conflict (Pianta), bsc2_warmth (parenting style)

2) Accessing and Understanding the Data

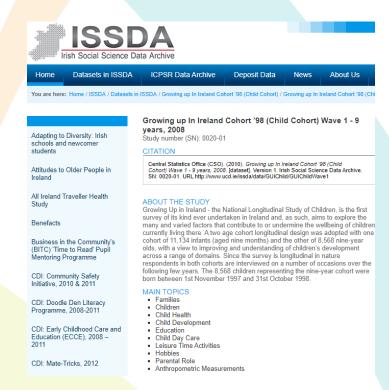
- Online Resources
- Familiarising yourself with the Data
- Applying for the AMF/RMF

Two Types of Data File

- Anonymised Microdata File (AMF)
- 2. Research Microdata File (RMF)
- Both files made available to researchers after each wave of data collection
 - AMF from ISSDA
 - RMF from CSO
- Data are confidential and anonymised
- Substantial overlap between both file types
 - AMF easier to access
 - RMF provides more detailed and sensitive data

Anonymised Microdata Files (AMF)

- The AMF is prepared and approved by the CSO
- Distributed by Irish Social Science Data Archive (ISSDA)
 - www.ucd.ie/issda/data/guichild/
 - www.ucd.ie/issda/data/guiinfant/
- Fewer 'sensitive' variables included
 - i.e. questions from self-complete questionnaires
- Identifying variables removed
- Top & bottom coding
- Collapsed categories



Anonymised Microdata Files (AMF)

How to Apply for AMFs

- 1. Download the request form from ISSDA site
- 2. Identify data files (study number, SN)
- 3. Complete all sections of the form:
 - Personal / institution details
 - Short description of intended use of the data
- 4. Sign the End User Licence, email completed application to issda@ucd.ie
- 5. Allow up to three working days for the application to be processed (hopefully quicker)
- 6. Receive a link to download data + separate password

ACCESS INFORMATION Accessing the data

To access the data, please complete a <u>ISSDA Data Request Form for Research Purposes</u>, sign it, and send it to ISSDA by <u>email</u>.

For teaching purposes, please complete the ISSDA Data Request Form for Teaching Purposes, and follow the procedures, as above. Teaching requests are approved on a once-off module/workshop basis. Subsequent occurrences of the module/workshop require a new teaching request form.

Data will be disseminated on receipt of a fully completed, signed form. Incomplete or unsigned forms will be returned to the data requester for completion.

AMF – Data Request Form

•	Please provide a short description (approx. 100 words) of your intended use of the dataset/s, including itle and details of your intended research project*:											
Type of user *	□Academic Staff	☐ Post Doc	□PhD	□Masters								
	□Undergraduate	□Independent Researcher	☑Government/ Policy researcher									
	□Other [please spe	cify]										

When to Apply for an RMF?

- From preliminary AMF analysis, it will be clear if the variables or level of detail you need are not included on the AMF
- If a variable / question / scale is present on question naire but not on the AMF, it will be available on the RMF
 - Majority of self-complete (sensitive) items are only available on RMF
 - Individual items from scales
- RMFs are only available through the CSO
- More detailed than AMF
 - Less collapsing of variable categories
- Substantially tighter controls / longer turnaround time

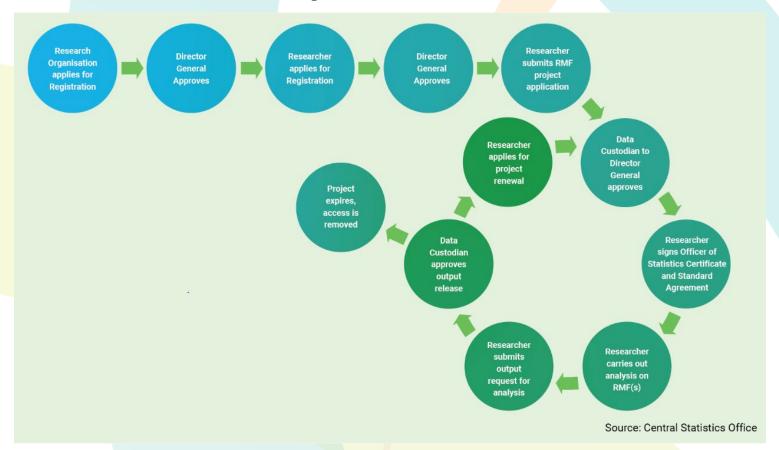
Ownership and Use of the Data

- Data collected under the Statistics Act 1993
 - Clearly sets out the terms and conditions of use of the data recorded under it
 - Ensures that the integrity and confidentiality of the data is maintained
 - Data shall be used for statistical compilation and analysis only
- RMF data users must attend Officer of Statistics training and abide by the conditions of the RMF Standard Agreement
- Data are owned by the State and accessed under licence from the CSO
- No data which can be related to an identifiable person shall be disseminated, shown or communicated to any person or body

Research Microdata Files (RMF)

- Applicants (researchers) must be employed by, or formally related to, a registered research organisation
- If your organisation is not registered (or if you're unsure), contact the Researcher Coordination Unit (RCU) rcu@cso.ie
- All registered research org's will have a designated RMF contact they will need to countersign any RMF application form
- RMF access for students is restricted to those undertaking post-graduate work
 - Supervisor(s) must also apply and be appointed as an Officer of Statistics
- Your organisation's RMF Contact who will set them up on ROSA with a profile, etc.
 - Researcher needs to complete their own registration, researcher and Officer of Statistics training on ROSA
- On approval, ROSA will generate and issue the RMF Standard Agreement and Officer of Statistics cert accept/sign
- Data files will be made available on remote desktop; researchers can use SPSS, R and Stata

RMF Process Lifecycle



Finished Analysis

- Access to both AMF and RMF is project specific and time limited
 - You will need to re-apply for an extension
- Inform ISSDA/CSO when finished with AMF/RMF
- RMF access will be directly controlled by CSO who have an ethical obligation to monitor statistical outputs before releasing them for use
- No copies of the data should be retained by the researcher

3) Using the Data

- Matching Files
- Applying Weights

A Note on Syntax

*Examples hereafter use SPSS, but many similarities with other common statistical programs

There are two ways to conduct statistical analysis (and manage/manipulate data)

- 1) Using graphical interface (i.e. drop-down menus)
- 2) Using syntax
 - Syntax is a programming command language; write commands to run procedures

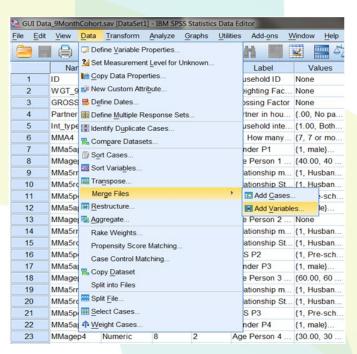
Key Advantages of Syntax:

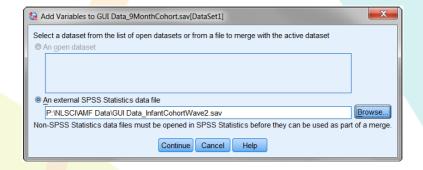
- Can be saved, providing a record of all analyses you've performed
- Repeatable and flexible can be edited, improved, fixed and re-run
- Retrace your steps, keep notes, and communicate your process

Matching Files

WHY? If we want to conduct any longitudinal analysis i.e. compare results across waves

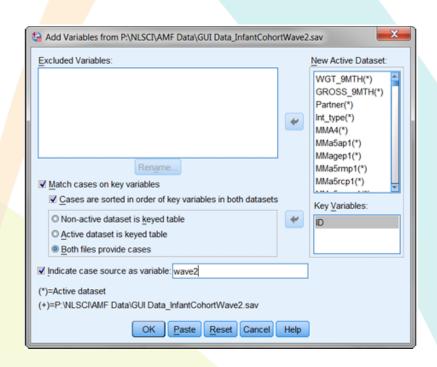
HOW? Open a data file (e.g. C'08 at Wave 1), then using drop-down menu...





Matching Files

- Match cases on key variables
 - Cases are sorted in order of key variables in both datasets
 - By default, sorted by ID
- Indicate case source as variable rename
 - New variable 'wave2', cases coded 1 if in Wave 2, 0 if not
- Repeat for subsequent waves...
- Save
- Conduct longitudinal analysis
- * Remember, file structure is wide
- * Still just one row per ID



Matching Files

Using Syntax...

```
FILE HANDLE wave1 name = 'P:\NLSCI\AMF Data\GUI Data_9MonthCohort.sav'.

FILE HANDLE wave2 name = 'P:\NLSCI\AMF Data\GUI Data_InfantCohortWave2.sav'.

FILE HANDLE wave3 name = 'P:\NLSCI\AMF Data\GUI Data_InfantCohortWave3.sav'.
```

FILE HANDLE merged name = 'P:\NLSCI\AMF Data\GUI Data_InfantCohortWave1Wave2Wave3.sav.sav'.

GET FILE wave1. SORT CASES by id.

MATCH FILES FILE = * / FILE = wave2 / IN wave2 / BY id / MAP. FREQUENCIES wave2.

MATCH FILES FILE = * / FILE = wave3 / IN wave3 / BY id / MAP. FREQUENCIES wave3.

SAVE OUTFILE = merged.

3) Using the Data

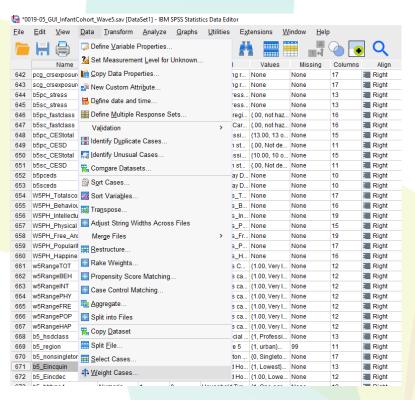
- Matching Files
- Applying Weights

- Data can be re-weighted to account for differential attrition across waves
 - Leads to differences between structure of completed sample (any wave) and wider population
 - Ensures sample is representative of the population (*at time of recruitment fixed panel design)
 - Based on key socio-demographic variables
- Re-weighting should be carried out prior to any analysis
 - Standard procedure / considered best practice in sample surveys
- System used for GUI is called GROSS (used at ESRI)
 - Minimum information loss algorithm which fits population marginals in a regression framework and adjusts the sample to ensure that it produces estimates which match known population parameters
 - Similar to CALMAR and ADJUST

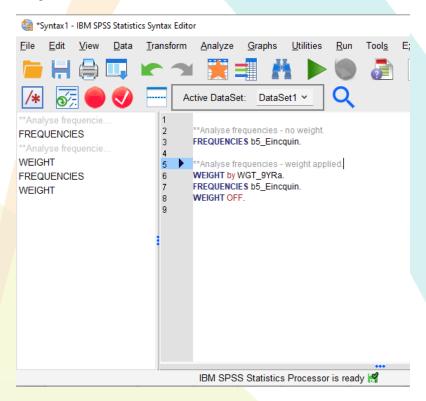
- Data file will usually* contain two weighting factors
 - Using an example of Cohort '08 at 9yr data (Wave 5)....
- 1. WGT_9YRA; based on children who participated at Wave 1 & Wave 5
 - For cross-sectional (one wave only) analysis
 - May have participated at Wave 2-4, but not relevant to our analysis
- **2. WGT_9YRB**; based on children who participated at all main waves (1,2,3,5)
 - For **longitudinal** analysis
 - A reduced sample = smaller N than using WGT_9YRA

^{*} older data files also have a grossing factor (e.g. GROSS_9YR), which calibrates to the population total of 60-70,000 children (varies by wave)

- Drop-down menu



- Syntax



- No weight

WEIGHT OFF. FREQUENCIES b5_Eincquin.

b5_Eincquin Equivalised Household Net Annual Income -Quintiles W5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Lowest	1154	14.4	15.8	15.8
	2 2nd	1355	16.9	18.6	34.4
	3 3rd	1433	17.8	19.7	54.1
	4 4th	1646	20.5	22.6	76.6
	5 Highest	1704	21.2	23.4	100.0
	Total	7292	90.8	100.0	
Missing	System	740	9.2		
Total		8032	100.0		

- Weight applied

WEIGHT by WGT_9YRa. FREQUENCIES b5_Eincquin.

b5_Eincquin Equivalised Household Net Annual Income -Quintiles W5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Lowest	1449	18.0	20.0	20.0
	2 2nd	1448	18.0	20.0	40.0
	3 3rd	1443	18.0	19.9	60.0
	4 4th	1447	18.0	20.0	80.0
	5 Highest	1450	18.1	20.0	100.0
	Total	7238	90.1	100.0	
Missing	System	794	9.9		
Total		8032	100.0		

Thank You

Questions?

Contact...
eoin.mcnamara@equality.gov.ie
derek.nolan@equality.gov.ie

*Please complete feedback form - check emails