

Growing Up in Ireland

The National Longitudinal Study of Children

The Economic and Social Research Institute and Trinity College, Dublin

Data Workshop

Covering Child Cohort (Cohort '98) and Infant Cohort (Cohort '08)

Housekeeping:

- 3 sessions of 40 min + practical session
- Attendees will have chat/audio functions disabled
- Please use Q&A function for questions



Upcoming GUI events

Growing up in Ireland conference

- Change to conference schedule
 - (Nov/Dec → May 2022)

Expressions of interest in presenting your work are welcome

See mailing list or growingup.ie for details



Contents of Presentation

- Session A 40min
 - Introduction and background to Growing Up in Ireland
 - Sample design and weighting
 - Content and structure of the data
- Session B 40min
 - GUI website Online resources
 - Questionnaires, documentation, publications
 - Applying for AMF through ISSDA
 - Applying for RMF through CSO
- Session C 40min
 - Familiarisation with GUI data structure
 - Using Statistical weights
 - Matching GUI files
 - Simple example of cross sectional and longitudinal analysis



Session A Introduction and background to Growing Up in Ireland



Background to Growing Up in Ireland

- Study is almost wholly funded by the Department of Children Equality, Disability, Integration and Youth (DCEDIY) in association with the Department of Social Protection, the Central Statistics Office and the Department of Education & Skills.
- A part funding contribution in support of Phase 2 of Growing Up in Ireland (2015-19) has been generously provided by The Atlantic Philanthropies, a limited life foundation.
- DCEDIY is overseeing and managing the study, which is being carried out by a group of independent researchers led by the Economic & Social Research Institute (ESRI) and Trinity College Dublin.
- Very strong policy focus.









Objectives of Growing Up in Ireland

- to <u>study the lives of children/young people</u> in Ireland
- to establish what is <u>typical and normal</u> as well as what is atypical and problematic
- to identify the <u>key factors</u> that most help or hinder children's development
- to establish the effect of <u>early child experiences</u> on later life
- to identify the <u>persistent adverse effects</u> that lead to social disadvantage and exclusion, educational difficulties, ill health, deprivation etc.
- to obtain **children's views and opinions** on their lives
- to <u>provide evidence</u> for the creation of effective and responsive <u>policies and</u> <u>services</u> for children and families



Scale of Growing Up in Ireland

Two Cohorts for study

Cohort '98 - Child Cohort

8,500 9-year olds

Cohort '08 - Infant Cohort

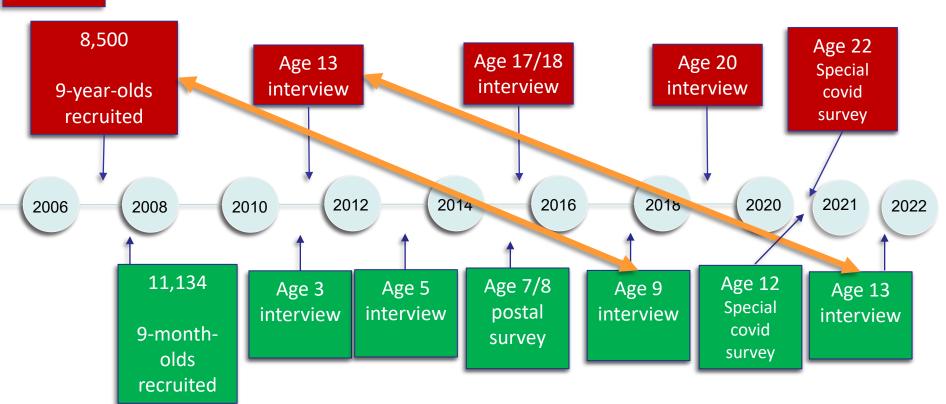
11,000 9-month olds

120 households for in-depth qualitative assessment for both cohorts (Wave 1 only)



Overview of GUI Waves

Cohort '98



Cohort '08



Longitudinal design of Growing Up in Ireland

- Cross-sectional studies involve independent, representative samples.
 Different respondents in each sample.
- Longitudinal design involves interviewing same sample of respondents on several occasions.
- Longitudinal study design tracks the progress of the same child and his/her family over a period of time
- Longitudinal design allows us to consider:
 - Why there is a problem and how it developed
 - What are the policy sensitive factors
 - When and how it is best to intervene
 - How effective was the intervention
 - How durable are the results.



Sample design and weighting



The Samples of 9-year-old children and 9-month-old infants

• 56,497 9-year-olds in population

73,662 infants (less than one year old) in population

- Random sample of 8,500 9-year-olds resident in Ireland
- Random sample of 11,000 9-montholds resident in Ireland

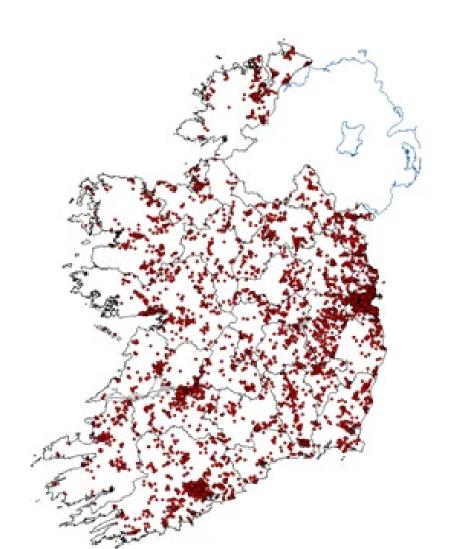
- Two stage, clustered sample design
- Child Benefit Register used as sampling frame
- Stratified random sample of Primary schools
- Sampled over 7 month period
- Random sample of children within school
- Simple, systematic selection procedure, random start and constant sampling fraction

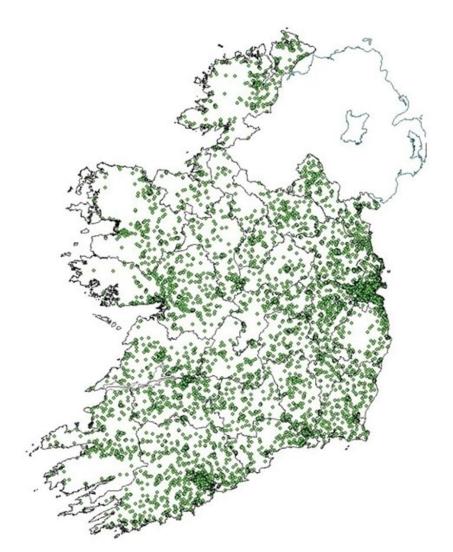


Distribution of Samples

Cohort '98 – Child Cohort

Cohort '08 – Infant Cohort







Cohort '98 The Sample of Schools

- 1,105 schools randomly selected from population 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
- Interviewer called to school
- List of all 9 year olds if <40 all selected. If >40, a random sample selected



Securing informed consent from families

- 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
- Family response rate for Cohort '98 was 57%
- Family response rate for Cohort '08 was 64.3%
- Some differential response in terms of disadvantaged status of school, family social class of child, level of educational attainment of child's mother



Fieldwork pre-Covid-19

Initial Wave

- Interviewers recruited and trained inhouse by GUI
- Field visit to family home
- Computer Assisted Personal Interview (CAPI)
- Computer Assisted Self Interview (CASI)
- Physical/Cognitive measurements
- Fixed panel design

Follow up waves

- Tracing information collected at Wave 1
 - PPSN
 - Family / friend contact details
- Initial contact to child's home from Head Office
- Follow up face-to-face visits
- If possible, same interviewer as previous wave
- C. 85-90% response rate at early₁₆
 waves



Fieldwork Post Covid-19

Special COVID Survey 22yrs + 12yrs

Aim:

To capture contemporary data on pandemic experience

Methodological Adaptations:

- Web-based survey
- Participants contacted via email/text
- Informed consent/assent received via our website
- Very short questionnaire

Lessons Learned:

- Response rate lower
- Impact of pandemic warrants long-term exploration



Fieldwork Post Covid-19

PILOT Cohort '08 at 13:

- Test procedures / content for main fieldwork
- Computer Assisted Telephone Survey
 + Web survey
- Initial contact by phone / email: consent by phone
- Shortened questionnaires: Reduce redundancy / Age appropriate / Pandemic effects
- Survey hosted by CSO
- Changes to logistical procedures
- Interviewer training
- Digitisation of paperwork

ADAPTATIONS Cohort '08 at 13 Main survey:

- Retain remote modes of data collection
- Families sent letter/info pack beforehand
- Interviewer training conducted remotely
- Questionnaires needed to be substantially shortened
- Additional COVID-19 items



Re-weighting the sample

Differential responses – by education, social class and family type

 Data were re-weighted or statistically adjusted to account for any differences in structure of population and completed sample

 Statistical re-weighting is a standard procedure and should be carried out in respect of all sample surveys prior to analysis

 Minimum information loss algorithm used to generate the weighting scheme. System used in ESRI is called GROSS — similar to CALMAR and ADJUST. Iterative column marginal approach.



Child/Infant Cohort adjustment factors

- 2 statistical adjustment factors included on file
- Weighting factor weights to total number of children in GUI sample (use for descriptive analysis & tests of statistical significance)
- Grossing factor grosses to total number of children in Irish population (Use for population estimates across – viable across early waves of data collection)
- Both provide same structural/percentage breakdown



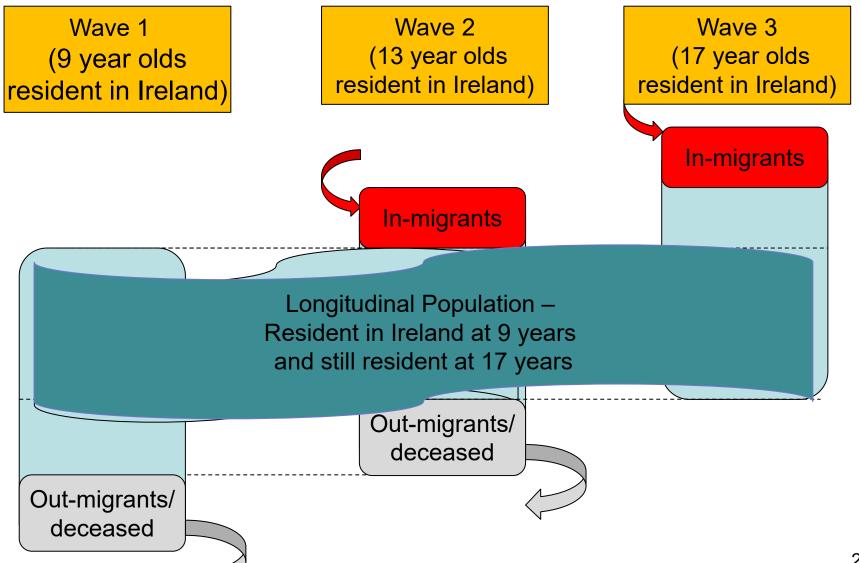
Sample size and populations

Cohort '98	Sample	Population
Wave 1	8,568	56,497
Wave 2	7,525	55,796
Wave 3	6,216	55,300

Cohort '08	Sample	Population
Wave 1	11,134	73,662
Wave 2	9,793	70,500
Wave 3	9,001 (8,712 all 3 waves)	69,300



Child Cohort Longitudinal Population

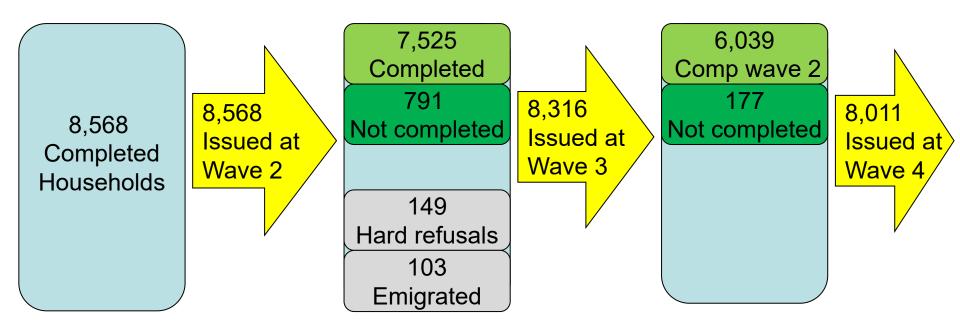




Child Cohort Longitudinal Sample

Wave 1 (at 9 years) 8,568

Wave 2 (at 13 years) 7,525 Wave 3 (at 17 years) 6,216





Content and structure of the data



Infant and Child Cohorts: Respondents

Multiple sources of information:

- Primary Caregiver (PCG)*
- Secondary Caregiver (SCG)**
- Child Interview
- Child Cognitive Tests
- Principal (When in primary/secondary)
- Teacher (When in primary Wave 3 & 5, Wave 1)
- Physical Measurements
- * 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



Summary of information recorded

	Wave	PCG	SCG	Child	Cognitive Tests	Principal	Teacher	Physical Measures
Infant Cohort	1 (9mth)	✓	✓					✓
	2 (3yr)	✓	✓		✓			✓
	3 (5yr)	✓	✓		✓	✓	✓	✓
	4 (Postal survey)	✓						
	5 (9yr)	✓	✓	✓	✓	✓	✓	✓
	Covid survey	✓		✓				
	6 (13yr)	✓	✓	✓	✓	✓		



Summary of information recorded

	Wave	PCG	SCG	Child/ Young Adult	Cognitive Tests	Principal	Teacher	Physical Measures
Child Cohort	1 (9yr)	✓	✓	✓	✓	✓	✓	✓
	2 (13yr)	✓	✓	✓	✓	✓		✓
	3 (17yr)	✓	✓	✓	✓	✓		✓
	4 (20yr)	✓		✓	✓			✓
	Covid survey			✓				
	5 (25yr)			✓	✓			?



Outcome domains

- Socio-emotional, behavioural
- Health
- Education / cognitive development
- Economic and Civic Participation (Wave 3)

Plus demographic/classificatory variables



Socio-emotional, behavioural domain

- 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



Health domain

- Pregnancy / pre-natal care
- Child's birth
- Child's health / healthcare utilisation
- Child's nutrition /diet/ breastfeeding
- Child's physical activity levels/exercise
- Child's physical development
- Physical measures (Expanded in waves 3 and 4)
- Parental health and lifestyle



Education/cognitive development domain

- Childcare arrangements
- Child's education / home learning environment
- Child's cognitive development
- Teacher characteristics and perception of child
- Principal / school characteristics



Economic and Civic Participation Domain

- 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



Classificatory variables

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



Scales

- Standardized measures
- Set of questions measuring an underlying concept
- Used internationally
- Tested for reliability and validity
- Advantages quality, comparison, replicability

Examples in GUI: SDQ, SMFQ, CES-D, DASS21, FAST



Structure of the data file

Data from all sources matched together

Most records involve a one to one match

 Some school level data involves a one to many match. E.g., Principal completes one questionnaire (one record) and multiple child records are matched to this



http://www.growingup.ie



Session B Overview of steps in accessing GUI data

GUI website Online resources

Questionnaires, documentation, publications

Applying for AMF through ISSDA

Applying for RMF through CSO



GUI website

- https://www.growingup.ie/
- General study information
- Questionnaires (individual)
- GUI publications
- Other publications using GUI data
- Data workshops & resources



growingup.ie/data-documentation/

Summary Guide Documents

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



growingup.ie/data-documentation/ Design reports

Measures and psychometrics

Population, sampling frame and response rates

Reweighting the data



Growingup.ie Questionnaires

- All original questions are included in the Questionnaire documentation – (Except for scales under copyright)
- CAPI programme was based on these questionnaires
- Instructions to interviewers
- Routing
- Exact question wording and response categories

 Note: GUI website hosts individual documents, ISSDA tends to publish documents grouped by wave. 43



growingup.ie/data-documentation/

Summary data dictionaries

 Data dictionary is comprehensive in listing and describing each variable.

Lists variable name and label per wave

Variables Colour coded by source questionnaire



ISSDA website

- https://www.ucd.ie/issda/data/guichild/
 - Child
- https://www.ucd.ie/issda/data/guiinfant/
 - Infant

- Apply for the data (AMF)
- Questionnaires (combined)
- Study documentation (similar to GUI)
- GUI register of use



Gov.ie/DCEDIY websites

DCEDIY + CSO websites

- General government link: https://www.gov.ie/en/
- Specific page on GUI at <u>DCEDIY</u>
- Useful DCEDIY article on GUI data use

- Information on GUI study at CSO
- Application and access to <u>RMF through CSO</u> (Covered in next section)



Overview of steps in using the GUI data

Apply for RMF through CSO



Two levels of data file

AMF

Anonymised Microdata File

AMF file available from ISSDA

Top & bottom coding

Collapsed categories

Removal of potentially identifying variables

RMF

Researcher Microdata File

Accessed through the CSO

Less coding/collapsing

Contains more variables

More restricted access



Anonymised Microdata Files (AMF)

 The AMF is a basic set of variables, approved by the CSO for distribution by the Irish Social Science Data Archive (ISSDA)

Available from ISSDA at University College Dublin

Visit <u>www.ucd.ie/issda/data/guiinfant/</u>
 or <u>www.ucd.ie/issda/data/guichild/</u>



Anonymised Microdata Files (AMF)

- Download the relevant application form
 - (Research or Teaching purposes)

- Complete all sections of the form:
 - Name, address, institution & contact details
 - Dataset requested (including Time Use Diary if needed)
 - Short description of intended use of the data
 - Estimated end date for using the data
 - Consent to register of use
 - List of all users



Anonymised Microdata Files (AMF)

Sign the End User Licence

• Email your completed application to issda@ucd.ie

 Allow up to three working days for the application to be processed

Receive a link to download data + separate password



Overview of steps in using the GUI data

Apply for RMF through CSO



Apply for RMF

 From preliminary data analysis it will be clear if there are variables you need which are not included on the AMF

 Variable naming and Longitudinal data dictionary document will tell you if they are on the RMF

- The RMF is only available through the CSO
- Tighter controls & longer turnaround time



- The RMF is a more detailed set of variables, available to researchers from Registered Research Organisations
- If not already registered, the organisation must complete the Research
 Organisation Registration
 Application Form and appoint a Research
 Organisation RMF Contact

Work with Research Coordination Unit (RCU) at CSO throughout the process

Check if your organisation has already completed this step: (rcu@cso.ie)



- Individual researchers who have not previously accessed a CSO RMF with their current organisation must complete the Researcher Registration Application Form
- Access to RMFs for students will be restricted to those undertaking post-graduate work, at a minimum, and in all such cases student and supervisor(s) must also apply and be appointed as an Officer of Statistics

 Lead researcher and RMF contact must complete the Research Microdata File (RMF) Application Form and return to the Research Coordination Unit

rcu@cso.ie



- Requests for access to RMF data from researchers outside of Ireland or employed by, or otherwise related to, an unregistered Research Organisation will be considered on a case-by-case basis
- Follow normal processes of submission of an RMF Application
 Form and Researcher Registration Application Form



- Access to the RMF is approved by the Director General (DG) of the CSO and, as it includes more detail than the AMF, access is subject to a stricter range of conditions:
- If the application is approved by the DG, the CSO will issue the Standard Agreement to the applicant, which the applicant must sign and return to the CSO

Policy on Access to RMFs Instructions on the use of GUI data for Researchers (https://www.cso.ie/en/media/csoie/aboutus-new/dataforresearchers/Instructions on the use of GUI data for Researche rs.pdf)



 Access is approved on a project-specific, time-limited basis to researchers who are appointed Officers of Statistics on the basis of a successful application

Visit

https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/dataforresearchers/



 Access to the RMF will typically be through the CSO's Researcher Data Portal (RDP) [https://sara.cso.ie]

 Aggregate data outputs will be released to researchers once they have been sanctioned as nonconfidential by the assigned CSO Statistician



Inform ISSDA/CSO you have finished & delete the data

- Access to both AMF and RMF is project specific and time limited.
- Inform ISSDA when finished with AMF.
- 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



Ownership and use of the data

- RMF data users must attend Officer of Statistics training and abide by the conditions of the RMF Standard Agreement
- Users are reminded that the data are owned by the State and accessed under licence from the Central Statistics Office
- The data were collected under the Statistics Act 1993. This is a very important Act and clearly sets out the terms and conditions of use of the data recorded under it
- Data shall be used for statistical compilation and analysis only
- No data which can be related to an identifiable person shall be disseminated, shown or communicated to any person or body



http://www.growingup.ie



Session C Practical use of GUI data

Familiarisation with GUI data structure

Using Statistical weights

Matching GUI files

Simple example of cross sectional and longitudinal analysis



Familiarise yourself with the data

- Growingup.ie/Questionnaires
- PDF by individual participant and wave
- Growingup.ie Technical documents for GUI Data users
- Summary guides
- Data dictionaries
- Data workshop information sheets and worksheets (available from GUI website)



Data dictionaries Variable naming conventions

- Types of variables in file
- Outline naming conventions
- Data dictionary:
 - All vars in each wave
 - Establish which vars were asked across multiple waves
- Data workshop documents: How to match the files across waves – SPSS syntax and drop down menus
- Example of analysis SPSS syntax



Variable characteristics

 Note – Not all questions from questionnaire are on the anonymised datafile

 Variable labels are shortened version of question wording from questionnaire

 Important to check value labels on the datafile, may not exactly match questionnaire answer categories if categories have been collapsed for anonymisation purposes



Variable Naming

Convention A – questionnaire-based

 Convention B – topic-based harmonised crosswave (W1 – W2 only)

- Files from CSO/ISSDA
 - Convention A "GUI..."
 - Convention B "xGUI..."

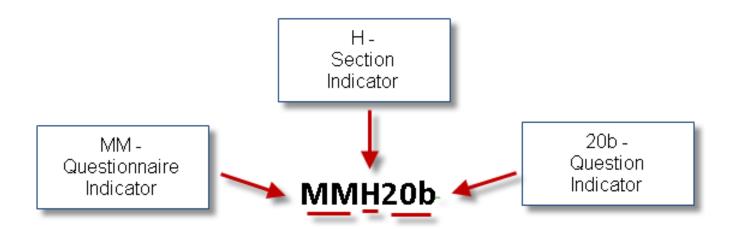


Variable Naming Convention A

- Based on:
 - Questionnaire
 - Section
 - Question number
- File sorted according to questionnaire:
 - PCG Main / Sensitive
 - SCG Main / Sensitive
 - Child (if relevant)
 - Scales
 - Derived Variables
 - School (if relevant)



Variable Naming Convention A

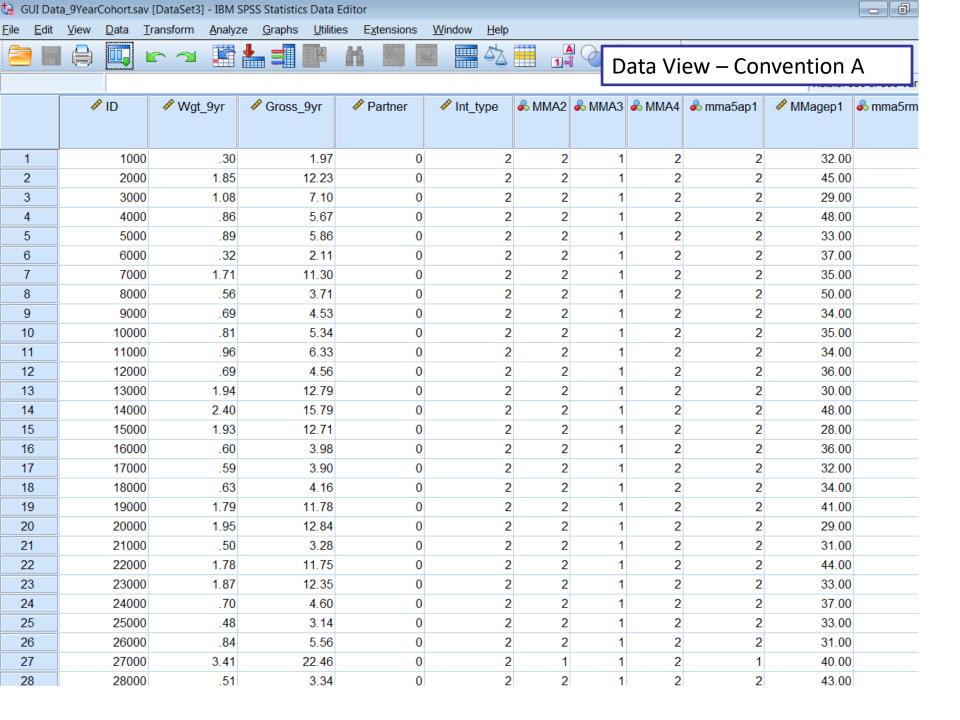


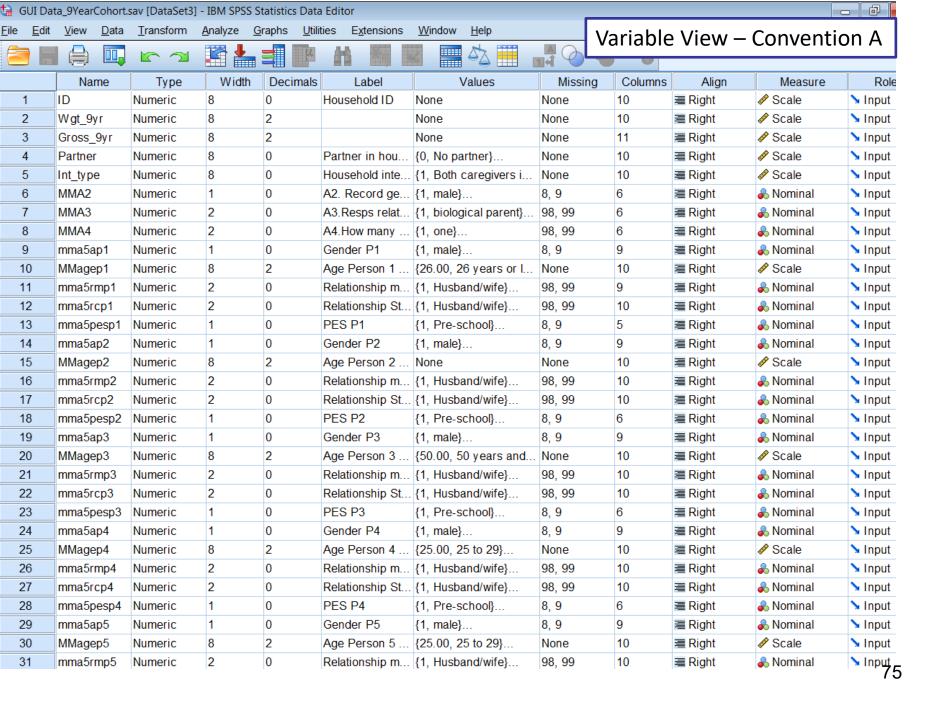
Note: will not be the same across waves

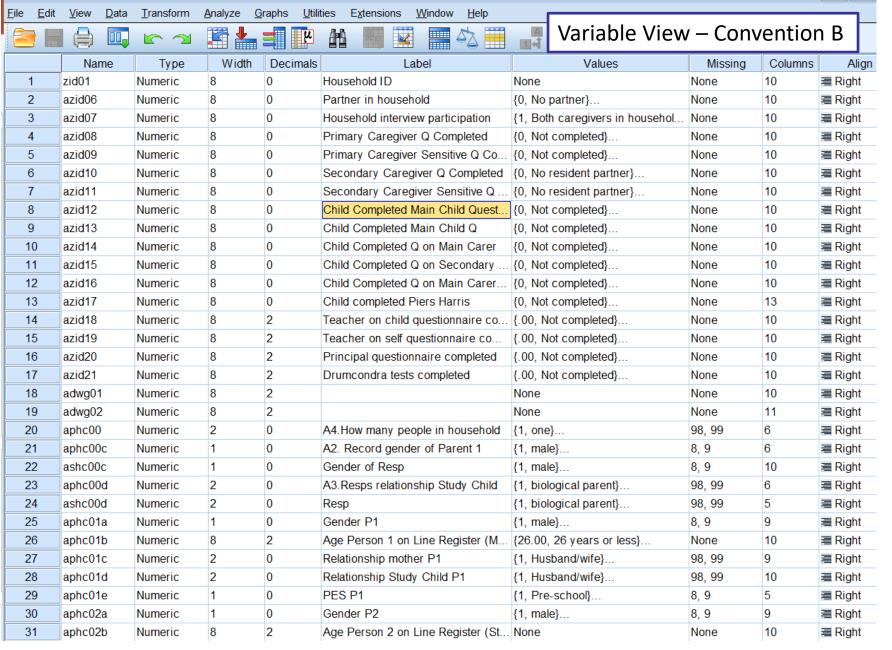


Longitudinal Data Dictionary

TopicCat	Varname	9yrname	9vrlabel	OVEDME	OvrAME	13yrname	13yrlabel	13wpME	13yrAMF
Topiccac	Varianic	Symanic	Syriabei	Synthetic	SyrAivir	25ymanie	13yriaber	23yi kimir	LIJIAMI
PH	sPH11f					sc2s25b	S25. SCG FAST Alcohol Screening Test - Item 2	yes	
PH	pPH11g	ļ				pc2s25c	S25. PCG FAST Alcohol Screening Test - Item 3	yes	
PH	sPH11g					sc2s25c	S25. SCG FAST Alcohol Screening Test - Item 3	ves	
	226							1	
PH	pPH11h					pc2s25d	S25. PCG FAST Alcohol Screening Test - Item 4	yes	
PH	sPH11h					sc2s25d	S25. SCG FAST Alcohol Screening Test - Item 4	ves	
	31112211	\blacksquare				-	SES. See 120 Action See Comp. 163.	,	
PH	pPH11i					pc2s25e	S25. PCG FAST Alcohol Screening Test - Item 5	yes	
PH	sPH11i					sc2s25e	S25. SCG FAST Alcohol Screening Test - Item 5	ves	
								,	
PH	pPH12	MMF7	F7. Opinion of body image	yes	yes	pc2c8	C8. Opinion of body image	yes	yes
PH	sPH12	FC7	C7. Opinion of body image	yes	yes				
							C9. How often do you try to lose weight		
PH	pPH13	MMF8	F8. How often do you try to lose weight	yes	yes	pc2c9	through dieting?	yes	yes
PH	sPH13	FC8	C8. How often do you try to lose weight	yes	yes				
PH	pPH14	MMF9	Primary Caregiver's self-reported height in c	ms ves	ves				
	p. 1.2-1		Secondary Caregiver's self-reported height in		,	-			
РН	sPH14	FC9	cms	yes	yes				
PH	pPH15	MMF10	Primary Caregiver's self-reported weight in I	kes ves	ves				
	prinzo		Secondary Caregiver's self-reported weight i		100				
PH	sPH15	FC10	kgs	yes	yes				
							S30a. Have you been treated by a medical		
PH	pPH16a	MS28	S28. Treated for depression	yes		pc2s30a	professional for clinical depression, anxiety,	yes	
	-01145-	5530	530 Treated for decreasing				S30a. Have you been treated by a medical		
PH	sPH16a	FS28	S28. Treated for depression	yes		sc2s30a	professional for clinical depression, anxiety,	yes	







🔙 XGUI Data_9YearCohort.sav [DataSet4] - IBM SPSS Statistics Data Editor

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