Growing Up in Scotland Sweep 10: 2019-20

User Guide

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1 Survey details

1.1 Study aims and objectives

The overarching aim of the Growing Up in Scotland study is set out in its purpose, which is:

"To generate, through robust methods, specifically Scottish data about outcomes throughout childhood and into adulthood for children growing up in Scotland across a range of key domains:

- *Cognitive, social, emotional and behavioural development*
- *Physical and mental health and wellbeing*
- *Childcare, education and employment*
- *Home, family, community and social networks*
- *Involvement in offending and risky behaviour*

Such data will encompass, in particular, topics where Scottish evidence is lacking and policy areas where Scotland differs from the rest of the UK."

1.2 Sweep 10 data collection elements

Sweep 10 mainstage **face-to-face (f2f) data collection** included five main elements:

1. A face-to-face CAPI (Computer Assisted Personal Interview) interview with the cohort member's main carer. This includes a self-completion element (CASI - Computer Assisted Self-complete Interview)

2. A face-to-face CAPI interview with the cohort member (young person). This includes a self-completion (CASI) element

3. Height and weight measurement of the cohort member (young person)

4. Cognitive assessments of the cohort member (young person)

5. A self-complete PAPI (Pen and Paper Interview) questionnaire with any resident partner of the main adult respondent

Due to the Coronavirus pandemic, face-to-face fieldwork was halted in March 2020. Cases which had not yet been completed were invited to take part in a **telephone and web survey** instead. This alternative data collection included the following elements:

1. A telephone interview (Computer Assisted Telephone Interview – CATI) with the cohort member's main carer (replacing the interviewer-led (CAPI) element of the face-to-face survey)

2. A web survey (Computer Assisted Web Interview – CAWI) with the cohort member's main carer (replacing the self-completion (CASI) element of the face-to-face survey)

3. A CATI interview with the cohort member (young person) (replacing the interviewer-led (CAPI) element of the face-to-face survey)

4. A CAWI with the cohort member (replacing the self-completion (CASI) element of the face-to-face survey)

5. A self-complete PAPI questionnaire with any resident partner of the main adult respondent

1.3 Study design

GUS was initially based on two cohorts of children: the first aged approximately 10 months at the time of first interview (involving around 5217 children at the first sweep) and the second aged approximately 34 months (involving around 2800 children at the first sweep). In 2018, an additional 502 families were recruited to the study. These families took part in interviews alongside families in the original birth cohort. Further details are provided in section 1.4.2.

A second birth cohort of 6127 children aged around 10 months at the first interview was recruited in 2011.

The configuration of cohorts and sweeps for all sweeps of data collection launched to date is summarised in Table 1.1. BC1 refers to the younger of the two original cohorts ('birth cohort 1'), CC to the slightly older cohort ('child cohort') and BC2 to the most recent birth cohort ('birth cohort 2').

A key aim of using multiple cohorts is to allow the study to provide three types of data:

- Cross-sectional time specific data – e.g. what proportion of 14-year-olds were living in single parent families in 2019/20?
- Cross-sectional time series data – e.g. is there any change in the proportion of 10-month-old children living in single parent families between 2005 and 2011?
- Longitudinal cohort data – e.g. what proportion of children who were living in single parent households aged 0-1 are living in different family circumstances at the time they are aged 14?

Table 1.1	Study design: ages and stages												
Sweep - Fieldwork years	**Cohort and age at interview**												
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	12-13	14-15
1 - 2005/06	BC1		CC										
2 - 2006/07		BC1		CC									
3 - 2007/08			BC1		CC								
4 - 2008/09				BC1		CC							
5 - 2009/10					BC1		-						
6 - 2010/11						BC1		-					
1 (BC2) - 2011/12	BC2						-		-				
7 - 2012/13		-						BC1		-			
2 (BC2)/ 7.5 (BC1) - 2013/14			BC2						BC1 w-c*				
2.5 (BC2)/ 8 BC1 - 2014/15				BC2 w-c*						BC1			
3 (BC2)/ 8.5 (BC1) - 2015/16					BC2						BC1 w-c*		
9 - 2016/17						-						BC1	
10 - 2019/20													BC1

*'w-c' indicates 'web-CATI' data collection. These sweeps involved shorter questionnaires issued initially as web surveys. Participants who did not respond to the web survey were then contacted by telephone and invited to complete the questionnaire with a telephone interviewer.

1.4 Sample design[1]

1.4.1 BC1 Main sample (the original birth cohort)

The original or 'main' BC1 sample was recruited at sweep 1.

The initial area-level sampling frame was created by aggregating Data Zones. Data Zones are small geographical output areas created for the Scottish Government. Data Zones are used by Scottish Neighbourhood Statistics to release small area statistics. The Data Zone geography covers the whole of Scotland. The geography is hierarchical, with Data Zones nested within Local Authority boundaries. Each data zone contains between 500 and 1,000 household residents. More information can be found on the Scottish Neighbourhood Statistics website: http://www.sns.gov.uk.

The Data Zones were aggregated to give an average of 57 births per area per year (based on the average number of births in each Data Zone for the preceding 3 years). It was estimated that this number per area would provide us with the required sample size. Once the merging task was complete, the list of aggregated areas was sorted by Local Authority[2] and then by the Scottish Index of Multiple Deprivation Score (SIMD). 130 areas were then selected at random. The Department of Work and Pensions then sampled children from these 130 sample points.

Within each sample point, the Child Benefit records were used to identify all babies and three-fifths of toddlers who were born between 1st June 2004 and 31st May 2005. The sampling of children was carried out on a month-by-month basis in order to ensure that the sample was as complete and accurate as possible at time of interview.

In cases where there was more than one eligible child in the selected household, one child was selected at random. If the children were twins they had an equal chance of being selected. If the eligible children were in different age cohorts the younger child had a higher chance of being selected given that those children had a higher chance of being included in the sample overall.

After selecting the eligible children, the DWP made a number of exclusions before transferring the sample details. These exclusions included cases they

[1] This section focusses on sample design for the sample interviewed at sweep 10 – i.e. BC1. Information about the sample design for BC2 is provided in the user guide accompanying the BC2 sweep 1 dataset which is available through the UK Data Service website.

[2] Local Authority has been used as a stratification variable during sampling, this means the distribution of the GUS sample by Local Authority will be representative of the distribution of Local Authorities in Scotland. However, the sample sizes are such that we would not recommend analysis by Local Authority. The small sample sizes would give misleading results.

considered ‘sensitive’ and children that had been sampled for research by the DWP in the last 3 years.

1.4.2 BC1 Boost sample (refreshment sample recruited in 2018)

Whilst the overall levels of attrition seen in GUS are typical for a cohort study of its kind, the effects of attrition are spread unevenly over the sample, with some sub-groups affected more than others. Analysis of the achieved sample from Birth Cohort 1 after sweep 8 revealed that two groups in particular had become under-represented since the beginning of the study: children born to mothers aged 16-24 at time of birth and children living in the 15% most deprived areas (according to the Scottish Index of Multiple Deprivation).

To resolve this under-representation, a boost sample for BC1 was recruited to the study as part of phase 2 fieldwork for sweep 9, specifically targeting families those in the under-represented groups. Like the sample for the original birth cohort, the sample for the boost was drawn from Child Benefit records held by HMRC. For further details about the sampling approach and rationale, please see the GUS BC1 sweep 9 User Guide (https://growingupinscotland.org.uk/wp-content/uploads/2019/08/BC1-SW9-User-Guide.pdf)

At sweep 9, a total of 502 families were recruited to the boost sample. All families who consented to follow-up were issued for sweep 10 fieldwork (n=495).

1.5 Developing and piloting

Policy priorities and key topics of interest for the sweep 10 adult and young person questionnaires were initially discussed and agreed by the study’s Scottish Government Project Manager and a number of internal and external stakeholders. The questionnaires were then developed by the GUS team at ScotCen with input from the study’s Questionnaire Advisory Group and policy teams across the Scottish Government.

Cognitive testing of selected items in the young person questionnaire was carried out in August/September 2018. A full CAPI/CASI instrument, with both adult and young person questionnaires, was piloted in October/November 2018.

There was no separate pilot or dress-rehearsal for the web and telephone data collection.

1.6 Sweep 10 fieldwork timing

In sweeps 1-7, fieldwork was conducted over a 14-month period with cases issued to field according to the child’s age and interviews taking place as around a specified date calculated according to the child’s birthday (the ‘target

interview date'). Ahead of sweep 8 there was interest in interviewing families according to the child's school year. Therefore, from sweep 8 fieldwork moved from an 'ages' to a 'stages' approach. This means that the age gap between the young people at the time of interview is larger at sweeps 8-10 than at previous sweeps. Conversely, at sweeps 8-10, almost all young people were in the same school year at the time of interview (i.e. at sweep 10 most young people were in the second term of their third year at secondary school - Secondary 3/S3).

Because of how children were initially sampled, cohort members in BC1 span two different school years. The fieldwork for sweep 10 was therefore conducted over two phases:

- **Phase 1** fieldwork took place between January and July 2019. All data collected during Phase 1 were collected face-to-face. Cases were issued in three waves followed by a period for reissues.[3]
- **Phase 2** fieldwork was scheduled to take place face-to-face between January and July 2020. However, due to the COVID-19 pandemic face-to-face fieldwork in Phase 2 was paused in March 2020 and the remaining cases were subsequently issued to web and telephone surveys.
- **Phase 2 web and telephone fieldwork** consisted of a 10-week web survey period and an 8-week telephone fieldwork period. It took place between August and October 2020. In July 2020 participants who had not yet completed an interview face-to-face but were still eligible to do so were invited to take part in web and telephone questionnaires. Participants were first invited to complete their web survey and reminded to do so during their telephone interview; interviewers had no other involvement with the web surveys. Families who had completed their telephone interview but not their web survey, were automatically reminded to do so 5 days after their telephone interview.
- **Partner paper questionnaires** were administered across both phase 1 and phase 2 fieldwork.

Please see the **project instructions** and **fieldwork report** in Appendix 1 for further details.

1.7 Response

Table 1.7 shows historical response for BC1. A total of 2304 interviews were achieved with the original sample through either face-to-face, web and/or telephone data collection, representing 44% of cases achieved at sweep 1.

Table 1.7 BC1 historical response

	Cases achieved	% of sweep 1 cases

[3] Selected cases which had been unproductive on first issue were reissued to a different interviewer. For further details see the fieldwork report.

Sweep 1	5217	-
Sweep 2	4512	86%
Sweep 3	4193	80%
Sweep 4	3994	77%
Sweep 5	3833	73%
Sweep 6	3657	70%
Sweep 7	3456	66%
Sweep 8	3150	60%
Sweep 9 (Main sample only)	2917	56%
Sweep 10 (Main sample only)	2669	51%

Details of the number of cases issued and achieved at sweep 10 are presented in Table 1.8. Following a top-level overall response rate for the entire sweep, separate rates are provided for face to face response and the alternative data collection response. It is worth noting that due to the sudden pause of the face to face fieldwork, the vast majority of 'pending' cases were subsequently issued to the alternative data collection – including many returned as unproductive (reissues). As a result, the total number of issued cases and covered[1] cases do not match.

Note that all Boost sample cases were issued as part of phase 2 fieldwork. This means that Boost sample cases were disproportionately represented amongst those issued for web and telephone fieldwork. Note also that neither cognitive assessments nor height and weight measurements were collected as part of the web and telephone data collection.

Table 1.8 sweep 10 response

	Total cross-sectional sample (Main and Boost samples)		**Longitudinal sample** (Main sample only)	
Total face-to-face and web/tel	No. of cases	% of issued in-scope	No. of cases	% of issued in-scope
Total in-scope* issued	3855	-	3360	-
Total achieved (face-to-face or web/tel)	2943	76%	2669	79%
Main carer interview achieved (face-to-face or web/tel)	2933	76%	2662	79%
Young person interview achieved (face-to-face or web/tel)	2827	73%	2566	76%

Face-to-face interviews	No. of cases	% of covered in-scope	No. of cases	% of covered in-scope
Total cases covered face-to-face	3037	-	2881	-
Total face-to-face interviews achieved	2417	80%	2304	80%
Main carer interview achieved (face-to-face)	2411	79%	2299	80%
Young person interview achieved (face-to-face)	2325	77%	2218	77%
Young person height and weight measurements achieved	2238	74%	2139	74%
Young person cognitive assessments achieved	2279	75%	2177	76%
Web/tel interviews (any element)	No. of cases	% of issued	No. of cases	% of issued
Total cases issued to web/tel	919	-	538	-
Total web/tel interviews achieved (any element)	526	57%	365	68%
Partner interviews (paper)	No. of cases	% of eligible	No. of cases	% of eligible
Total eligible (partner of main carer resident in household)	2305	-	2142	-
Partner interview achieved	1705	74%	1639	77%

*Excludes 4 cases which were found to be ineligible after issuing to field (i.e. excl. cases where family had moved out of Scotland or where cohort child has died).

Further details on response are provided in the fieldwork report in Appendix 1.

1.8 Length of interview

The average face-to-face interview (including adult and young person interviews, cognitive assessments and height and weight measurements) lasted just over an hour (median length 67 minutes).

2 Sweep 10 data collection elements

2.1 Interview with the cohort member's main carer

At sweep 1, primarily because of the inclusion of questions on the mother's pregnancy and birth of the sample child, interviewers were instructed as far as possible to undertake the interview with the child's mother. Where the child's mother was not available, interviews were undertaken with the child's main carer. At the following sweeps, interviewers have been instructed to undertake the interview with the same respondent as in the previous sweep, where possible and appropriate. At sweep 10, this means the same respondent as sweep 9 (or sweep 8/sweep 7/etc. if the household skipped one or more sweeps). Where this was not possible or appropriate, interviews were conducted with another parent or carer. In practice, most parent/carer interviews were undertaken with the adult who took part in the previous sweep (98% of adult interviews were with the adult respondent who took part in the latest sweep) and this was usually the young person's mother (94% of adult interviews were with the cohort member's mother). Further details about contact procedures are available in the **project instructions**.

For the main **face-to-face data collection**, interviews were carried out in participants' homes, by trained social survey interviewers using laptop computers (otherwise known as CAPI – Computer Assisted Personal Interviewing). The interview was quantitative and consisted almost entirely of closed questions. There was a brief self-complete section in the interview in which the adult respondent, using the laptop, input their responses directly into the questionnaire program (CASI).

For the alternative **telephone-and-web data collection**, the parent or carer who took part in the previous sweep was invited to take part in a short online survey (CAWI – Computer Assisted Web Interview) and a short telephone survey (CATI – Computer Assisted Telephone Interview). The web survey could be completed before or after the telephone interview but had to be completed by the same parent/carer who completed the sweep 10 telephone interview. This was emphasised in the invitation mailing and emphasised by the interviewer when making contact to arrange a telephone interview. Reconciliation of the CAWI and CATI data was carried out to check that the same parent/carer completed both elements. In a small number of cases it was not possible to confirm that the same parent/carer had completed both questionnaires. In these cases, only the CATI data was retained. The content of the telephone survey was near-identical to the content of the questions asked by the interviewer in the face-to-face (CAPI) interview. To mimic the face-to-face interview as closely as possible, participants were issued with showcards as part of the advance mailout and also had access to a copy of these online.

There is a variable in the dataset which records whether the main carer had access to showcards during the telephone interview (CjShcCkY and MjShcCkP). Where they did not, the interviewer would simply read out the answer options over the phone. Please see the enclosed **project instructions** for details. The content of the online parent/carer survey was almost identical to the content of the self-completion (CASI) element for the adult in the face-to-face approach. **For details of any changes to questions, including changes to wording and/or routing, users should consult the enclosed questionnaire documentation.**

2.2 Interview with the cohort member (young person)

The cohort members were interviewed directly for the fourth time at sweep 10. As part of mainstage **face-to-face data collection** cohort members were invited to take part in two elements: 1) an interviewer-led section (CAPI); 2) a self-completion questionnaire to be carried out on the interviewer's laptop (CASI). Cohort members were also asked for their email address and mobile number. For details about consent procedures and contact procedures please see the **project instructions**.

As part of the **web and telephone data collection,** like the main carer, cohort members were invited to take part in a short web questionnaire (CAWI) and a telephone interview (CATI). The CAWI could be completed before or after the CATI. As in the main carer questionnaire, questions in the young person CAWI largely mirrored those asked in the young person CASI self-completion questionnaire, while questions in the telephone interview largely mirrored those asked in the interviewer-led CAPI interview. **For details of any changes to questions, including changes to wording and/or routing, users should consult the enclosed questionnaire documentation**.

2.3 Cognitive assessments

Cognitive assessments were carried out with cohort members as part of the main face-to-face interviews. **No cognitive assessments were carried out as part of the web-and-telephone data collection.**

Cognitive assessments were previously carried out with the cohort members in BC1 at sweeps 3, 5, 8 and 9. At sweep 10 cohort members were assessed using the 'Listening Comprehension' subtest of the Weschler Individual Achievement Tests, 2nd Edition (WIAT-II). This is the same assessment which was administered at sweeps 8 and 9.

WIAT-II is an educational assessment tool which is widely used by educational psychologists to examine cognitive development and educational ability. The assessments carried out with GUS cohort members were adapted for use in a survey setting and modified to be administered in CAPI.

The Listening Comprehension subtest is designed to measure the ability to listen for detail by selecting the picture that matches a word or sentence (e.g. 'point to the dog') and generating a word that matches a picture and an oral description (e.g. 'what is this?'). There are strict protocols which must be adhered to when administering assessments. These ensure that the resultant data can be confidently compared with the normative data used to produce the various derived scores necessary for analysis.

The Listening Comprehension test includes three sub-assessments: Receptive Vocabulary, Sentence Comprehension and Expressive Vocabulary (see table 2.1 below).

Table 2.1 Child cognitive assessments: WIATT-II Listening Comprehension

Assessment name	Assesses	Method	Max no. of items
Receptive vocabulary	Ability to listen for details and knowledge of words	Young person is asked to select a picture that matches a word	16
Sentence comprehension	Ability to listen for details and knowledge of words	Young person is asked to select a picture that matches a sentence	10
Expressive vocabulary	Knowledge of words	Young person is asked to generate a word that matches a picture and oral description	15

For each assessment, the starting point is determined by the child's age. The assessment continues until the last item or until six consecutive incorrect responses are given.[4] At GUS sweep 10, all children started at the same point (note that this was not the first item in each sub-test) however, some children may have subsequently been asked earlier items depending on their progress through the assessment. Where children were not asked those earlier items, they were scored positively. Understanding which set of items were administered to the cohort member is important when analysing the results.

The following scores are available in the dataset:

- ***Receptive Vocabulary Adjusted Raw Score:*** A count of all the items on Receptive Vocabulary the child answered correctly (including where early items were automatically scored).
- ***Sentence Comprehension Adjusted Raw Score:*** A count of all the items on Sentence Comprehension the child answered correctly (including where early items were automatically scored).

[4] Further details are available in the project instructions.

- ***Expressive Vocabulary Adjusted Raw Score:*** A count of all the items on Expressive Vocabulary the child answered correctly (including where early items were automatically scored).
- ***Listening Comprehension Raw score:*** The raw score is a count of the number of items the child answered correctly. The total raw score for the Listening Comprehension subtest is derived by adding up the adjusted raw scores for each of the three sub-assessments (Receptive vocabulary; Sentence comprehension and Expressive vocabulary).
- ***Listening Comprehension Standard Score***: A normalised transformation of the raw score which uses an external standard or 'norming' sample and takes into account the child's age in months at the time the assessment was undertaken. The standard score can be used as a measure of how far a child's score from the mean (and median) score for a child their age, measured in standard deviations. The Listening Comprehension standard score can also be compared to other types of normalised derived scores, like subtest scaled scores from the Wechsler intelligence scales.

For each raw score outlined above it is possible to derive *within-sample standardised z scores* which allow for comparisons to be made across sub-assessments (measures in standard deviations from the mean).

Note that the exercises are designed to provide a picture of the range of skills across a number of young people, not to give a clinical assessment of an individual young person.

Further information about the WIAT-II measures is available online, at: http://www.pearsonclinical.co.uk/Psychology/ChildCognitionNeuropsychologyandLanguage/ChildAchievementMeasures/WechslerIndividualAchievementTest-SecondUKEdition(WIAT-IIUK).

2.4 Height and weight measurements

The cohort member's height and weight measurements were previously taken in sweeps 2, 4, 6, 7, 8 and 9 and were also included as part of the face-to-face data collection at sweep 10. **No height and weight measurements were undertaken as part of the web-and-telephone data collection.**

The interviewers were asked to measure the height and weight of all cohort members (young people). However, in some cases it may not have been possible or appropriate to do so, for example if it was clear that the young person was unwilling or that the measurement would be far from reliable.

It was recommended that height and weight measurements be taken on a floor which was level and not carpeted. If all the household was carpeted, a floor with the thinnest and hardest carpet was chosen (usually the kitchen or bathroom). The interviewer was asked to code whether they experienced problems with the height and/or weight measurements and, if they did, to indicate whether they felt the end result was reliable or unreliable at (WjXhei14 and WjXwei19). As a

rough guide, if the measurement was likely to be more than 2 cm (3/4 inch) from the true figure for height or 1 kg (2 lbs) from the true figure for weight, it was coded as unreliable.

If the respondent was not willing to allow the sample child to have his/her height or weight measured, for example saying that they were too busy or already knew their measurements, a refusal code was entered for the measurements variables (WjXhei01 and WjXwei01), with the reason for refusal at WjXhei021-8 or WjXwei021-7. If the height or weight was refused or not attempted, the cohort member was asked for an estimated height or weight, in metric or imperial measurements.

Detailed protocols of how to take height and weight measurements are included as appendices to the main interviewer instructions deposited with the dataset and available from the data archive website.

The data has been used to estimate an approximate BMI (Body Mass Index) score for each cohort member. Further details on the data and variables associated with the height and weight measurements can be found in section 5.6.19.

2.5 Partner questionnaire

In cases where the main adult respondent lived with a partner, their partner was invited to complete a paper questionnaire. A paper questionnaire was enclosed with the advance letter to all households where records indicated that a partner had been resident at the previous sweep of data collection. Upon contacting the household ahead of their interview, the interviewer would check if the paper questionnaire had been received, or, in cases where no questionnaire had been sent out, if one was now required. As part of the CAPI interview with the main carer the interviewer would check that the partner questionnaire had been completed, and by whom, and would hand out spare copies as required.

In most cases the interviewer collected the completed paper questionnaire as part of the household visit. Where the questionnaire had not been completed at the time of the interviewer's visit, text, email and telephone reminders were issued to increase partner questionnaire response. As noted in Table 1.8 above, three quarters of eligible partners completed the questionnaire at sweep 10.

Further details about the administration of the partner questionnaire are provided in the **project instructions.** Separate **CAPI edit instructions** for the partner questionnaires are enclosed alongside the coding and editing instructions for the main carer and young person data.

The person completing the partner questionnaire can be identified using the variable PjPartID. Self-completion data has been reconciled against the CAPI data, however, data users who want to conduct further checks can use details

provided by partners at the beginning of the partner questionnaire. See the **questionnaire documentation** for further details.

3 Coding and editing

Additional coding and editing tasks were performed after the interviews were conducted. The enclosed **CAPI edit instructions** provide details of the tasks that were conducted.

Note that the coding and editing tasks were carried out on data collected face-to-face and via telephone only. The same coding and editing program was used for the data collected face-to-face and via telephone.

4 Weighting the data

4.1 Background

4.1.1 Weights developed for sweep 10

Weights were initially generated for those cases issued and completed – meaning either data was gathered via a face-to-face interview or the case was given an unproductive final outcome - before fieldwork paused due to COVID in March 2020. Additional weights were subsequently created for the full samples including cases completed using either face-to-face (F2F), telephone or online data collection methods. In this note, these weights are differentiated as the 80% weights (using 80% of cases issued and completed prior to lockdown) and 100% weights (using all cases, including those issued during lockdown). Responses in the 80% data were gathered only via face-to-face interviews, while responses in the 100% data also include telephone and online interviews. 80% weights incorporate weighting for whether a case was issued and completed prior to fieldwork pausing, as well as for non-response. 100% weights include all cases issued in sweep 10, so only incorporate non-response models.

For both the 80% and 100% data, two weights were generated for analysis of information collected from the main carer and two weights for analysis of data collected from the cohort member (young person). For the 100% data, an additional weight was generated for the PAPI responses from the main carer's resident partner questionnaire.

Four sets of weights were generated for the 80% data:

- A cross-sectional weight for adults that should be used for any cross-sectional analysis of sweep 10 data collected from the main carer via F2F interview. All main carers that responded by F2F interview at sweep 10 have a cross-sectional adult weight.

- A longitudinal weight for analysis of data collected via F2F from main carers that have responded at every sweep of GUS up to and including sweep 9[5].

- A cross-sectional weight that should be used for any cross-sectional analysis of sweep 10 data collected from the young person via F2F interview. All young people that completed the interview via F2F at sweep 10 have a cross-sectional young person weight.

- A longitudinal weight for analysis of data collected from the young person F2F and whose main carer had responded at every sweep of GUS up to and including sweep 9.

[5] Cases where the main carer changed between sweeps (e.g. where one parent completed the sweep 7 interview, while another parent completed the sweep 8 interview) are counted as productive cases in this respect, as long as a main carer interview was achieved.

Five sets of weights were generated for the 100% data:

- A cross-sectional weight for adults that should be used for any cross-sectional analysis of all data collected in the sweep 10 main carer interview. All main carers that responded at sweep 10 via F2F, telephone, or online interview have a cross-sectional adult weight.

- A longitudinal weight for analysis of data collected via any mode at sweep 10 (F2F, telephone or web) from main carers that have responded at every sweep of GUS up to and including sweep 9.

- A cross-sectional weight that should be used for any cross-sectional analysis of the sweep 10 data collected from the young person. All young people that completed an interview at this sweep have a cross-sectional young person weight.

- A longitudinal weight for analysis of data collected from the young person via any mode at sweep 10 (F2F, telephone or web) and whose main carer had responded at every sweep of GUS up to and including sweep 9.

- A cross-sectional weight for analysis of the sweep 10 PAPI data (i.e. data collected from the main carer's resident partner). All partners that completed the PAPI interview at sweep 10 have a cross-sectional partner weight.

4.2 Weights for main carer interview data

4.2.1 80% main carer sample

The sweep 10 80% sample of adult respondents can be split into three groups. For the purposes of describing the weighting, these have been named Sample A, Sample B, and Boost Sample. These are defined as follows:

- Sample A – adults who responded at *all* previous sweeps, who were issued and invited to take part via F2F interview at sweep 10 and the case was completed prior to lockdown in March 2020.

- Sample B – adults who responded at sweep 1 but had missed one or more interviews in sweeps 2-9, who were issued and invited to take part via F2F interview at sweep 10 and the case was completed prior to lockdown in March 2020.

- Boost Sample – adults from the refreshment sample added at sweep 9 who were issued and invited to take part via F2F interview at sweep 10 and the case was completed prior to lockdown in March 2020.

The three samples were treated separately during the weighting. This is because respondents in the Sample B and the Boost Sample are likely to have different response behaviours to those in Sample A, as demonstrated by the difference in their response rates.

- There were 784 individuals in Sample B, 375 of whom responded at sweep 10 prior to March 2020. The response rate was 48%.
- There were 2213 individuals in Sample A, 1924 of whom responded at sweep 10 prior to March 2020. The response rate was 87%.
- There were 262 individuals in the boost sample, 112 of whom responded to sweep 10 prior to March 2020. The response rate was 46%.

The issued and responding sample sizes for the three groups in the 80% data are given in Table 4.1.

Table 4.1 Response rates for the three groups of main interview respondents in initial 80% issued

	Issued	Responding	Response rate
Sample A	2213	1924	87%
Sample B	784	375	48%
Boost	241	112	46%
Combined (A+B+Boost)	3238	2411	74%

Two sets of weights were developed for the responding adults in the 80% data: a cross-sectional weight and a longitudinal weight. Only members of Sample A (who have responded at every previous sweep of GUS, were issued to take part via F2F interview at sweep 10 and the case completed prior to March 2020) received a longitudinal weight. This weight is described in more detail in section 4.2.2.

All sweep 10 respondents will have a cross-sectional weight (Sample A + B + Boost). These are described in more detail in section 4.2.3 for the 80% data.

4.2.2 80% longitudinal weights for main carer interview data

80% longitudinal weights were only generated for respondents in Sample A. A model-based weighting technique was used to develop the sweep 10 longitudinal weights for the 80% data, where response behaviour is modelled using data from previous sweeps. This is the same method used to generate weights for adults who completed the main interview at sweeps 2 to 9. Ineligible households (deadwood) were not included in the non-response modelling.

Whether a case was issued and response behaviour were modelled using logistic regression. This models the relationship between an outcome variable (in this instance whether the case was issued for F2F interview and response to the sweep 10 interview) and a set of predictor variables. The predictor variables were a set of socio-demographic individual and household characteristics collected from the previous sweeps of the study.

Table 4.2 Variables used in adult weights of 80% longitudinal sample

Issued model
SIMD 2016 quintiles
Highest education level of respondent
Whether respondent currently has a job
Mother's employment status
Whether respondent has a disability or limiting illness
Respondent's Ethnicity
Non-response model
Rural/urban classification
Tenure of household
Number of children in household
Family Type
Mother's age at birth of child
Highest education level of respondent
Household employment measure 1
How often respondent helps child with homework
Respondent's health in general
Whether respondent has a disability or limiting illness

The final sweep 10 longitudinal weight for the 80% data was calculated as the product of the issued weight and non-response weight. The final weights were scaled to the responding 80% sweep 10 sample size, so that the weighted sample size matches the unweighted sample size.

4.2.3 80% cross-sectional weights for main carer interview data

Cross-sectional weights were generated for respondents in the 80% of cases issued before lockdown at sweep 10 (Sample A + Sample B + the Boost sample) and should be used for any cross-sectional analysis of the 80% sweep 10 data.

Calibration weighting was applied to the combined sample to create the cross-sectional weights. This method adjusts a set of starting weights using an iterative procedure so that they match pre-defined population totals. The resulting weights, when applied to the combined 80% data, make the survey estimates match the population estimates which in this instance were calculated from Sample A, weighted by the longitudinal weight.

The choice of the variables used in the calibration was decided upon by comparing (Sample A weighted by the sweep 10 80% longitudinal weights) with the combination of {Sample B weighted by the cross-sectional weight from the last completed sweep + the Boost sample weighted by the interim non-response

weight}. This was done using a logistic regression model where the dependent variable was equal to 1 if the case was a member of sample A and 0 if not.

The variables used in the calibration weighting are listed in Table 4.3 below.

Table 4.3 Variables used in calibration of the adult 80% cross-sectional sample
Household income
Highest education level of respondent
Household employment measure 1
Mother's age at birth of child
Tenure of household
Respondent age
SIMD 2016 quintile
Urban/rural classification
Respondent's ethnicity

4.2.4 100% main carer sample

The sweep 10 100% sample of adult respondents can be split into three groups, each including responses via F2F, telephone, and online interviews. For the purposes of describing the weighting, these have been named Sample A, Sample B, and Boost Sample. These are defined as follows:

- Sample A – adults who had responded at all previous sweeps, as well as sweep 10 via any interview mode.
- Sample B – adults who had responded at sweep 1 but had missed one or more interviews in sweeps 2-9, as well as responding at sweep 10 via any interview mode.
- Boost Sample – adults from the refreshment sample added at sweep 9 who responded at sweep 10 via any interview mode.

The three samples were treated separately during the weighting. This is because respondents in the Sample B and the Boost Sample are likely to have different response behaviour to those in Sample A, as demonstrated by the difference in their response rates.

- There were 1359 individuals in Sample B, 699 of whom responded at sweep 10. The response rate was 51%.
- There were 2496 individuals in Sample A, 2238 of whom responded at sweep 10. The response rate was 90%.
- There were 495 individuals in the boost sample, 273 of whom responded at sweep 10. The response rate was 55%.

The issued and responding sample sizes for the three groups in the 80% data are given in Table 4.1.

Table 4.4 Response rates for the three groups of main interview respondents in 100% issued

	Issued	Responding	Response rate
Sample A	2496	2238	90%
Sample B	1359	699	51%
Boost	495	273	55%
Combined (A+B+Boost)	4350	3210	74%

Two sets of weights were developed for the responding adults in the 100% data: a cross-sectional weight and a longitudinal weight. Only members of Sample A (who have responded at every previous sweep of GUS and sweep 10) received a longitudinal weight. This weight is described in more detail in section 4.2.5.

All sweep 10 respondents will have a cross-sectional weight (Sample A + B + Boost). For the 100% data, these are described in section 4.2.6.

4.2.5 100% longitudinal weights for main carer interview data

100% longitudinal weights were only generated for respondents in Sample A. A model-based weighting technique was used to develop the sweep 10 longitudinal weights for the 100% data, where response behaviour is modelled using data from previous sweeps. This is the same method used to generate weights for adults who completed the main interview at sweeps 2 to 9. Ineligible households (deadwood) were not included in the non-response modelling.

Response behaviour were modelled using logistic regression. This models the relationship between an outcome variable (in this case response to the sweep 10 interview) and a set of predictor variables. The predictor variables were a set of socio-demographic individual and household characteristics collected from the previous sweeps of the study.

Table 4.5 Variables used in adult non-response weighting of 100% longitudinal sample

Tenure of household
Number of children in household
Mother’s age at birth of child
Highest education level of respondent
How often respondent helps child with homework
Family type (lone parent or couple)

Respondent's general health
Household employment measure 1

The final sweep 10 weight for the 100% data was calculated as the product of the non-response weight and the sweep 9 interview weight. The final weights were scaled to the responding 100% sweep 10 sample size, so that the weighted sample size matches the unweighted sample size.

4.2.6 100% cross-sectional weights for main carer interview data

Cross-sectional weights were generated for all respondents at sweep 10 (Sample A + Sample B + the Boost sample) and should be used for any cross-sectional analysis of the 100% sweep 10 data.

Calibration weighting was applied to the combined sample to create the cross-sectional weights. This method adjusts a set of starting weights using an iterative procedure so that they match pre-defined population totals. The resulting weights, when applied to the combined data, make the survey estimates match the population estimates which in this instance were calculated from Sample A, weighted by the longitudinal weight. Since the longitudinal weight corrects for non-response bias at each stage of GUS, the weighted Sample A estimates are the best estimates available for children from the cohort from which sweep 1 was sampled who remain in Scotland.

The choice of the variables used in the calibration was decided upon by comparing (Sample A weighted by the sweep 10 longitudinal weights) with the combination of {Sample B weighted by the cross-sectional weight from the last completed sweep + the Boost sample weighted by the interim non-response weight}. This was done using a logistic regression model where the dependent variable was equal to 1 if the case was a member of sample A and 0 if not.

The variables used in the calibration weighting are listed in Table 4.6 below.

Table 4.6 Variables used in calibration of the adult 100% cross-sectional sample
Household income
SIMD 2020 quintile
Whether respondent currently has a job
Mother's employment status
Ethnicity of respondent
Mother's age at birth of child
Crime domain quintile
Urban/rural classification
Education quintile

4.2.7 Sample efficiency of main carer interview data

Weighting affects the statistical efficiency of a sample: the more variable the weights, the larger the variance of the (weighted) survey estimates. More variable weights will result in larger standard errors and wider confidence intervals, so there is less certainty over where the "true" population values lie.

The precision of weighted survey estimates is indicated by the effective sample size (neff) which measures the size of an (unweighted) simple random sample that would provide the same precision (standard error) as the weighted sample. The efficiency of the weights is given by the ratio of the effective sample size to the actual sample size. The range of the weights, the effective sample size, and the sample efficiency for both sets of data and both sets of weights are given in Table 4.7.

Table 4.7 Range and sample efficiency of adult 80% and 100% weights

	Min	Max	Mean	N	Neff	Efficiency
80% main carer longitudinal weight	0.48	7.99	1	1924	1398	73%
80% main carer cross-sectional weight	0.18	4.79	1	2411	1943	81%
100% main carer longitudinal weight	0.51	7.89	1	2238	1595	71%
100% main carer cross-sectional weight	0.25	7.04	1	2937	2322	79%

4.3 Weights for young person interview data

4.3.1 Weighting the young person interview data

For the fourth time on GUS, at sweep 10 cohort members (young people) themselves were interviewed. A large proportion of children completed the questionnaire; 96% of young people whose main carer had completed or partially completed the main CAPI interview in the 80% data and 95% of young people who main carer had completed or partially completed the main interview in the 100% data.

Calibration methods were used to generate non-response weights for the data collected from young people.

Two sets of weights were generated for both the 80% and 100% data:

- A set of longitudinal weights: these are weights for young people who completed an interview at sweep 10 and whose parents had completed every wave of GUS up to and including sweep 10,

- A set of cross-sectional weights: these are weights for young people who completed an interview at sweep 10 but whose parents had missed one or more sweeps prior to sweep 10.

Young people in the Boost sample received only the cross-sectional weights as sweep 9 was the first wave to which they were invited and thus they couldn't have completed all of the previous sweeps.

As with the adult cross-sectional weights, the choice of variables used in the calibration was dictated by the small bias remaining after the appropriate (80% or 100% and longitudinal or cross-sectional) sweep 10 weights were applied. The variables used in calibration of each set of weights are listed in sections 4.3.2 and 4.3.3.

4.3.2 80% weights for young person interview data

In the 80% data, six young people whose main carer had not completed the sweep 10 adult interview were given a weight from the last interview completed as an entry weight to calibration for the cross-sectional sample. Two of these young people also received a longitudinal weight as their main carers had completed every previous GUS sweep up to sweep 10.

As with the adult cross-sectional weights, the choice of variables used in the calibration was dictated by the small bias remaining after the appropriate (80% longitudinal or cross-sectional) sweep 10 weights were applied. The variables used in calibration of each set of weights are listed in Table 4.8 below.

Table 4.8 Variables used in calibration of 80% young person interview data

Longitudinal 80% young person weights	**Cross-sectional 80% young person weights**
Highest education level of respondent	Family type (lone parent or couple)
General health of child	General health of child
General health of respondent	SIMD 2016 quintile
How often carer helps child with homework	Education quintile
	Income domain quintile
	Whether child was mother's first born

The final weights were scaled to the responding 80% sweep 10 young person sample size, so that the weighted sample size matches the unweighted sample size.

4.3.3 100% weights for young person interview data

In the 100% data, six young people whose main carer had not completed the sweep 10 adult interview were given a weight from the last interview completed as an entry weight to calibration for the cross-sectional sample. Two of these young people also received a longitudinal weight as their main carers had

completed every previous GUS sweep up to sweep 10. These are the same six cases that received young person weights in the 80% data (see section 4.3.2 above).

As with the adult cross-sectional weights, the choice of variables used in the calibration was dictated by the small bias remaining after the appropriate (100% longitudinal or cross-sectional) sweep 10 weights were applied. The variables used in calibration of each set of weights are listed in Table 4.9 below.

Table 4.9 Variables used in calibration of 100% young person interview data

Longitudinal 100% young person weights	**Cross-sectional 100% young person weights**
Income How often carer helps child with homework SIMD 2020 quintile	General health of child Employment domain quintile Crime domain quintile

The final weights were scaled to the responding 100% sweep 10 young person sample size, so that the weighted sample size matches the unweighted sample size.

4.3.4 Sample efficiency of the young person interview data

The range of the weights, the effective sample size, and the sample efficiency for both sets of data and both sets of weights are given in Table 4.10.

Table 4.10 Range and sample efficiency of young person 80% and 100% weights

	Min	Max	Mean	N	Neff	Efficiency
80% young person longitudinal weight	0.47	4.74	1	1861	1377	74%
80% young person cross-sectional weight	0.17	5.04	1	2325	1860	80%
100% young person longitudinal weight	0.50	6.74	1	2152	1520	71%
100% young person cross-sectional weight	0.25	5.42	1	2797	2217	79%

4.4 Weights for partner interview (PAPI) data

4.4.1 Weighting the partner interview (PAPI) data

For the third time, interviews with resident partners of the main carer carried out. At sweep 10 – as at sweep 9 – interviews with resident partners were conducted using paper self-completion questionnaires (PAPI). Further details

are provided in section 2.5. Partner interviews were previously carried out at sweep 2 and sweep 9. However, only cross-sectional weights have been computed for sweep 10 data which align the profile of the achieved sample of partners with the profile of all existing partners in the responding households. PAPI weights were only generated for the 100% data.

74% of partners completed the questionnaire. A bivariate analysis suggested that the responding sample is systematically different from those that did not respond. Non-response behaviour was modelled using logistic regression. This is a method of analysing the relationship between an outcome variable (in this case response to the sweep 10 interview) using a set of predictor variables. The model takes account of the relationship of the predictor variables to the outcome and the relationships of the predictor variables to each other. Weighting the model by the cross-sectional weights for main carer interview data allows to identify bias remaining only due to non-response of the partners.

The variables identified as significantly predicting the non-response behaviour are listed in Table 4.11.

Table 4.11 Variables used in non-response weighting of 100% partner (PAPI) sample
SIMD 2020 quintile
Employment status of partner
Mother's age at birth of child
Urban/rural classification
Partner's relationship to child
Education level of partner
Household income quintile

4.5 Applying the weights

For each sample, the cross-sectional weights should be used for any cross-sectional analysis, i.e. any analysis of sweep 10 80% data only. All sample members, including those from the Boost Sample, that responded at sweep 10 have a cross-sectional weight.

The longitudinal weight may be used for any analyses of more than one sweep of data. Sample members that have responded at every previous sweep of GUS have a longitudinal weight. The application of longitudinal and cross-sectional weights for analysis of multiple sweeps of data is discussed in the GUS weighting review published alongside the sweep 10 data (Lubian, Tipping and Bradshaw, 2021).

80% weights should be used for analysis of cases where data were collected via F2F interview only. 100% weights should be used for analysis of all sweep 10 GUS data, including that collected via F2F, telephone, and online interviews.

Table 4.12 Description of weight variables in the data file

Variable name	Label
Djwtbth2f	Dj: Longitudinal weight - household - face-to-face only
Djwtbrthf	Dj: Crossectional weight - household - face-to-face only
Djwtchldf	Dj: Crossectional weight - YP data - face-to-face only
Djwtchd2f	Dj: Longitudinal weight - YP data - face-to-face only
Djwtchlda	Dj: Crossectional weight - YP data - all modes
Djwtchd2a	Dj: Longitudinal weight - YP data - all modes
Djwtbrtha	Dj: Crossectional weight - household - all modes
Djwtbth2a	Dj: Longitudinal weight - household - all modes
Djwtpa	Dj: Partner PAPI weight

5 Using the data

The GUS sweep 10 data collected from cohort members and their main parent or carer consists of the following SPSS file:

GUS_SW10_B.sav	2943 cases	Birth cohort 1

5.1 Variables on the data file

The data file contains questionnaire variables (excluding variables used for administrative purposes) and derived variables. The variables included in the file are detailed in the **variable list**. As far as possible they are grouped in the order they were asked in the interview. Variables that were asked only in the telephone-and-web data collection, and variables which were amended slightly for the web and telephone data collection, are listed alongside the corresponding variables for face-to-face data collection.

Please note that variable descriptions in the variable list cannot be relied upon to capture the detail of the question wording, or the answer categories used. For the precise question wording, please refer to the interview documentation. **Users should also carefully check the questionnaire documentation for any differences in question wording across the data collected face-to-face and via web/telephone.** The **questionnaire documentation for the web and telephone elements** highlight and provide details about any differences. Some differences are also flagged in the variable list. A number of variables are included to enable identification of the completion mode (e.g. MjInterviewMode).

For variables with answers following a scale, such as ‘Strongly agree’ to ‘Strongly disagree’ for instance, it must be noted that the order of the answer categories may not follow systematically an ascending or descending scale throughout the list of variables. Also, the answers may equally refer to positive or negative statements as in the Strength and Difficulties questions MjSDQ01 to 25. The phrasing of the question and the list of answers provided on the showcards - if any - shape the variables. The user must therefore take these variations into account when creating derived variables.

5.2 Variable naming convention

Variables names are normally made up of 8 characters, the first indicates the source of the variable, the second the year of collection and the rest is an indication of the question topic. Therefore, where the same question was asked in the different sweeps the names will usually be the same apart from the second character. If a variable name has changed substantially between sweeps this is marked in the variable list. Variables which are similar but non-identical across sweep 10 face-to-face and web/telephone data collection will in many cases have the same ‘stem’, but with a ‘c’ added to the end for variables

used in web/telephone data collection. However, users should always refer to the detailed questionnaire documentation.

The naming convention is summarised in Table 5.1

Table 5.1 GUS variable naming conventions – BC1			
Character no.:			
1		2	
Source of data		**Sweep/Sweep**	
Non-sequential capitals: A, D,M, P, C		Sequential lower case: a, b, c..	
Source code	**Details**	**Sweep code**	**Child's age**
AL	Area level variable	a	10 months
D	Derived variable	b	Almost 2 years
DP	Derived variable from partner int	c	Almost 3 years
DWP	DWP variable	d	Almost 4 years
M	Main carer/adult interview	e	Almost 5 years
P	Partner interview	f	Almost 6 years
C	Child (young person) interview	g	Almost 8 years
W	Young person height/weight	h	Around 10-11 years (in Primary 6)
Z	Z-score variable	i	Around 12-13 years (in Secondary 1)
		j	Around 14-15 years (in Secondary 3)

5.3 Variable labels

In the sweep 10 dataset the variable labels have been shortened to 40 characters as far as possible; the first 2 show the source and year of the data (as in the variable name). Although the labels give an indication of the topic of the question **it is essential to refer to the questionnaire documentation to see the full text of the question and the routing applied to that variable**.

5.4 Derived variables

Derived variables included in the dataset are listed with the questionnaire variables for the same topic. The SPSS syntax used to create them can be found in the **derived variables** section of the documentation.

5.5 Multicoded questions

Some questions in the survey enabled participants to give more than one answer. In the dataset each of the answer options has been converted into a binary variable with the people who selected that option coded 1 and the rest coded 0.

5.6 Indicators and summary variables

5.6.1 Household details collected at sweep 10

In all cases where a face-to-face interview took place, and in all cases where a parent/carer telephone interview took place, details about each member of the household such as gender, age and relationship to other members of the household were collected, as were details such as employment, income, education and country of birth of the main adult respondent and (where applicable) their resident partner.

In the small number of cases where only a web interview was carried out, no household details were collected at sweep 10. For proxies for these details, users are referred to the GUS BC1 sweep 9 dataset which is also available through the UK Data Service.

5.6.2 Household data

Similar to previous sweeps, the adult respondent was asked about each member of the household. The gender, age and marital status of each household member was collected along with their relationship to each other and to the cohort member (young person). Each person in the household was identified by their person number, which they will retain through each sweep of the survey. The variable MjHGSl(n) can be used to see whether a person who was in the household at a previous sweep is still in the household at sweep 10.

A set of derived summary household variables is also included in the data. Amongst other things these detail the number of adults, number of children or number of natural parents in the household. A list of these variables is included in Table 5.2. A set of variables which allow identification of the adult respondent and their partner (if present) in the household grid are also included. These permit easier analysis of adult respondent's and partner's age, marital status and relationship to other people in the household. The age variables have been banded for all persons in the household except the cohort member.

Table 5.2 Key household derived variables

Variable name	Description
MjRespID	Mj: Respondent's ID
MjRsex	Mj: Respondent's sex
MjPartID	Mj: Respondent partner ID
MjRPsex	Mj: Respondent partners sex
MjHGnp01	Mj: Number of natural parents in hhold
MjHGrsp01	Mj: Whether respondent is natural mother
MjHGrsp02	Mj: Whether respondent is natural father
MjHGnp02	Mj: Natural mother in household
MjHGnp03	Mj: Natural father in household
MjMothID	Mj: Mothers ID
MjFathID	Mj: Fathers ID
Djhgnmad2	Dj: Number of adults other than resp in household - banded
Djhgnmk2	Dj: Number of children in household - Banded
Djhgrsp04	Dj: Family Type
Djhgprim	Dj: Whether child was mothers first-born
Djhgrsp05	Dj: Resp is childs mother? (incl. adopt./foster/step-mothers)
Djhgrsp06	Dj: Resp is childs father? (incl. adopt./foster/step-fathers)
Djhgrsp07	Dj: Who is the respondent in relation to the child
Djhgrsp08	Dj: Resps partner relation to the child
Djhgmag5	Dj: Age of natural mother at birth of cohort child (banded)
Djhgagc	Dj: Study childs age at interview (months)
MjHGrsp03	Mj: Whether same respondent as last sweep

5.6.3 National Statistics Socio-economic Classification (NS-SEC)

The National Statistics Socio-economic Classification (NS-SEC) is a social classification system that attempts to classify groups on the basis of employment relations, based on characteristics such as career prospects, autonomy, mode of payment and period of notice. There are fourteen operational categories representing different groups of occupations (for example higher and lower managerial, higher and lower professional) and a further three ‘residual’ categories for full-time students, occupations that cannot

be classified due to a lack of information or other reasons. The operational categories may be collapsed to form a nine, eight, five or three category system.

The sweep 10 dataset includes the five-category system in which respondents and their partner, where applicable, are classified as managerial and professional, intermediate, small employers and own account workers, lower supervisory and technical, and semi-routine and routine occupations. A sixth category ‘never worked’ is also coded on this variable. The decision on whether or not this category should be included as a separate category, incorporated with category 5 ‘semi-routine or routine’ or set to ‘missing’ is dependent on the particular analysis to which it is being applied.

Further information on NS-SEC is available from the National Statistics website at: http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html.

At sweep 10, parents/carers in the Boost sample were asked retrospectively about employment details since the cohort child was aged 10 months. These details are provided in variables MjBEmpSt to MjBJobO1.

5.6.4 Equivalised household annual income

The income that a household needs to attain a given standard of living will depend on its size and composition. For example, a couple with dependent children will need a higher income than a single person with no children to attain the same material living standards. "Equivalisation" means adjusting a household's income for size and composition so that we can look at the incomes of all households on a comparable basis. Official income statistics use the 'Modified OECD' equivalence scale, in which an adult couple with no dependent children is taken as the benchmark with an equivalence scale of one. The equivalence scales for other types of households can be calculated by adding together the implied contributions of each household member from the table below.

Table 5.3 Income equivalence scales for household members

Household member	**Equivalence scale**
Head	0.67
Subsequent adults	0.33
Each child aged 0-13	0.20
Each child aged 14-18	0.33

For example, a household consisting of a single adult will have an equivalence scale of 0.67 - in other words he or she can typically attain the same standard of living as a childless couple on only 67 percent of its income. In a household

consisting of a couple with one child aged three, the head of the household would contribute 0.67, the spouse 0.33, and the child 0.20, giving a total equivalence scale of 1.20. In other words, this household would need an income 20 percent higher than a childless couple to attain the same standard of living.

GUS collects a banded version of total net household income from all sources in the main CAPI interview. The midpoint of the band is used to calculate equivalised income. This midpoint income value is adjusted, using the above equivalence scale, according to the characteristics of the household, to produce an equivalised annual household income value. Variables with the full equivalised income scale (DjEqvinc) and quintiles of the scale based on within sample distribution (DjEqv5) are available in the datasets.[6]

5.6.5 Area-level variables

Scottish Government Urban/Rural Classification

The dataset includes a binary measure of urban/rural location (ALjrural). This is based on the Scottish Government's two-fold urban rural classification which is itself derived from the more detailed six-fold classification shown in Table 5.4.

The Scottish Government Urban Rural Classification was first released in 2000 and is consistent with the Government's core definition of rurality which defines settlements of 3,000 or less people to be rural. It also classifies areas as remote based on drive times from settlements of 10,000 or more people. The definitions of urban and rural areas underlying the classification are unchanged.

Table 5.4	Scottish Government Six-fold and Two-fold Urban Rural Classifications	
Classification	**Description – six-fold**	**Description – two-fold**
1. Large Urban Areas	Settlements of over 125,000 people	1. Urban
2. Other Urban Areas	Settlements of 10,000 to 125,000 people	1. Urban
3. Accessible Small Towns	Settlements of between 3,000 and 10,000 people and within 30 minutes' drive of a settlement of 10,000 or more	1. Urban

[6] Note previous user guides suggested this variable referred to UK wide income distribution using data from the Family Resources Survey. This is not the case for this sweep nor any previous sweep. Income distribution is considered only amongst the GUS sample.

4. Remote Small Towns	Settlements of between 3,000 and 10,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more	1. Urban
5. Accessible Rural	Settlements of less than 3,000 people and within 30 minutes' drive of a settlement of 10,000 or more	2. Rural
6. Remote Rural	Settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more	2. Rural

For further details on the classification see the Scottish Government's website: https://www.gov.scot/publications/scottish-government-urban-rural-classification-2016/pages/2/. A detailed urban/rural variable with all six categories outlined above is available on request under UKDS Secure Licence.

Scottish Index of Multiple Deprivation

The Scottish Index of Multiple Deprivation (SIMD) identifies small area concentrations of multiple deprivation across Scotland. It is based on a number of indicators - 37 indicators in the 2020v2 version – in the seven individual domains of Current Income, Employment, Health, Education Skills and Training, Geographic Access to Services (including public transport travel times for the first time), Housing and Crime (the 2020 version is based on 37 indicators). SIMD is presented at data zone level, enabling small pockets of deprivation to be identified. The data zones – which for the 2020v2 version have a median population size of 755 – are ranked from most deprived (1) to least deprived (6976) on the overall SIMD and on each of the individual domains. The result is a comprehensive picture of relative area deprivation across Scotland. The GUS sweep 10 dataset contains two classificatory variables: SIMD 2016 and SIMD 2020v2. It should be noted that analyses in various GUS reports may be based on earlier versions of SIMD.

In the sweep 10 dataset, the data zones are grouped into quintiles. Quintiles are percentiles which divide a distribution into fifths, i.e., the 20th, 40th, 60th, and 80th percentiles. Those respondents whose postcode falls into the first quintile are said to live in one of the 20% least deprived areas in Scotland. Those whose postcode falls into the fifth quintile are said to live in one of the 20% most deprived areas in Scotland.

Further details on SIMD can be found on the Scottish Government Website: http://www.scotland.gov.uk/Topics/Statistics/SIMD/Overview

Details about SIMD 2020v2 can be found here: https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/.

Further area-level variables (available on request)

Further geographical measures have been derived and are available on request through UKDS Secure Licence arrangements. These are outlined below.

Data Zones

The data zone is the key small-area statistical geography in Scotland. SNS has introduced, for the first time, a common, stable and consistent, small-area geography called data zones. The data-zone geography covers the whole of Scotland and nests within local authority boundaries. Data zones are groups of 2001 Census output areas and have populations of between 500 and 1,000 household residents. Where possible, they have been made to respect physical boundaries and natural communities. They have a regular shape and, as far as possible, contain households with similar social characteristics[7].

Intermediate Geography

Not all statistics are suitable for release at the data-zone level because of the sensitive nature of the statistics, or for reasons of reliability, and it was apparent that a statistical geography between data zone and local authority was required. The intermediate zones are aggregations of data zones within local authorities and contain between 2,500 and 6,000 people.[8]

Local authority

Local government in Scotland comprises 32 unitary local authorities, responsible for the provision of a range of public services. Local authority areas (also known as council areas) reflect the geographical diversity within Scotland with wide variations in size (from 60 square miles in Dundee City council area to 25,656 square miles in Highland council area) and population (from under 20,000 people in Orkney Islands council area to over 600,000 in Glasgow City council area).

Carstairs score (deciles)

The Carstairs and Morris index was originally developed in the 1980s using 1981 census data. It is composed of four indicators at postcode sector level that were judged to represent material disadvantage in the population (Lack of car ownership, Registrar General Social Class, Overcrowded households and male unemployment). The index has also been calculated based on 1991 and 2001 census data. It is often used in health-related research.

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[7] Further information on data zones is available from the Scottish Government Scottish Neighbourhood Statistics Guide: https://www2.gov.scot/Publications/2005/02/20697/52626

[8] Further information on intermediate geography is available from the Scottish Government Scottish Neighbourhood Statistics Guide: https://www2.gov.scot/Publications/2005/02/20697/52626

5.6.6 Strengths and Difficulties Questionnaire (SDQ)

The Strengths and Difficulties Questionnaire (SDQ) is a brief behavioural screening questionnaire designed for use with 3-16-year-olds[9]. The scale includes 25 questions which are used to measure five aspects of the child or young person's development – emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems and pro-social behaviour. Further details on the SDQ can be found at: http://www.sdqinfo.com/

At sweep 10, the full list of SDQ items were asked of the cohort members themselves and of their main carer. In both cases, cases were asked as part of the self-completion section of the questionnaire. The SDQ items have been asked of the main carer at most sweeps since the cohort member was aged 3.

A score is calculated for each aspect of the young person's development, as well as an overall 'difficulties' score which is generated by summing the scores from all the scales except pro-social. For all scales, except pro-social where the reverse is true, a higher score indicates greater evidence of difficulties.

The dataset includes the constituent items from the cohort member and main carer questionnaire. The dataset also includes derived variables for the various composite scores and total score based on data collected from the main carer. Details of the derived variables (based on parent report) and a full list of the the constituent variables in the cohort member questionnaire are included in Table 5.5.

Syntax for the derivation of the parent report composite scores are illustrated in the derived variables documentation. Users may want to consult this for deriving equivalent composite scores based on the data collected form the cohort member.

Table 5.5	Variables associated with the Strengths and Difficulties Questionnaire
Variable name	**Description**
Main carer questionnaire	
DjDsdem1	Dj SDQ: Emotional symptoms score (parent report)
DjDsdco1	Dj SDQ: Conduct problems score (parent report)
DjDsdhy1	Dj SDQ: Hyper-activity or inattention score (parent report)
DjDsdpr1	Dj SDQ: Peer problems score (parent report)
DjDsdps1	Dj SDQ: Pro-social score (parent report)
DjDsdto1	Dj SDQ: Total difficulties score (parent report)
Cohort member questionnaire	

[9] Goodman, R. (1997) "The Strengths and Difficulties Questionnaire: a research note", *Journal of Child Psychology and Psychiatry,* 38, pp581-586

CjSDQni	Cj: I try to be nice to other people. I care about their feelings.
CjSDQrt	Cj: I am restless, I cannot stay still for long.
CjSDQac	Cj: I get a lot of headaches, stomach-aches or sickness.
CjSDQsh	Cj: I usually share with others (food, games, pens etc.).
CjSDQan	Cj: I get very angry and often lose my temper.
CjSDQal	Cj: I am usually on my own. I generally play alone or keep to myself.
CjSDQto	Cj: I usually do as I'm told.
CjSDQwo	Cj: I worry a lot.
CjSDQhe	Cj: I am helpful if someone is hurt, upset or feeling ill.
CjSDQfi	Cj: Still thinking about how things have been for you over the last six months.
CjSDQfr	Cj: I have one good friend or more.
CjSDQfg	Cj: I fight a lot. I can make other people do what I want.
CjSDQun	Cj: I am often unhappy, down-hearted, or tearful.
CjSDQli	Cj: Other people my age generally like me.
CjSDQdi	Cj: I am easily distracted, I find it difficult to concentrate.
CjSDQne	Cj: I am nervous in new situations. I easily lose confidence.
CjSDQki	Cj: I am kind to younger children.
CjSDQly	Cj: I am often accused of lying or cheating.
CjSDQpb	Cj: Other children or young people pick on me or bully me.
CjSDQvo	Cj: I often volunteer to help others (parents, teachers, children)
CjSDQth	Cj: I think before I do things.
CjSDQst	Cj: I take things that are not mine from home, school, or elsewhere.
CjSDQgo	Cj: I get on better with adults than with people my own age.
CjSDQfe	Cj: I have many fears. I am easily scared.
CjSDQwk	Cj: I finish the work I'm doing. My attention is good.

5.6.7 Mental wellbeing: selected items from the Students' Life Satisfaction Scale

Life satisfaction is measured through the use of selected items from the Students' Life Satisfaction Scale (Huebner, 1991). These items were asked as

part of the self-completion questionnaire for the cohort member and were previously asked in the sweep 7 and sweep 9 questionnaires. Relevant variables are listed in Table 5.6.

Table 5.6	Selected items from the Students' Life Satisfaction Scale
Variable name	**Description**
CjWed	Cj Do you wish your life was different?
CjWer	Cj Do you feel that your life is just right?
CjWea	Cj Do you feel you have what you want in life?
CjWeg	Cj Do you feel you have a good life?

5.6.8 Depression: Composite International Diagnostic Interview (CIDI) Short Form

The World Mental Health Composite International Diagnostic Interview (WHO WMH-CIDI) has been designed to be used to assess mental disorders in accordance with definitions and criteria of ICD-10 and DSM-IV (WHO, 2021). Further information available at: https://www.hcp.med.harvard.edu/wmhcidi/

Questions were asked of both the cohort member and the main carer as part of the self-completion section. Questions were also asked in the paper questionnaire for the main carer's partner.

Table 5.8	Composite International Diagnostic Interview (CIDI) (short form) (cohort member, main carer and partner questionnaires)
Variable name	**Description**
Cohort member questionnaire	
CjCidDp	Cj Whether ever had period of several days feeling depressed
CjCidWp	Cj Whether worst period within two months of traumatic event or death
CjCidFl	Cj How much of day feelings lasted
CjCidDa	Cj When your feelings of depression or loss of interest were worst, did you feel this way…
CjCidLe	Cj Whether felt more tired or low energy than usual
CjCidWe	Cj: Whether gained or lost weight
CjCidSc	Cj: Whether sleep changed
CjCidSp1	Cj: When sleep changed: trouble falling asleep?
CjCidSp2	Cj: When sleep changed: waking too much or too early?

CjCidSp3	Cj: When sleep changed: sleeping too much?
CjCidCo	Cj: Whether had trouble concentrating
CjCidDo	Cj: Whether felt down on self, no good, worthless
CjCidDt	Cj: Whether thought a lot about death
Main carer questionnaire	
MjRCidDp	Mj: Whether ever had period of several days feeling depressed
MjRCidWp	Mj: Whether worst period within two months of traumatic event or death
MjRCidFl	Mj: How much of day feelings lasted
MjRCidDa	Mj: When your feelings were worst, did you feel this way …
MjRCidLe	Mj: Whether felt more tired or low energy than usual
MjRCidWe	Mj: Whether gained or lost weight
MjRCidSc	Mj: Did your sleep change?
MjRCidSp1	Mj: When sleep changed: trouble falling asleep?
MjRCidSp2	Mj: When sleep changed: waking too much or too early?
MjRCidSp3	Mj: When sleep changed: sleeping too much?
MjRCidCo	Mj: Whether had trouble concentrating
MjRCidDo	Mj: Whether felt down on self, no good, worthless
MjRCidDt	Mj: Whether thought a lot about death
Partner questionnaire	
PjCidDp	Pj: Whether ever had period of several days feeling depressed
PjCidWp	Pj: Whether worst period within two months of traumatic event or death
PjCidFl	Pj: How much of the day did these feelings usually last?
PjCidDa	Pj: Did you feel this way …
PjCidLe	Pj: Did you feel more tired or low on energy than is usual for you?
PjCidWe	Pj: Did you gain or lose weight without trying, or did you stay about the same?
PjCidSc	Pj: Did your sleep change?
PjCidSp	Pj: When your sleep changed, was that trouble falling asleep, waking too much, or sleeping too much?

PjCidCo	Pj: Did you have a lot more trouble concentrating than usual?
PjCidFd	Pj: People sometimes feel down on themselves, no good, worthless. Did you feel this way?
PjCidDt	Pj: Did you think a lot about death – either your own, someone else's or death in general?

5.6.9 General Anxiety Disorder (GAD-7)

A brief self-report measure of generalised anxiety disorder (GAD-7) was included in the cohort member self-completion questionnaire. The GAD-7 measure is a validated screening tool for general anxiety disorder (Spitzer et al., 2006). Variables on the dataset are set out in Table 5.8.

Table 5.8	General Anxiety Disorder Assessment (GAD-7) (cohort member questionnaire)
Variable name	**Description**
CjGadNer	Cj: In last 2 weeks, bothered by: Feeling nervous, anxious or on edge?
CjGadWoS	Cj: In last 2 weeks, bothered by: Not being able to stop or control worrying?
CjGadWoD	Cj: In last 2 weeks, bothered by: Worrying too much about different things?
CjGadRel	Cj: In last 2 weeks, bothered by: Having trouble relaxing?
CjGadRes	Cj: In last 2 weeks, bothered by: Being so restless that it is hard to sit still?
CjGadAnn	Cj: In last 2 weeks, bothered by: Becoming easily annoyed or irritable?
CjGadAfr	Cj: In last 2 weeks, bothered by: Feeling afraid as if something awful might happen?

5.6.10 Alcohol and smoking

As part of their self-completion questionnaire, cohort members were asked a number of questions about alcohol and smoking. Questions were adapted from the Health Behaviour in School Aged Children Survey (HBSC) and are listed in Table 5.9.

Questions about alcohol and smoking were also asked at sweep 9. Therefore, not all cohort members answered all questions about alcohol and smoking at sweep 10 (e.g. 'whether ever had alcoholic drink' was not asked of those who had already reported having an alcoholic drink at sweep 9).

Please refer to the **questionnaire documentation** for details of adaptations to routing in the data collected via web and telephone.

Table 5.9	Selected items from HBSC on child's health behaviours - alcohol and smoking (young person questionnaire)
Variable name	**Description**
CjSm	Cj Whether ever tried a cigarette
CjBSn	Cj How often smokes now
CjBSw	Cj How old when you first smoked a whole cigarette
CjBSe	Cj Whether ever tried e-cigarette or vaping device
CjBSa	Cj Whether ever had alcoholic drink
CjBSd	Cj How old when first had an alcoholic drink
CjBAl	Cj How often drank alcohol in the last 30 days
CjBDr	Cj Whether ever been drunk

5.6.11 Drug use

Alongside questions on alcohol and smoking, cohort members were also asked about drug use, see Table 5.10 below.

Table 5.10	Items on drug use – adapted from the Longitudinal Study of Australian Children (LSAC), Growing Up in Ireland (GUI) and the Scottish Adolescent Lifestyle and Substance Use Survey (SALSUS)
Variable name	**Description**
CjDrugMe	Cj Have you ever tried cannabis?
CjDrugMo	Cj How often have you used cannabis?
CjDrugOe	Cj Have you ever tried any drugs other than cannabis?
CjDrugOo	Cj How often have you used drugs other than cannabis?

5.6.12 Anti-social behaviour and offending

At sweep 9, for the first time on GUS, the child and the main carer were asked a range of questions about their engagement in anti-social behaviours. Questions were also asked of resident partners who took part in the paper self-completion questionnaire (see the GUS BC1 sweep 9 User Guide and documentation for details). The questions are adaptations of questions previously asked as part of sweep 3 of the Edinburgh Study of Youth Transitions and Crime (Smith, 2004).

At sweep 10, for each of the behaviours listed in Table 5.9 below, cohort members were asked how many times they had engaged in a particular form of behaviour in the last year.

Table 5.9	Items on anti-social behaviour and offending - adapted from the Edinburgh Study of Youth Transitions
Relevant variable names	**Description**
CjASBsy	Cj: In last year: how many times taken something from a shop or a store
CjASBry	Cj: In last year: how many times been rowdy or rude in public
CjASBmy	Cj: In last year: how many times stolen money or other things
CjASBky	Cj: In last year: how many times carried a knife or weapon
CjASBpy	Cj: In last year: how many times deliberately damaged or destroyed property
CjASBby	Cj: In last year: how many times broken into a locked place to steal something
CjASBgy	Cj: In last year: how many times written things or sprayed paint on property
CjASBwy	Cj: In last year: how many times used force, threats or a weapon etc.
CjASBhy	Cj: In last year: how many times hit, kicked or punched someone
CjASBsyC	Cj: In last year: how many times taken something from a shop or a store (CAWI only)
CjASBryC	Cj: In last year: how many times been rowdy or rude in public (CAWI only)
CjASBmyC	Cj: In last year: how many times stolen money or other things (CAWI only)
CjASBkyC	Cj: In last year: how many times carried a knife or weapon (CAWI only)
CjASBpyC	Cj: In last year: how many times deliberately damaged or destroyed property (CAWI only)
CjASBbyC	Cj: In last year: how many times broken into a locked place to steal something (CAWI only)

CjASBgyC	Cj: In last year: how many times written things or sprayed paint on property (CAWI only)
CjASBwC	Cj: In last year: how many times used force, threats or a weapon etc. (CAWI only)
CjASBhyC	Cj: In last year: how many times hit, kicked or punched someone (CAWI only)

5.6.13 Parent-Child Attachment: selected items from the People In My Life (PIML) scale

The People in My Life measure is a self-report instrument designed to measure attachment to parents and peers in middle childhood. The sweep 10 main carer and cohort member questionnaires both included selected items from the Parent Attachment scale, as did the paper questionnaire for the main carer's resident partner (see separate documentation). Further information about the PIML scale can be found on the Fast Track Project website: http://fasttrackproject.org/techrept/p/pml/

At sweep 10 the cohort member was asked these questions about up to two resident parents and up to two non-resident parents. In the data collected face-to-face**, resident parents** are identified as either 'parent 1' or 'parent 2' and their relationship with the cohort member can be identified through their household ID. Details of the relationship between the cohort member and their parent(s) living elsewhere are obtained as part of the cohort member interview (CjPe1Rel, CjPe2Rel).

Note that **the approach to identifying 'parent 1' and 'parent 2' differs between the face-to-face and web-and-telephone data collection**. **The questionnaire documentation** provides details of how 'parent 1' and 'parent 2' are identified in the data collected as part of the web and telephone fieldwork.

In the dataset, the following derived variables can be used to identify 'parent 1' and 'parent 2' figures:

- Household ID of **resident 'parent 1'** in data collected **face-to-face**: DjParent1
- Household ID of **resident 'parent 2'** in data collected **face-to-face**: DjParent2
- Household ID of **resident 'parent 1'** in data collected via **web questionnaire**: DjPa1web
- Household ID of **resident 'parent 2'** in data collected via **web questionnaire**: DjPa2web
- Details of **'parent 1' living elsewhere** in data collected **face-to-face**: CjPe1Rel (relationship with cohort member), Pe1ge (gender)
- Details of **'parent 2' living elsewhere** in data collected **face-to-face**: CjPe2Rel (relationship with cohort member), Pe2ge (gender)
- Details of **'parent 1' living elsewhere** in data collected via **web questionnaire:** CjPe1ReC (relationship with cohort member)

Please also note that the approaches to identifying parents are also different to those applied at sweeps 8 and 9. Users should consult the relevant **questionnaire documentation**.

Table 5.11 outlines the relevant variables on the dataset.

Table 5.11	Selected items from People In My Life scale (cohort member, main carer and partner questionnaires)
Variable name	**Description**
Cohort member questionnaire	
CjPar101, CjPar201, CjPar101C, CjPar201C, CjPar301, CjPEw101, CjPew201, CjPEw101C	Cj: … he/she listens to what I have to say.
CjPar102, CjPar202, CjPar102C, CjPar202C, CjPar302, CjPEw102, CjPew202, CjPEw102C	Cj: … I can count on him/her to help me when I have a problem.
CjPar103, CjPar203, CjPar103C, CjPar203C, CjPar303, CjPEw103, CjPew203, CjPEw103C	Cj: … I talk to him/her when I am having a problem.
CjPar104, CjPar204, CjPar104C, CjPar204C, CjPar304, CjPEw104, CjPew204, CjPEw104C	Cj: … If he/she knows something is bothering me, he/she asks me about it.

CjPar105, CjPar205, CjPar105C, CjPar205C, CjPar305, CjPEw105, CjPew205, CjPEw105C	Cj: … I share my thoughts and feelings with him/her.
CjPar106, CjPar206, CjPar106C, CjPar206C, CjPar306, CjPEw106, CjPew206, CjPEw106C	Cj: … he/she pays attention to me.
Main carer questionnaire	
MjPall	Mj I listen to what child has to say
MjPalu	Mj I can tell when child is upset about something
MjPAlt	Mj child talks to me when child is having a problem
MjPAlb	Mj If I know something is bothering my child, I ask about it
MjPAla	Mj I pay attention to child, even when I am busy
MjPAls	Mj Child shares thoughts and feelings with me
Partner questionnaire	
PjPall	Pj I listen to what he/she has to say
PjPalu	Pj I can tell when he/she is upset about something
PjPAlt	Pj The study child talks to me when he/she is having a problem
PjPAlb	Pj If I know something is bothering the study child, I ask him/her about it
PjPAla	Pj I pay attention to him/her, even when I am busy
PjPAls	Pj The study child shares his/her thoughts and feelings with me

5.6.14 Peer Attachment: selected items from the People In My Life (PIML) scale

In addition to the items on parent-child communication outlined above, the sweep 10 self-completion questionnaire for the cohort member also included selected items from the PIML Peer Attachment Scale. Relevant items are outlined in Table 5.12.

Table 5.12	Selected items from People In My Life Peer Attachment scale (cohort member questionnaire)
Variable name	**Description**
CjCrFrl	Cj My friends listen to what I have to say
CjCrFrc	Cj I can count on my friends to help me when I have a problem
CjCrFrt	Cj I talk to my friends when I am having a problem
CjCrFrb	Cj If my friends know something is bothering me, they ask me about it
CjCrFrs	Cj I share my thoughts and feelings with my friends
CjCrFra	Cj My friends pay attention to me

5.6.15 Parenting and parent-child relationship: arguments and disagreements

As part of the self-completion module, the cohort child's main carer and their resident partner were asked several questions about arguments and disagreements between them and the cohort child. These questions were adapted from questions previously asked as part of wave 6 of The Longitudinal Study of Australian Children (Growing Up in Australia) (Department of Social Services, 2018). These questions were also asked at sweep 9.

Table 5.11	Selected items adapted from Growing Up in Australia: Parent-child arguments and disagreements (main carer and partner questionnaires)
Variable name	**Description**
Main carer questionnaire	
MjPDis1	Mj My child and I get on each other's nerves
MjPDis2	Mj My child and I shout at each other
MjPDis3	Mj When child and I argue we stay angry for a very long time
MjPDis5	Mj When child and I disagree, child storms out of the room
Partner questionnaire	

PjPDis1	Pj The study child and I get on each other's nerves.
PjPDis2	Pj The study child and I shout at each other.
PjPDis3	Pj When the study child and I argue we stay angry for a very long time.
PjPDis5	Pj When the study child and I disagree, he/she storms out of the room.

5.6.16 Parenting: autonomy and control (selected items from Epstein's Mother-Father-Peer Inventory Scale)

Parents/carers were asked about their parenting practices, drawing on selected items from Epstein's Mother-Father-Peer Inventory Scale (Epstein,1983). These questions were previously asked as part of a between-sweep web-CATI survey with GUS main carers around the time the child was in Primary 5 (see separate dataset and documentation, forthcoming). The questions were also asked at sweep 9. At sweep 10, questions were asked in the main carer self-completion questionnaire and in the partner questionnaire, Questions are detailed in Table 5.13.

Table 5.13	Selected items from the Mother-Father-Peer Inventory Scale (main carer questionnaire)
Variable name	**Description**
Main carer questionnaire	
MjPInd01	Mj I encourage child to take own decisions
MjPInd04	Mj I'm always telling child how to behave
MjPInd05	Mj I often worry that child will be hurt or become ill
MjPInd06	Mj I help child to become an independent person
MjPInd09	Mj I encourage child to express opinion
MjPInd12	Mj I encourage child to do things by themselves
MjPInd13	Mj I'm overprotective of child
MjPInd14	Mj I'm always telling child what to do and how to behave
Partner questionnaire	
PjPInd01	Pj I encourage child to take own decisions
PjPInd04	Pj I'm always telling child how to behave
PjPInd05	Pj I often worry that child will be hurt or become ill
PjPInd06	Pj I help child to become an independent person
PjPInd09	Pj I encourage child to express opinion

PjPInd12	Pj I encourage child to do things by themselves
PjPInd13	Pj I'm overprotective of child
PjPInd14	Pj I'm always telling child what to do and how to behave

5.6.17 Parent Adverse Childhood Experiences (ACEs)

Adverse childhood experiences (ACEs) can be defined as stressful or traumatic experiences that occur during childhood (between 0 and 18 years of age). ACEs were first explored in a US context in the 1990s, asking adults a series of questions covering childhood psychological, physical and sexual abuse and household dysfunction (Felliti VJ et al., 2008). Since then, further studies on ACEs have been undertaken in England and Wales (see e.g. Public Health Wales, 2015; Bellis, 2016) and questions were included in the Scottish Health Survey in 2019 (McLean et al., 2020). Analysis has previously been carried out on GUS data using a prospective approach to identifying ACEs among the cohort members (Marryat and Frank, 2019).

This is the first time parents taking part in GUS have been asked about ACEs. Questions were asked in the main carer self-completion questionnaire and in the partner questionnaire. Questions were developed to enable identification of ACEs that allow comparison with ACEs studies elsewhere, however, data users should note differences across studies and are advised to check the questionnaire documentation carefully. An outline of the questions is provided in Table 5.16.

Table 5.16	Parent Adverse Childhood Experiences (ACEs)
Variable name	**Description**
Main carer questionnaire	
MjAceDiv	Mj: Parents separated or divorced (before age 18)
MjAceAlc	Mj: Lived with problem drinker or alcoholic, or anyone who used drugs (before age 18)
MjAceMen	Mj: Lived with anyone who was depressed, mentally ill or suicidal (before age 18)
MjAcePri	Mj: Lived with anyone who served time or was sentenced to serve time in a prison or a young offenders' institution (before age 18)
MjAceSwe	Mj: Parent or adult ever swear at you, insult you, or put you down (before age 18)
MjAcePus	Mj: Parent or adult ever hit, beat, kick or physically hurt you in any way (before age 18)

MjAceLov	Mj: Feel that no one in your family loved you or thought you were important or special (before age 18)
MjAcePhy	Mj: Not have enough to eat, or had to wear dirty clothes, or felt that your parents were unable to care for you (before age 18)
MjAceVio	Mj: Parents or another adult beat, kick or otherwise physically hurt or threaten your other parent or carer (before age 18)
MjAceAbu	Mj: Did anyone at least 5 years older than you ever touch you sexually, or try to make you touch them sexually (before age 18)
Partner questionnaire	
PjAceDiv	Pj: Parents separated or divorced (before age 18)
PjAceAlc	Pj: Lived with problem drinker or alcoholic, or anyone who used drugs (before age 18)
PjAceMen	Pj: Lived with anyone who was depressed, mentally ill or suicidal (before age 18)
PjAcePri	Pj: Lived with anyone who served time or was sentenced to serve time in a prison or a young offenders' institution (before age 18)
PjAceSwe	Pj: Parent or adult ever swear at you, insult you, or put you down (before age 18)
PjAcePus	Pj: Parent or adult ever hit, beat, kick or physically hurt you in any way (before age 18)
PjAceLov	Pj: Feel that no one in your family loved you or thought you were important or special (before age 18)
PjAcePhy	Pj: Not have enough to eat, or had to wear dirty clothes, or felt that your parents were unable to care for you (before age 18)
PjAceVio	Pj: Parents or another adult beat, kick or otherwise physically hurt or threaten your other parent or carer (before age 18)
PjAceAbu	Pj: Did anyone at least 5 years older than you ever touch you sexually, or try to make you touch them sexually (before age 18)

5.6.18 Additional measures sourced elsewhere

In addition to the items outlined above, Table 5.17 details items which were either directly sourced elsewhere or adapted from existing sources.

Table 5.17

Variable name(s)	Description	Source
CjCasE CjCasAS	Educational aspirations [cohort member questionnaire]	Adapted from the Millennium Cohort Study (Sweep 5)
MjPConf, PjPConf	Parental confidence in parenting [main carer questionnaire and partner questionnaire]	From the Maternal Postnatal Attachment Scale (Condon & Corkindale, 1998)
MjSexInt MjSexBeh MjSexCont MjSexSafe MjSexOri	Whether parent(s)/carer(s) talk to cohort member about sex and sexual health [main carer questionnaire]	Adapted from Growing Up in Ireland http://www.esri.ie/growing-up-in-ireland/questionnaires/
CjSexExp	Cohort member's level of sexual experience [cohort member questionnaire]	Adapted from Young Person's Behaviour and Attitudes Survey 2013 Version B https://www.health-ni.gov.uk/publications/young-persons-behaviour-and-attitudes-questionnaire
CjSubChr1[1-13]	Reasons for subject choices [cohort member questionnaire]	Adapted from Next Steps
CjSupAd CjSup[1-8]	Trusted adult and who speaks to when worried [cohort member questionnaire]	Adapted from Growing Up in Australia (Wave 6)
CjYSeHar	Self-harm in last 12 months [cohort member questionnaire]	Adapted from the Millennium Cohort Study (Sweep 5)
CjTVScd, MjTVScd, PjTVScd	Items on screen time [cohort member questionnaire]. Further	Adapted from the Millennium Cohort Study (Sweep 5)

CjGamSc, MjGamSc PjGamSc	adapted versions also asked in the main carer and partner questionnaires.	
CjSleSc, CjSleNs, CjSleWe	Sleep [cohort member questionnaire]	Adapted from Growing Up in Australia

5.6.19 Cohort member height and weight measurements: Body Mass Index (BMI) scores

Body Mass Index (BMI), i.e. weight divided by height squared, is a score that adjusts a person's weight for their height. Taken as a number in isolation, the BMI it does not actually represent anything medically. It is only meaningful in the context of a distribution of values for a population. Individuals are placed into bands to show where they stand in relation to the rest of the population, in particular whether they have unusually high or low BMI.

In adults BMI stays fairly constant on average as people get older. Therefore, BMI categories for adults ignore age and calculate the same BMI for two people with the same weight and height regardless of the differences in their ages. However, among children and young people BMI changes as the child or young person ages. Since to have a certain BMI at one age may be the norm but be unusually high or low at another age, different centiles are calculated for different ages.

The main cohort member overweight and obesity variables have been produced using the International Obesity Taskforce cut-offs. These cut-offs are based on BMI reference data from six different countries around the world (over 190,000 subjects in total aged 0 to 25 from UK, Brazil, Hong Kong, the Netherlands, Singapore, and the United States). In summary, the BMI percentile curves that pass through the values of 25 and 30 kg/m 2 (standard adult cut-off points for overweight and obesity, respectively) at age 18 were smoothed for each national dataset and then averaged.

The averaged curves were then used to provide age and sex-specific BMI cut-off points for children and adolescents aged 2 to 18. By averaging the distribution curves from each reference country, the international cut-offs for children purport to be representative of the countries but independent of the overweight or obesity level in each country.

One of the benefits of using these international standards is the possibility of making international comparisons. However, the international classification is not without problems: international reference data differ from those for the UK population, and this is reflected in the sex-specific overweight and obesity estimates produced by the International classification.

In light of this lack of consensus on its use, variables have also been produced using the 85th (overweight cut-off) / 95th (obesity cut-off) BMI percentiles of the UK reference curves (referred to as the National BMI percentiles classification).

The National BMI percentiles classification has been used in the past to describe childhood overweight and obesity prevalence trends in the UK and the 85th / 95th cut-off points are commonly accepted thresholds used to analyse overweight and obesity in children (detail on relevant cut-offs and their descriptions are included below).

The National BMI percentiles classification has been shown to be reasonably sensitive (i.e. not classifying obese children as non-obese) and specific (i.e. not classifying non-obese children as obese). A key issue to bear in mind however is that the National BMI percentiles classification are based on the arbitrary assumption that the prevalence of overweight and obesity at the point when the reference data was compiled was 15% and 5%, respectively. Furthermore, there seems to be no indication that these cut-off points relate directly or indirectly to any physiological outcomes or health or disease risks. It is worth noting that the UK component of the international classification used the same sample as that used to construct the UK reference BMI data.

In addition to these International and National BMI classifications, Public Health Scotland (formerly Information Services Division - ISD) uses an alternative method to produce BMI centiles (Cole's LMS method), which takes into account the fact that BMI data does not follow a normal distribution. Further information can be found in the technical reports which accompany the Primary 1 Body Mass Index (BMI) national statistics publications[10].

Note that only those height and weight measurements considered by the interviewer to be reliable were used to calculate the BMIs.

Percentile cut-off	**Description**
At or below 5th percentile	Underweight
Above 5th percentile and below 85th percentile	Healthy weight
At or above 85th percentile and below 95th percentile	Overweight
At or above 95th percentile and below 98th percentile	Obese
At or above 98th percentile	Morbidly obese

Table 5.18	Cohort member (young person) derived BMI variables
Variable name	**Description**
Djbmi	Dj BMI (reliable measurements only)
DjUKbmi	Dj UK BMI national classification standards

[10] For example see https://beta.isdscotland.org/find-publications-and-data/population-health/child-health/primary-1-body-mass-index-bmi-statistics-scotland/

DjINTbmi	Dj International BMI cut-offs
DjINTbmi2	Dj BMI status (ovrwt inc. obese) - international cut-offs
DjINTbmi3	Dj BMI status (non-obese vs obese) - international cut-offs
Djisdbmi	Dj Childrens BMI - 5 groups ISD classification
Djisdhwt	Dj Study child weight within/outwith ISD healthy range
Djisdovw	Dj Study child overweight, including obese (ISD)

5.7 Dropped variables

All variables in the questionnaire documentation with '[not in dataset]' next to their name have been deleted from the archived dataset (or have been transformed into derived variables instead).

The following types of variables have been deleted or replaced with a derived variable coded into broader categories in order to reduce the potential to identify individuals:

1. Those containing text
2. Those which contained a personal identifier (e.g. name/address)
3. Those considered to be disclosive, such as:
    - Detailed ethnicity
    - Detailed religion
    - Detailed geography variables
    - Language spoken at home
    - Full interview date
    - Full date of birth
    - Timing variables

There are no geographical variables in the archived dataset beyond a binary area urban-rural classification and the Scottish index of multiple deprivation summary variable. As noted in section 5.6.5, access to more detailed geographic variables is possible via the UKDS Secure Licence facility.

5.8 Missing values conventions

The following missing values conventions have been observed:

-1 Not applicable: Used to signify that a particular variable did not apply to a given respondent, usually because of internal routing

-8 Don't know/Can't say

-9 No answer/Refused

These conventions have also been applied to most of the derived variables. The

6 Documentation

The documentation includes the following:

- Questionnaires (with variable names added)
- List of variables in the dataset
- Derived variables syntax
- Showcards x2 (one set for face-to-face fieldwork; one set for telephone fieldwork)
- Interviewer (project) instructions x2 (one set for face-to-face fieldwork; one set for telephone fieldwork)
- CAPI edit spec (face-to-face and telephone data)
- PAPI edit spec (partner questionnaire)

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8 Contact details

Further details about the study and a list of publications using the data can be found on the study website: growingupinscotland.org.uk. There is also a list of current projects using the data.

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Appendix 1 – Fieldwork report

Introduction

This report provides information on fieldwork for Sweep 10 of Birth Cohort 1 (BC1) in the Growing Up in Scotland study. The fieldwork for this sweep was conducted using face-to-face interviews over two phases: the first from January to July 2019 and the second from January to July 2020. However, due to the COVID-19 pandemic the second phase (Phase 2) was paused. The remaining cases were subsequently issued to web and telephone surveys (the 'alternative data collection').

Phase 2 included the 'boost' sample, introduced at sweep 9. The boost sample is disproportionately formed of families with characteristics known to be associated with attrition and non-response. Further, they have only participated in one previous sweep. Therefore, families in the boost sample do not have as strong a bond to the study as those in our main sample. As such, the fieldwork outcomes for the boost sample were expected to be different from those of the main sample. Therefore, in this report, figures are reported for the overall sample and broken down by 'main' and 'boost' sample types.

The face to face fieldwork consisted of four main elements: a main carer questionnaire, a young person questionnaire, objective measurements of the young person (height and weight, cognitive ability) and a partner questionnaire. Throughout the report, figures are provided at an overall level and separately for main carers and young people. When the survey moved to web and telephone modes, main carers and young people were each asked to complete separate web and telephone questionnaires. Figures for these are also reported separately. Details of the partner questionnaire are provided in the last section.

Following a top-level overall response rate for the entire sweep, separate rates are provided for face to face response and the alternative data collection response. It is worth noting that due to the sudden pause of the face to face fieldwork, the vast majority of 'pending' cases were subsequently issued to the alternative data collection – including those returned as unproductive (reissues). As a result, the total number of issued cases and covered[11] cases do not match. To avoid confusion, face to face fieldwork will be reported altogether, not per phase.

[11] By covered cases we refer to those families where our field interviewers had returned a case outcome.

Overview

Response rate by sample type

At sweep 10, an overall sample of 3855 cases was issued (Table 1). Data were collected for 2943 cases (76% response). Specifically, data were gathered from 2827 young people (96% of all productive) and 2933 main carers (100%[12] of all productive).

3360 main sample cases were issued across both the face to face and the alternative fieldwork. Data were collected for 2669 cases (79% response).

495 boost sample cases were issued at sweep 10 with an achieved sample of 274 cases (55% response). Data were gathered from 261 young people (95% of all productive) and 271 main cares (99% of all productive).

Table 1

Growing Up in Scotland BC1 Sweep 10: Overall SW10 response by sample type			
	Total SW10 by sample type		
	Main	Boost	All
COVERAGE			
Cases issued	3360	495	3855
RESPONSE			
Productive cases	2669	274	2943
% response rate (of issued)	79%	55%	76%
Main carer interview achieved	2662	271	2933
% of productive	100%	99%	100%
Young person interview achieved	2566	261	2827
% of productive	96%	95%	96%

Response rate by incentive eligibility

The 3855 issued cases included 684 cases eligible and 3171 cases not eligible for an incentive (Table 2). From the 2943 productive cases, 330 were eligible for an incentive (48% response rate) and 2613 were not (82% response rate).

Table 2

Growing Up in Scotland BC1 Sweep 10: Overall SW10 response by incentive eligibility			
	Total SW10 by incentive eligibility		
	Eligible	Not eligible	All
COVERAGE			
Cases issued	684	3171	3855
RESPONSE			
Productive cases	330	2613	2943
% response rate (of issued)	48%	82%	76%

[12] When rounded to the nearest whole percent

Household response (main carer and young person)

Face to face

All phase 1 cases and slightly less than half of phase 2 cases were issued to face-to-face. Each phase was organised in 3 waves with each wave being 6 weeks long. Phase 2 was paused at the first half of the second wave for that phase (wave 5 of 6 for the overall sweep).

Productive cases by sample type (incl. partial breakdown)

Overall, 3474 cases were issued to field across phases 1 and 2 with 3037 having been covered before the pause due to the pandemic[13] (Table 3). In total, 2417 productive interviews were achieved. This represents an overall response rate of 80%. 2325 young person interviews were completed, representing 96% of productive cases and 2411 main carer interviews (100%).

3141 main sample cases were issued to field across phases 1 and 2. 2881 of which were covered over the face to face fieldwork. In total, 2304 productive interviews were achieved, representing an 80% response rate. 2218 young person interviews were completed, representing 96% of productive cases and 2299 main carer interviews (100%).

333 boost sample cases were issued to face to face fieldwork 156 of which were covered before the lockdown. All boost sample cases were issued at Phase 2. 113 productive interviews were achieved, representing a response rate of 72%. 107 young person interviews were completed, representing 95% of productive cases and 112 main carer interviews (99%).

Table 3

Growing Up in Scotland BC1 Sweep 10: Face-to-face response by sample type			
	Total F2F by sample type		
	Main	Boost	All
COVERAGE			
Cases issued	3141	333	3474
Cases covered	2881	156	3037
% coverage	92%	47%	87%
RESPONSE			
Productive cases	2304	113	2417
% response rate (of covered - in scope)	80%	72%	80%
Main carer interview achieved	2299	112	2411
% of productive	100%	99%	100%
Young person interview achieved	2218	107	2325
% of productive	96%	95%	96%

[13] See intro section for additional information.

Productive cases by incentive eligibility

From the 3474 issued cases, 516 were eligible for an incentive[14] (Table 4). Due to the pause, 317 were covered in the face to face fieldwork. 161 of which were productive (51%). Data from the main carer were collected for 159 (99%) of them and from the young person from 150 (93%).

Table 4

Growing Up in Scotland BC1 Sweep 10: Face-to-face response by incentive eligibility			
	Total F2F by incentive eligibility		
	Eligible	Not eligible	All
COVERAGE			
Cases issued	516	2958	3474
Cases covered	317	2720	3037
% coverage	61%	92%	87%
RESPONSE			
Productive cases	161	2256	2417
% response rate (of covered - in scope)	51%	83%	24%
Main carer interview achieved	159	2252	2411
% of productive	99%	100%	100%
Young person interview achieved	150	2175	2325
% of productive	93%	96%	96%

Response to additional elements by sample type

Cognitive exercises were carried out with a total of 2279 young people – 94% of cases where an interview was achieved (Table 5). Height and weight measurements were obtained for 2238 young people, representing 93% of the total number of achieved interviews.

The cognitive exercises were carried out with 2177 young people in the main sample – 94% of cases where an interview was achieved. Height and weight measurements were obtained for 2139 young people, representing 93% of issued cases.

In the boost sample, cognitive exercises were carried out with 102 young people – 90% of cases where an interview was achieved. Height and weight measurements were obtained for 99 young people, representing 88% of the total number of achieved interviews.

[14] This consisted of all boost sample cases and few main sample cases.

Table 5

Growing Up in Scotland BC1 Sweep 10: Face-to-face response to additional elements by sample type			
	Total F2F by sample type		
	Main	Boost	All
RESPONSE			
Productive cases	2304	113	2417
Cognitive exercises			
No. of cases with cognitive exercises carried out	2177	102	2279
% cog ex carried out (of productive cases)	94%	90%	94%
Height and weight measurements			
No. of cases with both H&W measurements obtained	2139	99	2238
% H&W obtained (of productive cases)	93%	88%	93%

Unproductive cases by sample type

In total, there were 616 unproductive cases during the face to face fieldwork: 573 main sample and 43 boost sample cases (Table 6). From these, 460 cases (75% of all unproductive) were refusals: 431 from the main sample (75%) and 29 (67%) from the boost sample. A further 74 cases (12% of all unproductive) were untraced movers including 69 from the main sample (12%) and 5 from the (12%) boost sample.

Table 6

Growing Up in Scotland BC1 Sweep 10: Face-to-face unproductive cases by sample type			
	Total F2F by sample type		
	Main	Boost	All
BREAKDOWN OF UNPRODUCTIVES			
Total unproductive	**573**	**43**	**616**
Non-contact	27	3	30
% non-contact (of unproductive cases)	5%	7%	5%
Movers	69	5	74
% movers (of unproductive cases)	12%	12%	12%
Refusals	431	29	460
% refusals (of unproductive cases)	75%	67%	75%
Others	46	6	52
% others (of unproductive cases)	8%	14%	8%
Ineligible	**4**	**0**	**4**

Reissues (incl. partial breakdown, unproductive breakdown, partner's response rate)

Overall, 400 cases were reissued during the reissue period for phase 1[15] (Table 7). The reissued cases resulted in 102 achieved cases, a conversion rate of 26%. Data

[15] As phase 1 sample was only main sample there is no sample breakdown for the reissue figures.

from the main carer were collected for 101 cases (99%) and from the young person for 90 cases (88%).

From the total of 297 unproductive cases, 217 were refusal (73%) and 39 were non-contact (13%).

Table 7

Growing Up in Scotland BC1 Sweep 10 Phase 1 Reissues	
	Total reissues
COVERAGE	
Cases issued	400
Cases covered	400
% coverage	100%
RESPONSE	
Productive cases	102
% Response rate (of covered - in scope)	26%
Main carer interview achieved	101
% of productive	99%
Young person interview achieved	90
% of productive	88%
BREAKDOWN OF UNPRODUCTIVES	
Total unproductive	297
Non-contact	39
% non-contact (of unproductive cases)	13%
Movers	1
% movers (of unproductive cases)	<1%
Refusals	217
% refusals (of unproductive cases)	73%
Other	40
% other (of unproductive cases)	13%
Ineligible	0

Alternative data collection

On 17th March 2020, a communication from the Office of the Chief Statistician instructed that, in light of the situation with COVID-19, all fieldwork on major Scottish Government funded surveys – including Growing Up in Scotland - should be suspended with immediate effect. To complete the sweep 10 data collection, GUS fieldwork was therefore moved to online and telephone modes with main carers and young people each being asked to complete a web and telephone questionnaire. This 'alternative data collection' consisted of a 10-week web survey period and an 8-week telephone fieldwork period. Participants were first invited to complete their web survey and reminded to do so during their telephone interview; interviewers had no other involvement with the web surveys. Families who had completed their telephone interview but not their web survey, were automatically reminded to do so 5 days after their telephone interview.

Any element completed by sample type and by incentive eligibility

Overall, 919 cases were issued to the alternative data collection fieldwork: 538 were main sample and 381 boost sample cases (Table 8). In total, 526 (57%) cases completed at least one of the four elements. These consisted of 365 (68%) main sample and 161 (42%) boost sample cases.

Table 8

Growing Up in Scotland BC1 Sweep 10: Web and telephone (W7) response by sample type			
	W7 - any element		
	Main	Boost	All
COVERAGE & RESPONSE			
Cases issued	538	381	919
Productive cases	365	161	526
% response rate (of covered)	68%	42%	57%

Out of the 919 cases, 420 were eligible for an incentive (Table 9). Data were collected for 169 (40%) of these cases.

Table 9

Growing Up in Scotland BC1 Sweep 10: Web and telephone (W7) response by incentive eligibility			
	W7 - any element		
	Eligible	Not eligible	All
COVERAGE & RESPONSE			
Cases issued	420	499	919
Productive cases	169	357	526
% response rate (of covered)	40%	72%	57%

All elements completed by sample type and by incentive eligibility

Overall, 273 cases (30%) completed all four elements (Table 10). 215 (40%) were main sample cases and 58 (15%) were boost sample cases.

Table 10

Growing Up in Scotland BC1 Sweep 10: Web and telephone (W7) response to all elements by sample type			
	W7 - all elements		
	Main	Boost	All
COVERAGE & RESPONSE			
Cases issued	538	381	919
Productive cases	215	58	273
% response rate (of covered)	40%	15%	30%

Further, 61 of the 273 productive cases (Table 11) were eligible for an incentive (15% response rate) whereas 212 were not (42% response rate).

Table 11

Growing Up in Scotland BC1 Sweep 10: Web and telephone (W7) response to all elements by incentive eligibility			
	W7 - all elements by incentive eligibility		
	Eligible	Not eligible	All
COVERAGE & RESPONSE			
Cases issued	420	499	919
Productive cases	61	212	273
% response rate (of covered)	15%	42%	30%

Web survey response rate by sample type

Overall, 357 main carers completed their web survey (39% response rate): 269 were main sample cases (50% response rate) whereas 88 were boost (23% response rate) (Table 12).

332 young people completed their web survey (36% response rate): 252 were main sample cases (47% response rate) whereas 80 were boost (21% response rate).

Table 12

Growing Up in Scotland BC1 Sweep 10: W7 web response by sample type			
	W7 - web		
	Main	Boost	All
COVERAGE & RESPONSE			
Cases issued	538	381	919
Productive cases – MC	269	88	357
% response rate (of issued)	50%	23%	39%
Productive cases – YP	252	80	332
% response rate (of issued)	47%	21%	36%

Telephone interview response by sample type

In total, data over the phone were collected for 503 cases (55%): 350 were main sample cases (65% response rate) and 153 were boost sample (40% response rate). For all cases, data were collected from the main carer (Table 13). For 449 cases data were also collected from the young person (89% of achieved sample): 319 main sample and 130 boost sample cases (91% and 85% of achieved respectively).

Table 13

Growing Up in Scotland BC1 Sweep 10: W7 telephone response by sample type			
	W7 - telephone		
	Main	Boost	All
COVERAGE & RESPONSE			
Cases issued	538	381	919
Productive cases	350	153	503
% response rate (of covered - in scope)	65%	40%	55%
Main carer interview achieved	350	153	503
% of productive	100%	100%	100%
Young person interview achieved	319	130	449
% of productive	91%	85%	89%

Unproductive breakdown by sample type

In total, there were 416 unproductive cases from the telephone fieldwork[16]: 188 main sample and 228 boost sample cases (Table 14). Out of these, 174 cases (42% of all unproductive) were non-contact split between 63 main sample (34%) and 111 boost sample cases (49%). A further 119 cases (29% of all unproductive) were refusals including 71 main sample (38%) and 48 (21%) boost sample.

Table 14

Growing Up in Scotland BC1 Sweep 10: W7 telephone breakdown of unproductive cases by sample type			
	W7 - telephone		
	Main	Boost	All
BREAKDOWN OF UNPRODUCTIVES			
Total unproductive	188	228	416
Non-contact	63	111	174
% non-contact (of unproductive cases)	34%	49%	42%
Movers	1	0	1
% movers (of unproductive cases)	1%	0%	0%
Refusals	71	48	119
% refusals (of unproductive cases)	38%	21%	29%
Other	53	69	122
% other (of unproductive cases)	28%	30%	29%
Ineligible	**0**	**0**	**0**

[16] Some cases completed either or both of their online elements.

Data from partners by sample type and mode

The resident partner of the main carer was asked to complete a paper questionnaire. The process used and questions included remained the same across both the face to face and the alternative data collections.

A total of 1680 partner questionnaires were completed, representing 74% of productive cases where the adult respondent had a resident partner (n=2283) (Table 15). 1615 were main sample and 65 were boost sample cases, representing 76% and 41% respectively of productive cases where the adult respondent had a resident partner (n_1=2125 and n_2=158).

Table 15

Growing Up in Scotland BC1 Sweep 10: Partner questionnaires - overall			
	Total SW10 by sample type		
	Main	Boost	All
PARTNER Q'NRE			
No. of eligible cases*	2142	163	2305
Partner questionnaires obtained	1639	66	1705
% partner questionnaires response rate (of eligible)	77%	41%	74%

* No of households with resident partner and productive outcome

Partner interviews (paper)	No. of cases	% of eligible	No. of cases	% of eligible
Total eligible (partner of main carer resident in household)	2305	-	2142	-
Partner interview achieved	1705	74%	1639	77%

Face to Face fieldwork

During the face to face fieldwork, 1508 partner questionnaires were completed, representing 79% of productive cases where the adult respondent had a resident partner (n=1911) (Table 16). This varied between main (n=1471, 80%) and boost cases (n=37, 54%).

Table 16

Growing Up in Scotland BC1 Sweep 10: Partner questionnaire - face-to-face fieldwork			
	Total F2F by sample type		
	Main	Boost	All
PARTNER Q'NRE			
No. of eligible cases*	1843	68	1911
Partner questionnaires obtained	1471	37	1508
% partner questionnaires response rate (of eligible)	80%	54%	79%

* No of households with resident partner and productive outcome

Web and telephone fieldwork

During the web and telephone fieldwork, 197 partner questionnaires were completed, representing 50% of productive cases where the adult respondent had a resident partner (n=394) (Table 17). 168 were main sample cases (56% of eligible cases) and 29 were boost (31% of eligible cases).

Table 17

Growing Up in Scotland BC1 Sweep 10: Partner questionnaires - web and telephone fieldwork (W7)			
	Total W7 by sample type		
	Main	Boost	All
PARTNER Q'NRE			
No. of eligible cases*	299	95	394
Partner questionnaires obtained	168	29	197
% partner questionnaires response rate (of eligible)	56%	31%	50%

* No of households with resident partner and productive outcome