Growing Up in Ireland
National Longitudinal Study of Children

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COHORT '98

Report on Wave Four Pilot for Cohort '98 (Child Cohort) at 20 Years of Age

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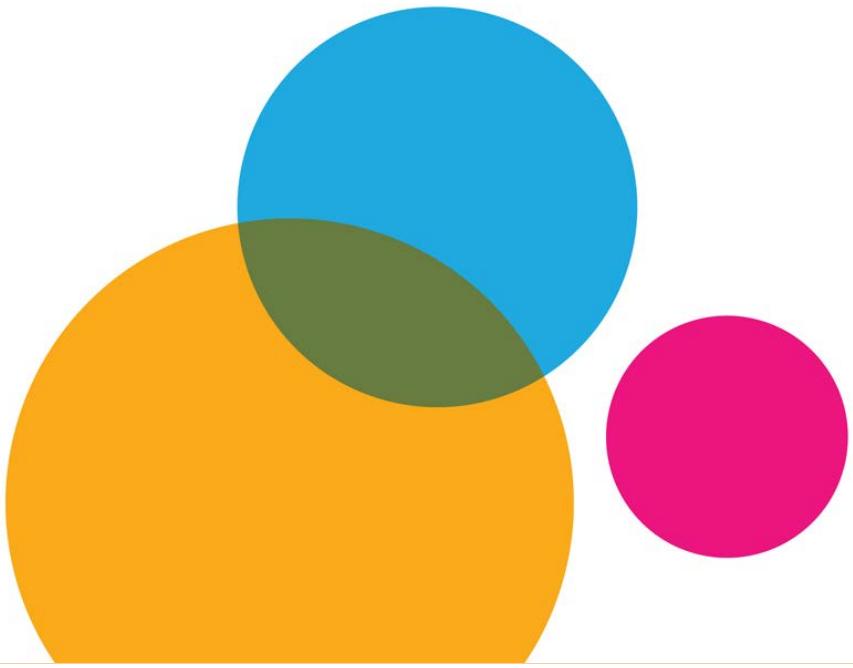


EXECUTIVE SUMMARY

Introduction

This report is a summary of the pilot fieldwork conducted with individuals from the ***Growing Up in Ireland*** Cohort '98 at 20 years of age. A separate set of appendices accompany this report. These contain the information sheets and questionnaires used in the pilot phase. Some technical appendices are added to the end of this document. They cover detailed analyses of the feedback from a 20-year-old focus group, and further technical details of factor analysis conducted on a number of scales. The report is designed to be read in conjunction with these appendices.

Fieldwork scheduling

Pilot phase fieldwork took place between August and December 2017.

Questionnaire development and consultation

Similar to previous waves, development of the procedures and questionnaires for the 20-year-old pilot study required consultation with a number of main stakeholder groups:

- The Scientific Advisory Group (SAG)
- International Advisors - Professors Ingrid Schoon and John Bynner
- A consultative process involving focus groups with 20-year-olds
- A web-based survey of policymakers and members of the Steering Group/Project Team and the Better Outcomes Brighter Futures Steering Group
- A review of feedback from the Department of Children, Equality, Disability, Integration and Youth (DCEDIY) peer review process, including feedback from the Research and Evaluation Unit, DCEDIY international advisors, the steering group, and members of the ***Growing Up in Ireland*** study team.

The pilot sample

The longitudinal pilot sample used in the previous rounds of pilot waves of the GUI was used. This included respondents and non-respondents from previous waves, with the exception of those who had moved outside the country (and so were no longer eligible for inclusion) and those who explicitly requested that they should not be further approached about the study or who strongly refused to participate in a previous round of the survey. In total, 203 20-year-olds and their parents were invited to participate; 125 completed the survey, representing a response rate of 62per cent.

Recruiting the families

Two introductory letters were issued by the Study Team – one to the 20-year-old and one to the Primary Caregiver or 'Parent One' at the previous interview (in most cases, this was the respondent's mother). Each letter contained its respective information sheet (for the 20-year-old and the parent). Both information sheets contained broadly the same information. Consent forms were signed by both the 20-year-old and the parent.

Survey participants

The main informants in the home were:

- The 20-year-old
- One parent/guardian (Ideally Parent One from the previous wave)

Consent and interviewing the 20-year-old respondent alone

Informed consent was gained separately from both the 20-year-old and their parent. As the 20-year-old was now an adult in their own right, the restriction for interviewers on working alone with the young adult was removed. This did not change the overall child protection policy of not being left alone with a minor (such as a younger brother or sister of the 20-year-old) while conducting the surveys.

Survey administration

Interviewing was based in the home of the 20-year-old and his/her parent(s)/guardian(s). The interviews could take place at different addresses, depending on whether or not the 20-year-old lived at the parental address.

The Young Adult completed the following elements:

- Household composition module (if the Young Adult's Main Residential Address was different to his/her parental address) – this covered key information regarding all people residing in the Young Adult's non-parental household (i.e. age, sex, relationship to Young Adult, principal economic status)
- Interviewer administered 'Main Questionnaire' – this included questions on a wide range of topics, including activities, political interests, their locality, health, diet, exercise, education, employment and money
- Self-complete Questionnaire – this included questions relating to more sensitive issues, including friendship, smoking, alcohol and drug use, identity and intimate/sexual relationships, self-esteem, family relationships, mental health, contact with the criminal justice system and internet use
- Cognitive tests (a one-minute 'Fruit-naming' test)
- One-day time-use diary (drop-off by interviewer with a postal return)
- Height and weight
- Blood pressure
- Waist circumference

The parent/guardian completed the following elements:

- Household composition module – this covered key information regarding all people residing in the family household (i.e. age, sex, relationship to Young Adult, principal economic status)
- Main Questionnaire – this included questions about parent's health, family context, parent's employment details and education, household income, their local community, and the 20-year-old's mental well-being

- Self-complete Questionnaire – this questionnaire covered more sensitive topics, including the parent-child relationship, parental marital status and well-being, smoking, drinking and drug use and parent's interaction with the criminal justice system
- Height and weight

Other questionnaires

There were no other participants contributing to this wave of ***Growing Up in Ireland***.

Overview of new topics and major changes post-pilot

The following paragraphs summarise the key action points covered in each chapter of this report, which also provide detail on further, less substantial changes. The content of Chapter 4 has remained consistent with the previous wave so is not covered here.

Chapter 2 – Design and recruitment

Changes for main phase

- Letters to 20-year-olds would be sent in advance of their parents' letters to emphasise the primary role of the Young Adult at this stage
- Mobile phone numbers of 20-year-olds would be issued to interviewers, where available, as part of their contact pack

Chapter 3 – Sample, response rates and questionnaire timings

Changes for main phase

Piloting highlighted the urgent need to reduce the length of the questionnaire, especially for 20-year-olds, to ease the participation burden. Decisions on what items/topics to discontinue were guided by the original 'inclusion criteria' set out in Section 1.4.

Chapter 5 – Young Adult Main Questionnaire

New topics/measures included in pilot

- Basic needs satisfaction
- Political views and whether they voted
- Political activism
- Concern about political and social issues
- Factors that influence success in life
- Risk-taking
- Reasons for hospitalisation through accident or assault
- Knowledge of appropriate calorie intake
- Physical activity changed to adult guidelines
- Questions on motivators and barriers to exercise
- More detail on social media use
- Event history grid
- Participation in post-secondary education even if not completed
- Satisfaction with third-level course
- Expanded employment questions
- Hopes for future
- Self-rated skills
- Expanded questions on own financial situation and financial exchanges with parents
- Advantages and disadvantages to living in parental home

Changes for main phase

- Replace six-item risk-taking scale with a single self-rating
- Removed left/right political question and added 'vote for person not party' option
- Removed abortion as issue given announcement of referendum
- Laminated card to write down health condition
- Simplify questions on social media platforms and use of privacy settings
- Replace list of questions on disability with a more open-ended question
- Expansion of questions on perception of secondary school education to equivalise with 17/18-year phase and to capture the post-leaving-school perspective from everyone
- A question on reasons for choosing particular FE/HE institution was reinserted from the 17/18-year-old questionnaire
- Ask all participants about current paid employment even if their main status was student
- Additional questions on working for a family member or in a family business
- Harmonise as many scales as possible to a 1 to 10 rating to simplify answer options for participants
- Skills for living independently were dropped
- Basic Deprivation scale dropped
- Dropped details on partner's income
- New questions on financial security

Chapter 6 – Young Adult Self-Complete Questionnaire

New topics/measures included in pilot

- Reasons for smoking, drinking, cannabis
- CAGE indicators of addiction
- Gambling
- Detailed questions on relationship with 'significant other
- Knowledge of sexually transmitted illness prevention and fertility during the menstrual cycle
- Experience of pregnancy and how many children wanted
- Being the victim of a crime
- More detail on diagnosis of psychological/psychiatric illnesses
- New bespoke measure on coping strategies
- More detail on nature of contact with Criminal Justice System

Changes for main phase

- Everyday Discrimination Scale dropped
- Updating of drug names to reflect contemporary slang
- Hierarchical question on sexual experience replaced with a single question on whether the young adult had had sexual intercourse
- Added question on bullying
- Additional details on caring responsibilities
- Center for Epidemiologic Studies - Depression Scale replaces Short Moods and Feeling Questionnaire as a depression measure
- Anxiety subscale removed
- Streamlining of list of psychological illnesses
- Barriers to accessing mental health services – new question
- New 'vitality' questions as used in Healthy Ireland survey added
- Refinement of new coping strategies measure
- Hierarchical restructuring of criminal justice system contact questions
- Replacement of anti-social behaviour measure with a new measure of aggressive tendencies
- Additional questions on privacy online and with social media apps

Chapter 7 – Young Adult's Cognitive Assessment, Time-Use Diary & Physical Measurements

New topics/measures included in pilot

- There was a new physical measurement included in the pilot for the first time, which was the waist circumference.

- A new measure of abstract reasoning from the Shipley battery was piloted but it was not continued for the main phase.

Changes for main phase

- Waist circumference measure continued for main phase

Chapter 8 – Parent Main Questionnaire

New topics/measures included in pilot

- For the first time in ***Growing Up in Ireland***, only one parent would be interviewed per young adult (rather than two if resident). The parent interviewed did not have to reside with the 20-year-old.
- New items on parent report of closeness to and disagreements with adult son/daughter
- Political opinions – who they would vote for and 'left' or 'right' leaning
- Financial support to and from the young adult

Changes for main phase

- Laminated card to write down health condition
- Removed question on expectations for education
- Removed disclosure subscale as many items no longer applicable
- Parent to complete questions on their own personality
- Removed left/right political question and added 'vote for person not party' option

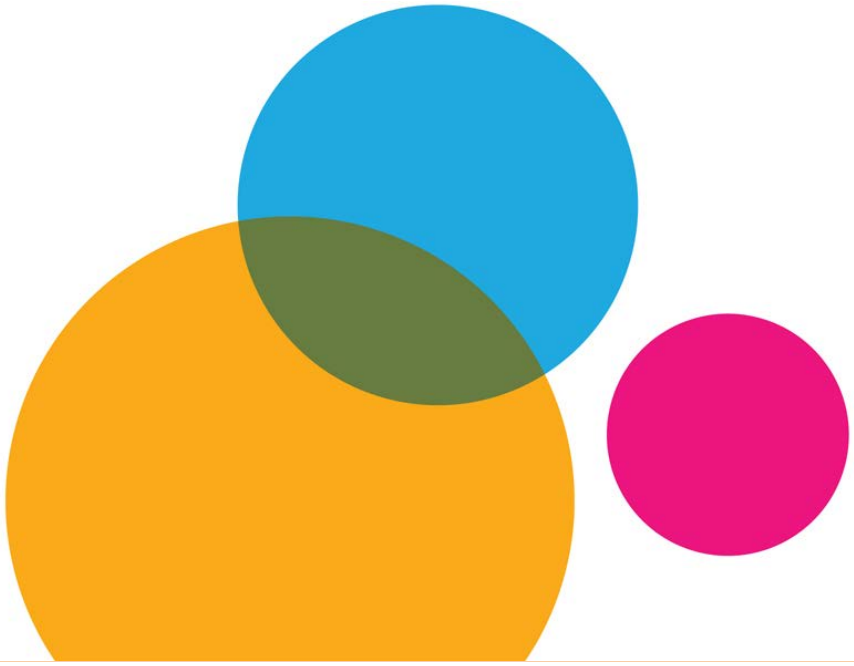
Chapter 9 – Parent Self-Complete Questionnaire

New topics/measures included in pilot

- Parental use of e-cigarettes and vaping
- Relationship with young adult including handling disagreements and satisfaction with aspects of 20-year-old's life

Chapter 1

BACKGROUND TO PILOT PHASE AT 20 YEARS OF AGE



1 BACKGROUND TO PILOT PHASE AT 20 YEARS OF AGE

1.1 INTRODUCTION

Growing Up in Ireland is the national longitudinal study of children and young people in Ireland. The study began in 2006 and follows two groups of children in Ireland, Cohort '98 (most of whom were born in 1998) and Cohort '08 (most of whom were born in 2008). The purpose of the study is to examine the factors which influence the development of children and young adults in Ireland with a view to informing government policies in relation to the young people and their families. The study is led by the Department of Children, Equality, Disability, Integration and Youth (DCEDIY) and conducted by a consortium of researchers in the Economic Social Research Institute (ESRI) and Trinity College Dublin (TCD). The study also provides a key national data resource through which further research can be conducted.

The purpose of this report is to summarise the pilot work which was undertaken with the Cohort '98 pilot sample from August to December 2017. The pilot sample of 214 nine-year-olds was recruited in 2006 from the primary school system. The children (along with their parent(s)/main caregivers and teachers) were interviewed in 2006/2007 at the age of 9 years. They were re-interviewed in 2011, when they were 13 years old. Their school principal (though not their individual teacher) was also interviewed at that time. The sample was interviewed again when the young people were aged 17/18 years in 2015. This report relates to the pilot phase of the fourth round of interviewing when the respondents were 20 years of age.

1.2 STAGES IN CONSULTATION AND PREPARATION BEFORE THE PILOT

- In preparing the procedures and questionnaires for the 20-year-old data sweep, the Study Team undertook substantial consultations with a number of main stakeholder groups as follows:
- The Scientific Advisory Group
- International Advisors - Professors Ingrid Schoon and John Bynner
- A consultative process involving focus groups with 20-year-olds
- A web-based survey of policy-makers and members of the Steering Group/Project Team and the Better Outcomes Brighter Futures Steering Group

1.2.1 SCIENTIFIC ADVISORY GROUP

The Scientific Advisory Group (SAG) is made up of approximately 50 academics and researchers from third-level colleges and institutions within Ireland, as well as several overseas researchers. The initial consultation with members of this group was carried out in November 2016, through a web-based survey. SAG members were asked to rank a series of potential topics for inclusion in the questionnaires for the pilot phase of the study. The topics were grouped around ***Growing Up in Ireland***'s key domains of:

- Health and Physical Development
- Cognitive and Educational Development
- Socio-emotional and Behavioural Development

- Economic and Civic Participation
- Socio-demographic & Economic Context

Participants were asked to rank a large number of potential topics in each domain as being of 'Little or no relevance'; 'Low Priority'; 'Medium Priority'; or 'Top Priority'. They were also invited to suggest new topics for inclusion in the questionnaires.

The highest ranked areas in relation to health and development were general health status; risky behaviours such as smoking/drinking/drug use; mental health issues; sexual behaviour; and physical measurements such as height, weight and blood pressure. For the domain of socio-emotional development and behaviour, the highest priority ratings were given to happiness and life satisfaction; depression and anxiety; experience of adverse life events; and friendship networks/peer relationships. In relation to cognitive and educational outcomes, the SAG clearly indicated that the highest priority should be given to recording academic performance. Ratings for other topics in this domain were more mixed but about half of the respondents also gave issues relating to third-level education a 'top priority' rating: transition to third-level education, details of the course, obstacles associated with accessing third-level education and reasons for leaving. The area of economic and civic participation was expected to be an expanded domain given the age of the now-adult participants. The highest priority in this area was attached to core indicators of advantage/disadvantage such as parental principal economic status, social class and education. After this were measures of deprivation, the young person's numeracy and literacy, family income, and household composition. Among the 'newer' topics with higher ratings were details of the young person's own income, occupation and labour market experience.

Some of the new topics suggested by members of the SAG which were incorporated into the survey included facilitators for exercise, political attitudes and engagement, reasons for choosing a particular college or university, financial support for studies, a full employment/unemployment history (later incorporated as an 'event history' grid since age 17/18 years), and detailed job characteristics such as type of contract.

The web-based survey was followed up in January/February 2017 with a series of emails, bilateral meetings and group meetings with members of the SAG to elaborate their views on the questionnaire content and procedures. These more detailed interactions were also centred on the five main domains considered up to this point in the study. A summary note based on the results of the web-based survey, as well as draft questionnaires and the Study Team's review of literature and relevant studies, was circulated to all participants before the more intensive interactions of January/February. This summary and the draft questionnaires were used as the basis for discussion with SAG members in the main phase of consultation with this group.

The SAG consultation process was extremely successful and resulted in a large volume of input from members. This included views on procedures and protocols; the appropriateness of inclusion of themes and topics in the surveys; and the content of the questionnaires – both top-level content as well as the micro-level detail of individual scales and questions.

1.2.2 THE INTERNATIONAL ADVISORS

Detailed consultation from an early stage of questionnaire development also took place with two international experts (Professors Ingrid Schoon[1] and John Bynner[2]).

An initial briefing document and set of draft questionnaires were forwarded to both advisors in December 2016. Specifically, the International Advisors were asked to provide their feedback to the briefing document on a range of issues, including the following:

- Who should be included as key participants at this round of the project
- In particular, the role of parent(s)/guardian(s) and, if relevant, the intensity of information provided by them
- Substantive issues for inclusion in the questionnaires and other instruments
- Survey implementation, protocols and procedures
- Other issues relevant to the development of the study with 20-year-olds

Very detailed written feedback was provided by both reviewers and was followed by a meeting with the Study Team Management Group (STMG) and research staff at the Study Team's offices in early 2017. A key element of the feedback from the international reviewers was the importance of agency and identity at this stage of the life-course, and the importance of transitions to adult life in work, relationships and independence. This manifested in increased coverage of related areas in the survey questionnaire (such as the basic needs scale, political opinions and activism, self-reported skills, changing relationships with parents, and the event history grid). The international reviewers also emphasised the importance of continuing the shift of data collection from parents to young adults. At age 20, therefore, only one parent was interviewed instead of two (as at previous waves) although the Study Team felt it important to continue with parental participation - given the relatively high proportion of young people who would be still living in the parental home and financially dependent on parents.

The ordering of the young adult questionnaire was also shifted in response to feedback, such that the interview started with the topics likely to be of greater interest to young people such as their attitudes to current affairs. More detailed sections focusing on factual information on health and educational attainment were moved to later in the interview. Many specific suggestions for questions and topics were received from the international reviewers both before and after the piloting process. These included, but were not limited to, the decision to discontinue the detailed measurement of cognitive development, the inclusion of a self-reported personality test for parents, questions on the context and motivations for smoking and drinking, more detailed questions on the young adult's contact with crime and the criminal justice system.

[1] UNIVERSITY COLLEGE LONDON
[2] UNIVERSITY COLLEGE LONDON

1.2.3 THE YOUNG ADULT CONSULTATIVE PROCESS

A consultation process with young adults was also undertaken. This involved a total of four focus groups with 20-year-olds. Participants in the focus groups were recruited from different backgrounds and at a range of 'life-stages' (e.g. in education or in the labour market). Two of the focus groups were recruited from the university student population. One group was participating in a further education course and the members of the fourth group were recruited via an inner-city youth club and were mostly recent entrants to the labour market.

Each focus group was led by two researchers from the Study Team in a room at the location where the participants were recruited from. Participants received a small thank-you gift for their help, a €50 'One4All' gift token.

Each session was audio recorded to facilitate the preparation of written notes. Key themes in relation to procedures included:

- the best way to contact 20-year-olds (e.g. through their parents, via email, phone etc.)
- how they see their parents contributing to the study at this age
- what formats would best engage young adults (e.g. face-to-face versus self-complete)

The discussion in the focus groups revolved around topics including the following:

- political attitudes and activism
- post-primary education and training
- the world of work
- health
- relationships
- expenditure patterns
- use of the internet and social media
- mental health and well-being
- housing / independent living

The issues of primary importance for the young adults which emerged from the focus groups included:

- school as preparation for adult life
- planning for the future
- finances and financial management
- social media and their role in the life of a 20-year-old
- having a family or partnership of one's own
- political awareness, engagement, participation and concerns about global issues
- becoming an adult
- importance or otherwise of community

- the role of sports and hobbies in the life of a 20-year-old
- health and access to healthcare

1.2.4 CONSULTATION WITH POLICY STAKEHOLDERS AND STEERING GROUP/PROJECT TEAM

A pre-pilot consultative process was carried out with policy stakeholders and the Steering Group/Project Team. This involved the participation of members of the Steering Group/Project Team and the Better Outcomes/Brighter Futures Policy Advisory Committee in a web-based survey similar to that completed by the Scientific Advisory Group (SAG). Participants rated the importance of different topics already under consideration and had space to suggest new ones.

While in many aspects, the policy stakeholders were in agreement with the SAG and the international reviewers, they placed greater importance on collecting information that could directly inform policy, especially where such information was unavailable from other sources. For example, the international reviewers had emphasised the longitudinal relevance and usefulness of survey items – and items related to more abstract concepts such as agency which could influence decision-making – whereas policymakers were keen to retain more factual data collection items even where these were largely cross-sectional in nature. Examples of specific items that were retained and/or added at the request of policy stakeholders were the questions on regrets about subjects taken in the Leaving Certificate and attendance at a 'crime prevention talk' given by the Gardaí (Irish police service). Post-pilot, more positively oriented questions on mental well-being (a type of vitality index derived from a Rand questionnaire and used in another national survey of Irish health) were also added at the request of the Steering Group.

1.2.5 CONSULTATION WITH THE RESEARCH ETHICS COMMITTEE (REC)

Detailed consultation and discussions were held with the study's Research Ethics Committee (REC) prior to the pilot phase. This involved very close engagement with all aspects of the operational and substantive issues related to the study including content. In some limited cases, this included the addition of items such as (ultimately) a question on actual diagnosis of a psychiatric or psychological disorder to complement the inclusion of questions on psychotic symptoms at earlier ages.

A key feature of the REC engagement at this particular wave was how to implement the principles of upcoming legislation on decision-making for potentially vulnerable adults, which in practice related to obtaining consent (or otherwise) directly from 20-year-old adult participants (rather than through their parents). The Study Team worked with the REC to establish fieldwork protocols which strived for best practice in the spirit of the forthcoming guidelines while recognising the practical aspects of voluntary participation in a home-based survey. On the ground, this meant continuing with the protocols established at previous waves of getting informed consent from the Child/Young Adult participant independently of the parent or guardian. However, at this wave the now-adult participant could take part in the survey even if their parent declined and interviewers were encouraged to make every effort to speak directly to the 20-year-old about participation in circumstances where the parent/guardian initially declined on their behalf. Decisions in relation to potentially vulnerable adults were made on a case-by-

case basis but could, should the need arise, have included options such as partial completion of the interview subject to the Young Adult's capacity or adapted explanation of the material in the information and consent pack.

1.3 CONCEPTUAL FRAMEWORK

A broadly-based bio-ecological model has been the lynchpin of the conceptual framework underlying ***Growing Up in Ireland*** since its inception. This has provided the overall analytical framework for considering the variety of contexts in which the Child/Young Person/Young Adult grows and develops. With the transition of participants over the course of Phase 2 into adulthood (17-20 years), the application of Bronfenbrenner's bio-ecological model benefitted the theoretical understanding of this wave, in that it provided insights from perspectives specifically focused on the transition to adulthood (Bronfenbrenner & Morris, 2006). These reflect the increased agency of participants in directing their own development, and interactions with organisations and individuals within, and beyond, the microsystem. Furthermore, as the participants have grown older, the composition of the 'systems' has changed: for example, the role of parents and school in the microsystem is increasingly replaced by friends, peers, partners, employers and college.

At the broader macro-level, the 20-year-old cohort members are affected by government policies in relation to third-level education or vocational training, employment, social welfare and housing. They have more direct interaction with State institutions and more power to bring about change in the macro situation through voting patterns and engagement with the political process. Internationally, the 20-year-olds are more directly affected by world events, migration, opportunities for working overseas, and the evolution of the global economy and global policies.

The information recorded in the course of the interviews reflects these changing influences on the worlds of the cohort in ***Growing Up in Ireland***. A great deal of this information was new as it had not been recorded in previous rounds of the study. In all, data were collected in four main outcome domains in the course of the pilot phase of the study, to reflect the bio-ecological model set out by Bronfenbrenner and others.

Growing Up in Ireland focused on three principal outcome domains in the Child/Young Adult's life at 9 and 13 years of age, adding a fourth at 17/18 years, as follows:

1. Health and physical development
2. Socio-emotional/behavioural
3. Cognitive/academic performance
4. Economic and civic participation (added at 17/18 years of age): this domain has been substantially expanded at 20 years of age to include issues such as:
    - political consciousness, social awareness, attitudes, beliefs and participation
    - expenditure patterns, management of own resources and financial decision-making

- transitions and pathways to adulthood, as well as aspirations and goals for adulthood
- pathways to a long-term, sustainable career
- awareness of and sources of information on news and current events
- socialising with peer and other groups
- development of social competence

In addition to what may be considered above as 'outcome' domains, a substantial degree of background socio-demographic and contextual information was recorded at each round of interviewing. Such contextual information is important for understanding the correlates, drivers and processes underlying the Young Adult's development and trajectories.

1.4 ISSUES AND PRINCIPLES IN DEVELOPING INSTRUMENTS AND PROCEDURES

Age-appropriate longitudinal consistency across the four waves of data collection is clearly a key consideration in the development and revision of the questionnaires, measures and procedures, both before and after the pilot phase. As far as possible, the Study Team has attempted to ensure that the information recorded at 20 years of age is consistent with that recorded in interviews when the children were 9 years, 13 years and 17/18 years of age. There are more challenges in implementing this principle at this stage of the study than in previous waves of data collection as, by definition, the Young Adults are moving into a very different and new phase of their lives. As new issues assume an increasing role in their lives it is important to introduce new concepts, topics, scales and questions. Additionally, this phase was one in which it was necessary to transition from child/adolescent-appropriate measures to more adult-appropriate ones to set up future longitudinal consistency. For these reasons there is a somewhat lower level of inter-wave consistency than was previously evident in the study.

As in earlier rounds of the study, the following criteria were considered when evaluating potential topics, questions and scales:

- Importance: are there scientific grounds for believing that the measure in question exerts a substantial influence on, or is an outcome of, one or more of the dimensions of the development or well-being of the 20-year-old and beyond? In applying this criterion, it is, of course, important not to exclude innovative ideas which may lead to hitherto unidentified scientific findings.
- Measurability: can the characteristic be validly, reliably and ethically measured using the methods of large-scale survey research adopted in ***Growing Up in Ireland***? Such measures need to be acceptable to respondents and not adversely impact on response in the current wave or attrition in subsequent waves.
- Longitudinal relevance and consistency: does the measure have a longitudinal or dynamic character which can be consistently measured over time?
- Policy relevance: is the measure susceptible to or actionable through public policy?
- Prevalence and variance: is the measure sufficiently prevalent in the population to yield an analysable level of variance in the available samples?

- Added value: does the measure relate to influences on the development of the 20-year-old that are inadequately covered by other research?
- Time efficiency: does the measure take as little interview time as possible, taking account of its relative importance, requirement for robust measurement and potential return?
- International use: has the measure been successfully used in research in comparable studies in other countries?
- Use in Ireland: has the measure been successfully used in previous research in Ireland?

The criteria above have been used both at pre- and post-pilot stages to develop and revise the questionnaires proposed for use with the 20-year-olds. Given the number of new topics suggested through the consultation process, it was always considered likely that the pilot interviews would be longer than would be feasible in the main phase of the study. In considering whether items were retained for the main phase, the potential burden for the respondent, and its impact on response rates, was considered in conjunction with the nine criteria outlined above.

1.5 INTERVIEWER TRAINING

All interviewers working on the pilot were experienced in preceding waves of the ***Growing Up in Ireland*** study. Where possible, interviewers were assigned to families they had previously visited. Each interviewer underwent three days of training and included the following modules:

- Background and objectives of the study – origins, funding, objectives etc. focusing, in particular, on how this phase of the study differed from previous phases.
- Detailed review of the content of all questionnaires – this aspect involved a general discussion of each questionnaire as well as a detailed discussion of each individual question on each questionnaire.
- CAPI (computer assisted personal interview) – this involved taking the interviewers through all sections, all questions, on the CAPI instruments and ensuring that they were fully familiar with the software and functionality of the two laptops used in the home.
- Role-play on CAPI – interviewers were paired off to administer sections of the instruments to their partner. In the course of these role-play sessions, the trainers observed and assessed the interviewer's performance.
- Field procedures – this module included a review of all field procedures, from initial contact with the family to final disengagement, emphasising throughout the need to leave a very professional impression with the respondents.
- Physical measurements– this module focused on the physical measurements of the 20-year-old and his/her parent – height, weight, blood pressure/heart rate and waist circumference; the latter two for the Young Adult only. It addressed practical issues on using the equipment, advising on how to position the respondent for the measurements and how and where to set up the weighing scales, height sticks and blood pressure monitors.
- Child welfare and protection guidelines – largely based on the training provided to the Study Team by the Irish Society for Prevention of Cruelty to Children (ISPCC) and other agencies. It principally focused on the identification and assessment of risk in relation to child protection/welfare concerns, along with reporting protocols for the study.

- Central Statistics Office (CSO) presentation on issues associated with the Statistics Act, 1993 (Government of Ireland, 1993). This module was based on a set of slides provided to the Study Team by the CSO.
- Ethics - this module covered the main ethical issues involved in work of this nature, in particular in relation to some of the more sensitive items included on the sensitive questionnaires.
- General interviewing practice, with emphasis on the context of families – this included a review of general best practice in interviewing with families and young adults.
- Summary of other documentation used in the administration of the survey – this module looked at completing the Work Assignment Sheet and other administrative documents involved in carrying out the work.

Following each training session, all interviewers were assessed according to a standard set of criteria (including a competency test on the laptop). Notwithstanding prior experience on the project, only interviewers who were assessed at the end of training and deemed to have an acceptable standard were assigned work on the Pilot (or any phase of the project). The assessment criteria used were:

- Understanding of the interview process and procedure
- Competence with the laptop, including an accuracy test
- Communications and interpersonal skills
- Attendance at training

In addition to clearance by An Garda Síochana and appointment as Officers of Statistics by the Central Statistics Office, all interviewers working on the project were required to provide:

- Two recent references – which were checked by phone by ESRI staff
- A declaration of appropriate health and fitness signed and stamped by their GP
- Confirmation of Class 2 car insurance on their motor policy
- A copy of a current valid driving licence

1.6 DATA CAPTURE AND TRANSFER

As in previous rounds of the study, the surveys which were completed in the pilot were administered by Computer Assisted Personal Interview (CAPI) and Computer Assisted Self-Completion interview (CASI). The interviews were programmed in BLAISE (Westat, 2018). The CAPI interviews were administered on a face-to-face basis by the interviewer. The CASI were self-completed by the respondent on the laptop.

All interviewers working on the pilot phase had two laptops in the home – one to administer the 20-year-old's questionnaires (Main and Self-complete) and the other to administer the parent's questionnaires. This allowed some components to run in parallel and so reduced the overall time in the family home.

All questionnaires were identified in the pilot (as in previous waves of the study) only by an anonymised numeric code. No contact details or surnames appeared on completed questionnaires.[3]

The BLAISE program for each questionnaire was developed in such a way that it was 'locked down' on completion. Once a questionnaire was 'locked down' neither the interviewer nor any third party was able to access it in the field. This was particularly important in a situation in which the laptops were used to complete both CAPI and CASI (self-completion) interviews by other respondents.

All laptops used in the course of fieldwork had 256-bit hard drive encryption, had password protected boot up and needed username and password credentials to log on. Interviewers were designated as users with no ability to install/uninstall additional programs or to attach additional devices such as USB drives, which were disabled for all of these devices. All laptops were configured only to: (a) run the BLAISE applications for the various questionnaires; (b) download (from Head Office) data from previous rounds of the study (forward feed of data) and upload questionnaires completed in the current round of the study; and (c) allow remote deletion from Head Office of completed questionnaires from the laptop. This meant that only a minimum amount of completed questionnaires or other work was on field laptops at any given time.

The IT communications system used for upload and download of data is dedicated for use only by ***Growing Up in Ireland*** interviewers. All data which are uploaded or downloaded are in encrypted ASCII format. In transfer, the files are encrypted strings of numbers, with no interpretable structure. The data are transferred across a secure virtual private network (VPN) system which is accessible only by the specified laptops which are being used in the study.

1.7 STRUCTURE OF THIS REPORT

The purpose of this report is to describe the pilot with the 20-year-olds and outline how the results of this process influenced decisions in relation to the main phase of interviewing with the Young Adults in the national roll-out of this wave. The text of all draft questionnaires, information sheets and Consent Sheets which were used in the pilot are contained in a separately bound set of appendices (Appendices A and B).

This report is divided into 8 subsequent chapters as follows:

Chapter Two: Design, Recruitment and 20-year-old's Main Address

Chapter Three: The Sample, Response Rates and Questionnaire Timings

Chapter Four: Household Structure

[3] First names (not surnames) will be entered by the interviewer on the household register section of the questionnaire. These are used within subsequent sections of the survey when referring to the Young Adult at the centre of the study, to ensure the integrity of the data being recorded, i.e. that the respondent is providing information in respect of the correct person in the household. This is particularly important when recording details on intra-household relationships.

Chapter Five: Young Adult Main Questionnaire

Chapter Six: Young Adult Self-Complete Questionnaire

Chapter Seven: Young Adult's Cognitive Assessment, Time-Use Diary and Physical Measurements

Chapter Eight: Parent Main Questionnaire

Chapter Nine: Parent Self-Complete Questionnaire

Chapter Ten: Summary

Each chapter referring to a questionnaire outlines how the various instruments in the questionnaire performed in the pilot, describing the time taken and respondent burden, some preliminary trends in the data where appropriate, and quoting initial psychometric properties of the data. As this is a pilot study, the relatively small sample is not amenable to a multivariate analysis. The purpose of describing the psychometrics of the various instruments is to show how well they performed at the pilot and to provide empirical data as a background for any suggested changes for the main phase of fieldwork.

Final versions of questionnaires used in the main phase of research are available at the ***Growing Up in Ireland*** website: www.growingup.ie

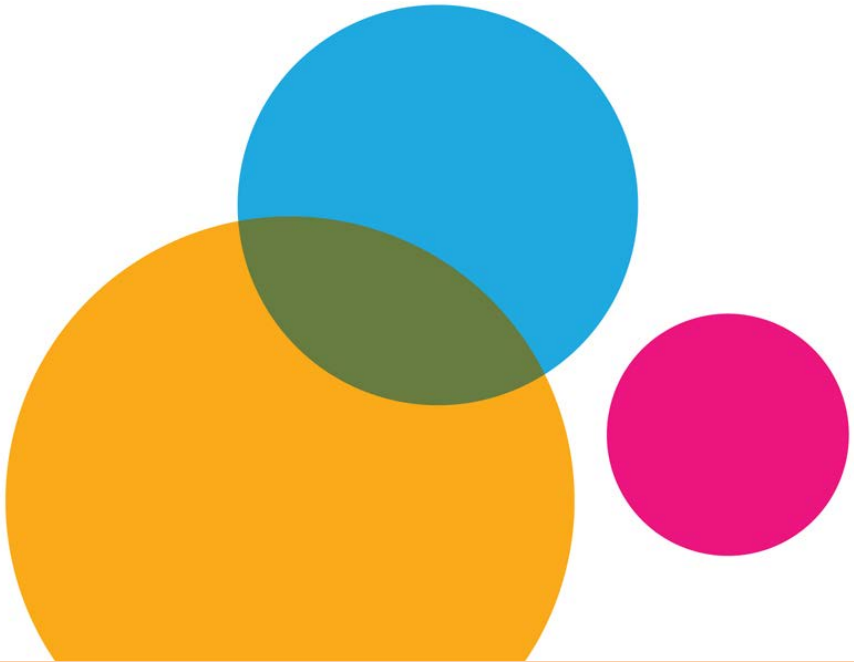
1.8 STAGES IN CONSULTATION AND REVISION AFTER THE PILOT

There were a number of components to the consultative process following the pilot phase of fieldwork. These included:

- Consultation with the participants of the pilot: a focus group was held with six 20-year-olds who had taken part in the pilot survey itself, considering the content of the survey as well as the operational and other procedures. The issues which emerged from the survey are outlined where relevant in the chapters related to the 20-year-old Main and Self-Complete Questionnaires (Chapters 5 & 6), as well as the sections on Physical Measurements (Chapter 7). A further brief report on the focus group is attached as Technical Appendix 2.
- De-briefing of interviewers working on the pilot phase: The Study Team held a de-briefing of the interviewers who worked on this pilot phase. The discussion centred on the content of the questionnaires, identifying areas or issues which respondents found difficult to understand or which they expressed concerns about, as well as its implementation: contacting and recruiting the participants, and securing signed consent. This de-briefing was coupled with an online feedback survey and the issues which emerged from the survey are discussed in detail across the document.
- Consultation with the International Experts: Professors Bynner and Schoon provided very detailed and helpful comments on the results of the pilot, especially around the 20-year-old interviews. Their recommendations and advice are reflected throughout the chapters on the individual questionnaires below.

Chapter 2

DESIGN, RECRUITMENT AND 20-YEAR-OLD'S MAIN ADDRESS



2 DESIGN, RECRUITMENT AND 20-YEAR-OLD'S MAIN ADDRESS

2.1 INTRODUCTION

This chapter briefly outlines the main aspects of the design, including approaching and recruiting the 20-year-olds into this phase of the study, the questionnaires administered to the two main informants, and the training provided to all interviewers prior to fieldwork in the pilot.

2.2 INFORMANTS, QUESTIONNAIRES AND MEASUREMENTS

In Ireland a much higher proportion of 20-year-olds live in their parental home relative, for example, to Britain, Mainland Europe or North America. On average, young people in Ireland remain in the family home until the age of 26.3 years. This is very close to the EU average of 26, but young adults from countries such as Sweden and Denmark leave their parental home at a much earlier age (21) in contrast to Mediterranean countries where the age is much higher (29 - 32) (Eurostat, 2020). Potentially this could mean that a 20-year-old in Ireland maintains a relatively higher level of financial and emotional dependency on their parent(s)/guardian(s) than their counterparts in some other countries (although parental support may obviously continue after the young adult leaves home too). For this reason, the Study Team recommended that one parent would be interviewed as well as the cohort members; but not both of the parent(s)/guardian(s) as in previous rounds of the study. This approach was adopted in the pilot phase and subsequently recommended for the main phase of interviewing.

When developing the design for the 20-year phase of the project, the Study Team considered whether it should attempt to interview the co-habiting partner of the 20-year-old. The prevalence of co-habitation at 20 years of age is relatively low, with estimates from the Irish Census of 2011 indicating that just 5 per cent of 20-year-olds lived in their 'own' family unit (see Table 2.1 later). On balance, it was felt that it would be preferable to record information on romantic relationships (be they co-habiting or otherwise) in the 20-year-old's self-complete questionnaire, rather than trying to interview a partner in his/her own right.

The main questionnaires and other instruments completed by the 20-year-old and his/her parent were:

Young Adult:

- Main Questionnaire – administered by interviewer on a laptop
- Self-complete Questionnaire – completed by respondent on a laptop
- Cognitive Ability Tests:
- Shipley 2, Abstraction test - split sample: half completed on paper and half on a laptop
- Fruit Naming' Test – all recorded on paper

- Measurements:
- Height
- Weight
- Blood pressure
- Waist circumference
- A one-day time-use diary – left by interviewer for self-completion on a designated day for return in the post

Parent/Guardian:

- Main Questionnaire – administered by interviewer on a laptop
- Self-complete questionnaire – completed by respondent on a laptop
- Measurements:
- Height
- Weight

The main questionnaires of both the 20-year-old and his/her parent were administered by the interviewer on a laptop. The self-complete questionnaires were filled out on a laptop by the respondents in question.[4]

The 20-year-old completed two cognitive tests – the Fruit Naming Test and the Shipley-2 Abstraction test. The answers to the Fruit Naming Test were recorded by the interviewer on paper as the respondent called them out. They were also audio-recorded on a digital voice recorder, used to check the paper-based record after the interview.

The Shipley-2 abstraction test was originally designed to be completed by the respondent on paper. The Study Team secured permission from the test developer to use a split sample in the pilot to test the feasibility of administering the test on a CASI basis with the respondent filling it out directly on the laptop. A split sample design was used in the pilot to assess whether mode effects were apparent in the results. One concern in relation to the screen presentation was that such individuals would only see one item at a time, and this might influence how long they spent on each. In comparison, paper participants could get an overview of all upcoming items. To mitigate this potential disparity, those who filled it out on a laptop were provided with a laminated copy of the full test to view (on paper) even though answers were entered on the laptop. This was simply a laminated copy of the paper test given to the other half of the split sample. (The results of the cognitive tests are described in full in Chapter 7 below).

[4] AS NOTED IN CHAPTER 1, EACH INTERVIEWER WAS ISSUED WITH TWO LAPTOPS FOR INTERVIEWING IN THE HOME

Medically approved measuring equipment (stadiometer, analogue weighing scales, mobile blood pressure monitor and waist measuring tape) were used to record all the physical measurements in the pilot.

2.2.1 RECOMMENDATIONS AND CHANGES FOR MAIN PHASE

The Study Team recommended that the respondents in the main phase of the study would be the 20-year-old cohort member and one of his/her parents (the primary caregiver). The Study Team also recommended that the CAPI and CASI methods of delivering the questionnaires be continued. Furthermore, the Study Team recommended that the methodology of recording the physical measurements be continued. Ultimately it was decided to continue only the semantic fluency (fruit naming) as a method of cognitive testing. There were a number of recommendations for changes to individual questionnaires, which are discussed in more detail in the relevant chapters below.

2.3 RECRUITING THE FAMILIES

2.3.1 APPROACHING THE FAMILIES

The 20-year pilot was the first time that all the cohort members (i.e. the original Study Children) were the primary respondents interviewed as adults in their own right. With the age of majority comes a substantial re-focusing of the project on the young adult (the 20-year-old), with his/her parent/guardian as an ancillary or secondary respondent.

The first point of contact with the 20-year-old was in all cases the address at which s/he was interviewed in the previous round of the study at 17/18 years of age[5]. The Study Team sent a covering letter and information leaflet to both the Young Adult and the Parent on the same date under two separate mailings. Although very similar in content, there were slight differences between them. Sending these separately to both parties indicated the attempt to balance the respect due to the 20-year-old as the main respondent in the study with a level of courtesy shown to the parent.

Following the two letters to the 20-year-old and his/her parent, an interviewer paid a first personal visit to the 20-year-old's last known postal address (in almost all cases the parental home). This was done with a view to securing consent (and the completed interview) or the current address of the 20-year-old if s/he was no longer resident in the parental home.

[5] EXCEPTIONS TO THIS WOULD BE SITUATIONS WHERE THE STUDY TEAM BECAME AWARE OF A CHANGE OF ADDRESS SINCE THE INTERVIEW AT 17/18 YEARS OF AGE, POSSIBLY THROUGH RECEIPT OF A 'CHANGE OF ADDRESS' CARD FROM THE FAMILY OR YOUNG PERSON FROM THE 17/18-YEAR INTERVIEW.

2.3.2 THE CONSENTING PROCESS

The interviewer secured signed consent from both the 20-year-old and the parent respondent before their respective interviews began. When the interviewer visited the family home, s/he went through the information sheet with both the 20-year-old and the parent respondent. Copies of the information sheets used in the pilot are enclosed in Appendix A. From these, one can see that the information sheet to both 20-year-old and parent contain the following details:

- Reminder that the previous visit took place when the young adult was 17/18 years of age
- The purpose of the study
- The funders of the study
- Why the family should take part in the study
- Who is involved in running and implementing the study
- What participation in the study involves
- Issues around confidentiality of the information recorded
- The type of questions asked
- The possibility of following up with a subsequent round of interviewing in a few years' time
- Who the interviewers are and how the family can verify an interviewer's identity
- Contact details for the project and Study Team

The consent forms completed by the 20-year-old and the parent respondent were very similar and copies of those used in the pilot are enclosed in Appendix A.

The Study Team notes that for the first time in the ***Growing Up in Ireland*** project the interviewer was permitted to be alone with the central respondent – the 20-year-old – who was now an adult. The interviewer was, as usual in the project, still instructed not to be alone with a minor in any respondent's home in the course of fieldwork. Although the interviewer could be alone with the 20-year-old or parent respondents, all other aspects of child protection which have been a central part of ***Growing Up in Ireland*** since its inception were implemented.

2.3.3 RECOMMENDATIONS FOR MAIN PHASE

The Study Team recommended that the approach to recruiting and consenting developed over the pilot study should be largely carried through to the main phase of fieldwork. There would, however, be a slight shift in focus towards the 20-year-old in the first contact: this would involve issuing the letter to the 20-year-old a few days before the one to his/her parent. As mobile phone numbers were available for most of the 20-year-olds from the previous wave of data, these will also be issued to the interviewers, with a view to directly contacting the

Young Adult and to facilitate scheduling interviews with parents and young adults independently, where necessary.

2.4 THE 20-YEAR-OLD'S MAIN RESIDENTIAL ADDRESS AND TEMPORARY/PART-TIME ADDRESSES

When the interviewer called to the last known address for the 20-year-old, s/he determined whether the parental address was the young adult's 'Main Residential Address'. At 17/18 years of age, almost all young adults were still resident in the parental home and were largely dependent on their parent(s)/guardian(s), especially financially. Table 2.1 presents a breakdown (from the 2011 Census of Population) of 20-year-olds, according to whether or not 20-year-olds are living with their parent(s).

From this table, one can see that there was a rounded total of just over 62,000 20-year-olds recorded in the 2011 Census. Approximately 5 per cent lived in their own family unit (separate from their parental home) with a spouse/partner and (possibly) a child or children. A further 15 per cent lived outside the family home (but not as a family unit with a spouse or partner). These are principally 20-year-olds living alone or sharing houses, flats or other types of accommodation – the latter mostly with non-relatives.

Table 2.1: 20-year-olds in 2011 Census of Population classified by household type*

Household type	Percent of 20-year-olds
Own family unit/not in parental home	5.4%
Not own family unit/ not in parental home	14.7%
Parental home	75.5%
Living with other relatives	2.9%
Other	1.6%
TOTAL	100%
(N)	(62,200)

***Figures provided by the CSO by special request.**

With this context in mind, the interviewer first determined whether the address which the Study Team had for the 20-year-old was their 'Main Residential Address' or whether s/he had moved out of the parental home, to another address. In addition, details were recorded on whether the 20-year-old had an alternative 'temporary' address at which they spent some, but not all of their time. This latter might be a term-time address used by the 20-year-old when at college or a temporary address when working away from home.

Table 2.2: 20-year-olds in the pilot survey classified by parent report on whether or not their parental address is their 'Main Residential Address' or they have a part-time/temporary address

	Percent of 20-year-olds
Parental address is Main Address, with NO Part-time/temporary address	70%
20-year-old has a separate Main Address	<5%
Parental address is Main Address, but 20-year-old HAS a Part-time / temporary address	26%
TOTAL (n)	100% (116)

Nearly one-third of 20-year-olds were identified by their parent as having an additional address, separate from the parental home; but the vast majority of these represented temporary/part-time addresses rather than the 20-year-old having left the family address entirely. For those with another address, the number of nights spent in the parental home on an average month varied considerably from as little as one or two to as much as 11+. The most common type of non-parental accommodation was a house/flat-sharing arrangement.

Where the 20-year-old with a separate address lived some distance from the original parental home, he/she was offered the possibility of being interviewed at the separate address by another interviewer.

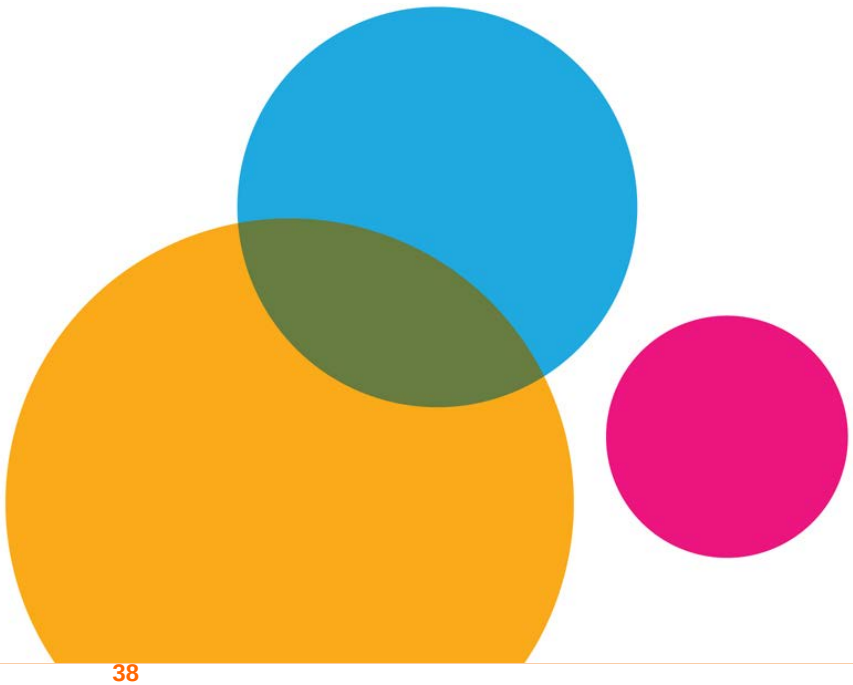
2.4.1 RECOMMENDATIONS FOR MAIN PHASE

The policy of recording whether or not the Parental address is the 20-year-old's Main Residential Address and whether or not s/he has a temporary/part-time address was recommended for continuation into the Main Phase of fieldwork. As noted above, mobile phone numbers were available for most of the 20-year-olds and would be issued to interviewers on their Work Sheets, enabling them to directly contact the young adult if they had difficulty meeting them on a visit to the parental home.

Accurately establishing the best place to conduct the 20-year-old's interview is essential to maximising the completion rate in the main study phase at Wave 4. These procedures have been linked with a view to making best use of the geographical spread of the fieldworkers to support the logistics of those participants living outside the family home.

Chapter 3

THE SAMPLE, RESPONSE RATES AND QUESTIONNAIRE TIMINGS



3 THE SAMPLE, RESPONSE RATES AND QUESTIONNAIRE TIMINGS

3.1 INTRODUCTION

This chapter considers the sample used in the pilot study, response rates and the timings of the questionnaires and other instruments (cognitive tests and measurements) for both the 20-year-old and his/her parent.

3.2 THE PILOT SAMPLE

As noted in Chapter 1 the pilot sample was longitudinal – it has been used in the 9-year, 13-year and 17/18-year phases of the study.

As in earlier rounds, the sample to be approached included not only those who participated in the 17/18 year-round of the study but also (most of) those who had participated at any time since recruitment into the original pilot sample in 2006/2007; regardless of their participation in subsequent waves. This means, for example, the inclusion of some respondents in Wave 4 (at 20 years of age) who refused or otherwise did not participate (for whatever reason) in Wave 3 (at 17/18 years).

Respondents who gave a very strong or definitive refusal at a previous wave were excluded from the sample going forward. Similarly, those families who had moved outside the State and were known to be no longer resident in Ireland were excluded.

The target sample was broken down as outlined in Table 3.1, based on their response histories in previous waves.

Table 3.1: Response patterns in pilot sample at 20 years of age (Wave 4 pilot)

9 year	13 years	17/18 years	N to approach at 20 years
Yes	Yes	Yes	139
Yes	No	Yes	*
Yes	Yes	No	34
Yes	No	No	*
		TOTAL	203

***Small cell sizes have been redacted in this table.**

A total of 203 respondents were assigned to interviewers, 147 of whom participated at 17/18 years of age, the remaining 64 of whom did not (for whatever reason). The reader should note that a small number of the 147 who participated at 17/18 years of age did not participate in the earlier wave of interviewing at 13 years. These figures excluded those who were now out of scope (no longer living in Ireland) or who had definitively requested that they be removed from the database.

3.2.1 RECOMMENDATIONS FOR MAIN PHASE

The Study Team recommended that the same policy regarding sample composition be adopted in the main phase of fieldwork, i.e. that the non-respondents of previous waves be included in the target sample issued to participants, unless there is a clear and compelling reason not to include a particular family.

3.2.2 RESPONSE RATES

Response rates at Wave 4 (20 years) in the pilot are outlined in Table 3.2. Approximately 70 per cent of families provided at least partial data at the pilot stage of wave 4. Complete data was available from circa 62 per cent of the families in the pilot sample. Complete cases required data from both a parent and the 20-year-old, and just under 10 per cent of families approached resulted in partial cases where either caregiver or 20-year-old data were not obtained in full. There were very few hard refusals at this stage of the study, so both hard and soft refusals were combined to give a combined refusal rate of approximately 24 per cent. Conversion of partial or full refusals was outside the scope of the pilot.

Table 3.2: Response rates in pilot sample at 20 years of age (Wave 4 pilot)

Status	Percent
Percent Invited to participate (n)	100% (203)
Completed	61.6%
Partial	<10%
Refusal	23.6%
Other	<10%%

The rate of refusal and partial data was higher than in previous waves of ***Growing Up in Ireland*** and was largely thought to reflect the busy lives of the 20-year-olds at this wave. On the whole, the retention rate at this phase of the study is within the rather broad range observed across comparable studies such as Next Steps in England which recorded a 54 per cent participation rate at age 20 (Anders, 2012), the 1997 cohort of the National Longitudinal Survey of Youth in the United States which recorded an 82 per cent participation rate for 19- to 24-year-olds (Moore, Pedlow, Krishnamurty, & Wolter, 2000), Young Lives in Ethiopia, India, Peru, and Vietnam, which recorded an 87 per cent participation rate for 22-year-olds (Outes-Leon & Dercon, 2009), and the ALSPAC study which refers to a retention rate of just under 40 per cent for 18-year-olds (Boyd et al., 2013)

The beginning of Section 3.2 discussed the varying paths of participation that are possible in ***Growing Up in Ireland***. The 17/18-year pilot report at Wave 3 previously noted that there was lower participation among those who had not completed all waves to this point (Williams, Murray, Thornton, O' Mahony, & Neary, 2018).

3.2.3 RECOMMENDATIONS FOR MAIN PHASE.

Though the sample appeared more difficult to reach at this wave when compared to previous waves of the study, the pilot recruitment window did not allow for the possibility of refusal conversion or of scheduling appointments around term-time or holidays. On this basis, the Study Team recommended maintaining the current recruitment and refusal conversion policies, as they were expected to be more successful in the main phase. Fieldworker training and field office procedures were updated to allow for the efficient hand-over of information about the 20-year-old for cases where they were living in a different geographical area to the parent respondent.

3.3 QUESTIONNAIRE TIMINGS

Table 3.3 summarises the total timings for both the 20-year-old and parent respondent in the pilot. The figures for the questionnaires were automatically recorded by the CAPI programme and taken from the laptops. Those for recruitment, consents and measurements are based on interviewer notes and estimates.

Overall, the 20-year-old's interview took an estimated 97 minutes. This included 18 minutes for the two cognitive tests - the Fruit Naming (4 minutes) and Shipley abstraction (14 minutes) tests - as well as 5 minutes for recruitment, explanation of the information sheet and consenting. The average time for the parent interview was approximately 45 minutes.

Table 3.3: Average timings for 20-year-old and parent interview in the pilot phase

	20-year-old	Average Minutes	Parent	Average Minutes
Block 1	Recruitment and Consent	5.0	Recruitment and Consent	5.0
Block 2	'Fruit Naming' test	4.0		
Block 3	Shipley-2 abstraction test	13.8	Household grid	7.3
			Main Questionnaire	17.4
			Measurements	4.0
Block 4	Main Questionnaire	46.9	Self-complete Questionnaire	10.9
Block 5	Self-complete Questionnaire	22.0		
	Measurements	5.0		
	GRAND TOTAL 20-YEAR-OLD	96.7	GRAND TOTAL PARENT	44.6

Having two laptops meant that some of the work could be carried out in parallel, so that the interviewer's time in the household was typically less than the total of 142 minutes, the sum of times for the 20-year-old and his/her parent. If the interviewer were to parallel the

components in the most efficient way feasible, the actual time in the household reduces from 142 minutes to approximately 111 minutes.

Supplemental information on timings within the 20-year-old's Main and Self-complete Questionnaires are included in Tables 3.4 and 3.5 below. Headline figures, including cognitive test timing, should be taken from Figure 3.3 above.

3.3.1 RECOMMENDATIONS FOR MAIN PHASE.

Feedback from pilot participants and experienced interviewers indicated that the time taken to complete all the questionnaires and other instruments in the home visit presented a significant time-burden to the 20-year-old and his/her parent. The Study Team recommended a reduction in the overall length of the instrumentation to shorten the participation time. This is particularly important in a longitudinal study where a heavy burden in one wave may negatively affect response rates and attrition levels in subsequent rounds. The specific changes to each questionnaire and test are outlined in Chapters 5 to 9 below.

Table 3.4: Section timings for interviewer administered Pilot 20-year-old Main Questionnaire

MAIN QUESTIONNAIRE		Minutes	
		Mean	Median
Section A	Activities, Identity and Becoming an Adult	13.3	12.5
Section B	Political Activism and Civic Participation	6.2	6
Section C	Perception of Locality	1.0	1
Section D	Young Adult's Health	5.1	4
Section E	Diet and Exercise	4.1	4
Section F	School	4.2	4
Section G	Current Status/Event Status History Grid	1.3	1
Section H (H1/H2/H3)	Further/Higher Education or Training	5.2	5
(no Section I)			
Section J	Attitudes to Work and Perceived Skills	4	5
Section K	Income and Expenditure	10.3	12.5
	TOTAL ABOVE	46.9	

Table 3.5: Section timings for the Pilot 20-year-old Self-complete Questionnaire

SELF-COMPLETE QUESTIONNAIRE		Minutes	
		Mean	Median
Section A	Friendship Networks and Discrimination	2.5	2.0
Section B	Smoking, Alcohol and Drugs	5.6	5.0
Section C	Gender Identity and Intimate Relationships	1.0	1.0
Section D	Sexual Experiences	1.2	1.0
Section E	Pregnancy and Outcomes	0.1	0.1
Section F	Adverse Life Events	1.0	1.0
Section G	Self-esteem	1.0	0.8
Section H	Family relationships	1.4	1.0
(no Section I)			
Section J	Mental Health – Stress, Happiness and Depression	2.6	2.0
Section K	Self-Harm	0.5	0.5
Section L	Coping and Support	1.5	1.0
Section M	Contact with Criminal Justice System	0.8	1.0
Section N	Internet and Technology Use	1.4	1.0
Section O	Reflections on Childhood	1.4	1.0
	TOTAL ABOVE	22.0	

Chapter 4

HOUSEHOLD STRUCTURE

4 HOUSEHOLD STRUCTURE

4.1 DEFINING THE YOUNG ADULT'S PRIMARY PRINCIPAL RESIDENCE

4.1.1 HOUSEHOLD STRUCTURE

The purpose of the Household Composition module was to record details on all members of the young adult's household. If the young adult was living in the parental home, the details on family composition from the previous interview at 17/18 years of age were fed forward to the field laptop from the ESRI's offices. This information appeared on the interviewer's screen when s/he opened the relevant questionnaire. The interviewer validated and amended the forward-fed information to ensure that it accurately reflected the current household circumstances.

In addition to basic composition, the household register records information, with respect to each member, on the following:

- Gender
- Date of birth
- Whether or not the household member from the previous round of interviews is still resident in the household
- Relationship to Parent
- Relationship to the Young Adult
- Broad level of economic status

The household register permits inclusion of new household members who have joined the household since the last interview (e.g. due to a birth in the family). Departures can also be recorded in the household grid. This is included in Section A of the Parent questionnaire (Appendix B7).

If 'Parent One' from the 17/18-year survey was no longer resident in the parental household, a new household grid was completed by the interviewer, without the benefit of forward-fed information from the previous interview. This was necessary to respect the guarantees of confidentiality which were given to the respondent when interviewed in the previous round of the study.

In circumstances where the Young Adult's Main Residential Address was different from the parental home, the interviewer assigned to that new address opened a new household grid and recorded details on the household composition. This is included in the Young Adult Household Composition module (Appendix B1).

4.1.2 DETAILS OF YOUNG ADULT HOUSEHOLD COMPOSITION MODULE

As well as information on the composition and membership of the Young Adult's Main Residential Address, the Young Adult's Household Composition module recorded the following information on their 'new' household (or residential address):

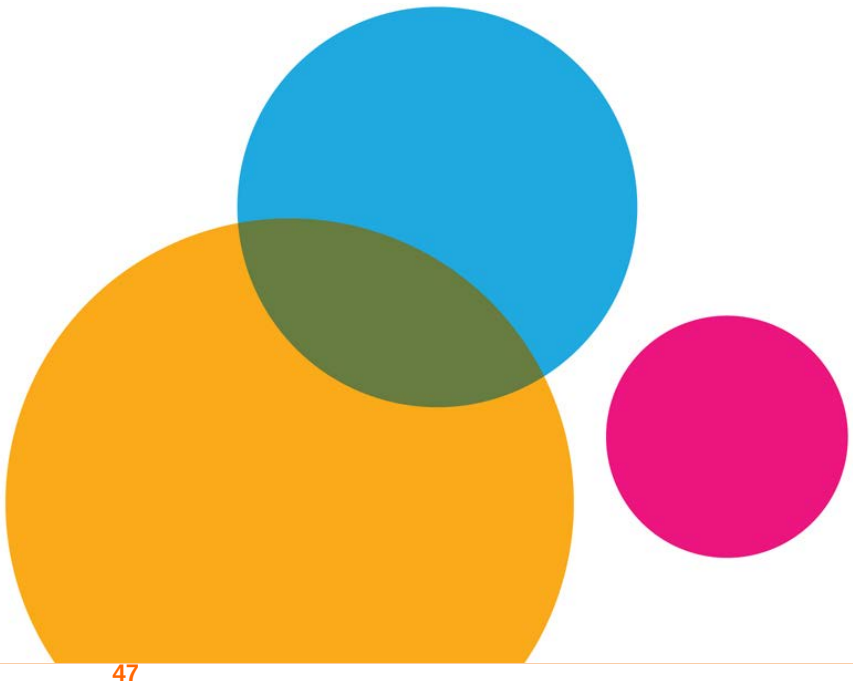
Table 4.1: Questions in Young Adult Household Composition Module

Question	Content
A1	Type of household – living alone; with a partner; in a house/flat share with relative, with no relatives, campus or student designated accommodation etc.
A2	Number of nights per month spent in parental home – to give a measure of the independence of their new household from the parental address
A3 – A4	Dates of moving out of parental address and into current address
A5 (A – F), A6	Details in respect of each household member: gender age relationship to Young Adult Principal Economic Status (PES) whether or not the Young Adult shares any income with the household member
A7	Nature of tenure
A8 – A9	Perception of suitability of accommodation
B1 – B5	Household income – taken together with the household composition this will provide a measure of equivalised household income
B6 – B7	Social Welfare dependency
B8 – B11	Information on the Irish national Basic Deprivation measure and financial stress (difficulty/ease in making ends meet)

The information in this module is comparable with the details available about the parental address (and which have been available for both Cohorts in all rounds of the study to date).

Chapter 5

YOUNG ADULT MAIN QUESTIONNAIRE



5 YOUNG ADULT MAIN QUESTIONNAIRE

5.1 INTRODUCTION

This chapter provides a summary of the contents of the Young Adult Main Questionnaire. There were 18 sections in this instrument as follows:

Section 1	Young Adult's address & household composition
Section A	Activities, Identity and Becoming an Adult
Section B	Political Activism and Civic Participation
Section C	Locality
Section D	Young Adult's Health
Section D1	Injuries and Accidents
Section D2	Disability
Section D3	Health Care Utilisation
Section D4	Sleep
Section D5	Dental Health
Section D6	Health Knowledge
Section E	Diet and Exercise
Section F	School
Section G	Current Status/Status History Grid
Section H1	20-year-olds in Further/Higher Education
Section H2	20-year-olds at work
Section H3	20-year-olds not in education, employment or training
Section J	Attitudes to Work and Perceived Skills
Section K	Income and Expenditure

This questionnaire was administered by the interviewer, on a CAPI basis using the laptop. A brief outline of the broad topics is given below, along with the relevant questions involved. For each topic (√) symbol indicates whether it was included in the child's questionnaire at 9, 13 or 17/18 years of age: this categorisation refers to broad topics and not to specific questions or wording, though in most cases the same questions were used where possible. The √ symbol followed by (P) denotes that information on the construct was collected about the 20-year-old from the parent only.

5.2 QUESTIONNAIRE CONTENT

5.2.1 SECTION 1 YOUNG ADULT'S ADDRESS & HOUSEHOLD COMPOSITION

5.2.1.1 LIVING ARRANGEMENTS (A1 – A4)

Question A1 gave the young adult seven options to describe their living arrangements (for example 'I live alone in house/flat' or 'I live in a house/flat-sharing arrangement with other adults – at least some not related to me'). Question A2 asked the young adult to specify the number of nights they spend in their parental home per month. A3 recorded the month and year that they moved to their new accommodation and A4 specified the month and year they stopped living at their parental address. Questions A1, A2, and A3 were retained for the main phase; however, Question A4 was removed. Question A2 was moved to the final question of the household composition section for the main phase.

5.2.1.2 HOUSEHOLD GRID (A5 – A6)

This question recorded personal details in respect of each person resident in the household. The information gathered included the first name of any residents, their sex, age, relationship to the Young Adult, economic status, and whether they shared income with the person. Question A6 asked the interviewer to specify the number of people that the Young Adult shared income within the household grid. This section was retained for the main phase with the addition of an 'other' answer option for sex, and a wording change from 'pre-school' to 'not yet at school' in the economic status subcategory.

5.2.1.3 NATURE OF OCCUPANCY (A7)

This question provided a list of 15 options to describe the nature of occupancy of the address (for example 'Rented from a private landlord who lives elsewhere'). This section was retained with a change in wording to one item for clarity from 'Digs' to 'Digs or lodgings – i.e. in a room in someone else's home (possibly with some meals provided)'.

5.2.1.4 NATURE OF OCCUPANCY (A8 – 9)

Question A8 asked the young person whether they felt their residence was suitable for their needs and, if not, question A9 asked why not, giving a range of nine options (for example 'Not enough bathrooms' or 'Too noisy'). These questions were retained for the main phase.

5.2.1.5 ADDITIONAL QUESTIONS FOR THE MAIN PHASE

Additional questions were asked in the main phase in order to understand cost of accommodation and whether this is burdensome on the Young Adult. Young Adults were asked how much rent cost for their accommodation, and whether they considered the cost of rent to be a burden to them personally.

5.2.2 SECTION A ACTIVITIES, IDENTITY AND BECOMING AN ADULT

This section contained a wide range of questions looking at various aspects of the Young Adult's life. It considered areas such as self-determination, identity, risk-taking, religion, citizenship, what is important in the Young Adult's life, social media, and satisfaction with life.

Table 5.1: Constructs in Section A, (p) represents information collected from a parent

Construct	20-year Questions	17/18 years	13 years	9 years
Hobbies/pastimes	A1	√	√	√
If they consider themselves as an adult	A2	√		
Speed of growing up	A3			
Self-determination- Basic Need Satisfaction scale	A4			
Risk-taking	A5			
One item-Willingness to take risks	A6			
Social Media	A7a – A7d	√	√(p)	√(p)
Religious Identity and Spirituality	A8a – A10	√	√(p)	√(p)
Citizenship	A11 – A12	√		
Importance of areas in life	A13	√		
Driving Licence	A14	√		
Access to own vehicle	A15			
Mode of transport to work/college	A16			
Satisfaction with different aspects of life	A17	√		
Personality traits	A18	√	√(p)	

5.2.2.1 LEISURE ACTIVITIES (A1)

Question A1 records information on how frequently the young adult engages in a list of activities, such as reading for pleasure, attending sports events etc. The same scale was used at age 17/18 years. In the 20-year pilot, interviewers commented on the length of time it took to complete this set of questions in the context of a longer-than-usual interview overall. It was therefore proposed that the answer options would be reduced from 'how often' the participant did each activity to 'tick all that you do regularly' to shorten administration time.

A brief factor analysis of Section A1 was conducted using Principal Components Analysis (PCA); the details of which are contained in the technical appendices at the end of this document. This process, as well as frequency distributions, were used to trim some of the activities from the list. The following items were removed for the question that was used in the main fieldwork: 'attending sports events', 'gardening or farming', 'going to the cinema', and 'beauty, hair or spa treatments'. 'Going to parties in people's homes' was merged with 'going to clubs, pubs, etc'. In response to post-pilot feedback from the Steering Group, a 'walking/hiking' item was added to the list for the main study.

5.2.2.2 VOLUNTEERING (A2 – A4)

Question A2 on involvement with voluntary organisations was removed following interviewer feedback. The feedback indicated some confusion around the question and inconsistent responding among participants. These were replaced with more detailed questions on specific volunteering activities for the main phase (new A21, A22 and A23).[6]

Questions A3 and A4 recorded details on the extent to which the Young Adult considers themselves to be an adult, and the speed with which they have taken on the responsibilities of adulthood relative to their peer group. These questions were retained in the revised questionnaire.

5.2.2.3 BASIC NEED SATISFACTION SCALE (A5)

The transition to adulthood is an important theme at waves three and four of ***Growing Up in Ireland***. This is a period of growth and development in a young adult's sense of agency and independence which is described by Self Determination Theory (Deci & Ryan, 2000). New goals, needs and drives come to the fore at this life stage, and the interplay between desires, needs and experiences has important effects on emotional well-being across the lifespan (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000).

The examination of basic psychological needs at 20 years old allows for cross-sectional analysis of the relationship between needs satisfaction and outcomes such as life satisfaction, stress and depression at this age. When considered longitudinally, causal models will be able to explore protective and risk factors for those who perceive met/unmet needs in this period of early adulthood.

Central to self-determination theory is the concept of basic psychological needs that are assumed to be innate and universal. According to the theory, these needs - the needs for competence, autonomy and relatedness - must be constantly satisfied for people to develop and function in healthy or optimal ways (Deci & Vansteenkiste, 2004) The Basic Need Satisfaction Scale (BNSS) was adapted from the Basic Psychological Needs Satisfaction Scale (Ilardi, Leone, Kasser, & Ryan, 1993).

The 21-item self-report Basic Need Satisfaction scale (BNSS) is contained in question A5. The Young Adult was asked to indicate how true they feel each statement is of their life, using a 7-point response scale (1 = Not true at all to 7 = Very true). Examples of items include: "I feel like I can decide for myself how to live my life" (autonomy), "I really like the people I interact with" (relatedness), and "I often do not feel very capable" (competence). Higher scores are indicative of a greater satisfaction of needs. This scale was new to the study at 20 years of age.

[6] QUESTIONNAIRES USED IN THE MAIN STUDY ARE AVAILABLE TO THE PUBLIC AFTER DATA COLLECTION FROM GROWINGUP.IE

This scale has been used frequently in studies measuring needs satisfaction in young adults (Britton et al., 2014; Idan & Margalit, 2014; Schiffrin et al., 2013; Wei, Vogel, Ku, & Zakalik, 2005). Wei et al. (2005) found that internal consistency for the scale was r = .69 for the autonomy subscale, r = .71 for the competence subscale and r = .86 for the relatedness subscale, with the overall Cronbach's alpha for the scale α = .90 (measured with a young adult sample). The scale has been found to have good external validity (Johnston & Finney, 2010).

Basic Need Satisfaction Scale (BNSS) subscales

At the level of individual items, there was little missing information and answers tended to be skewed towards a positive endorsement. As outlined in Table 5.2, according to the BNSS at the subscale level, on average the young adult sample felt that their needs on the dimensions of autonomy, competence and relatedness were being met. Means for each subscale were close to 5 for autonomy and competence and close to 6 for relatedness (i.e. satisfaction with personal relationships). Standard deviations were quite narrow for these data, showing that these scores were relatively consistent, though not to the point where serious kurtosis was an issue; this value ranged from -0.3 to +1.5 across the subscales which is within a reasonable range using cut-off values outlined by Tabachnik and Fidell (2014). Internal consistency values for the subscales fell within reasonable bounds; autonomy and competence were close to the recommended limits (of α = .6) for Cronbach's alpha (Cortina, 1993). The relatedness subscale demonstrated a very high level of internal consistency (at α = .86), as did the scale as a whole (at α = .86).

Table 5.2: BNSS whole scale and subscale descriptive statistics and alpha levels

N = 88 for all variables	BSNSS Full Scale Mean	BSNSS Autonomy	BSNSS Competence	BSNSS Relatedness
Mean	5.56	5.25	5.26	6.06
Median	5.62	5.29	5.50	6.25
SD	0.65	0.76	0.86	0.76
Minimum	3.71	3.57	2.50	3.50
Maximum	7	7	7	7
Alpha	.86	.66	.66	.86
Items in scale:	21	7	6	8

Shortening the BNSS scales

The Study Team explored some options for shortening the BNSS, as suggested by Johnston and Finney (2010). All subscales were examined, and an example of the process taken will be given here. Johnston and Finney (ibid.) reported that the autonomy variable could be shortened on this scale to three variables. In the current sample, shortening this scale resulted in an unacceptable reduction of the alpha value (to α = .54) for autonomy. Based on available data from the pilot study, shortening of the autonomy scale to this extent was not recommended. Further psychometric exploration did support the exclusion of two individual

items without compromising the scale;[7] however, it was felt that this minimal reduction in respondent burden did not merit the loss of comparability with other studies using the full scale.

Construct validity of the BNSS

Following a buffering hypothesis (Cohen, 2004), it was theorised that the subscales and scale total of the BNSS would display a significant negative relationship with the stress subscale of the Depression Anxiety Stress Scale 21 (DASS21) (Henry & Crawford, 2005). The DASS21 stress scale represents the outcome of long-term chronic anxiety (Lovibond & Lovibond, 1995) and the buffering hypothesis proposes that a participant whose needs are being met should be sheltered from these kinds of long-term effects.

It was further hypothesised that the relationships between the BNSS subscales and the DASS21 anxiety subscale would be weaker due to the anxiety subscale targeting more recent events (Hostinar, Johnson, & Gunnar, 2015). The full BNSS scale and all subscales demonstrated a significant negative correlation with the DASS21 stress subscale. For DASS21 anxiety, a significant negative relationship was observed only with the full BNSS scale and the autonomy subscale. The results are presented in Table 5.3 below.

Table 5.3 shows that the pattern of relationships posed by the buffering hypothesis has been supported. Feelings of independence, competence and satisfaction in one's relationships were associated with reduced feelings of stress and anxiety, although the relationship was stronger for the former (stress) – especially in terms of competence and relationships.

Table 5.3: Correlation matrix of BNSS and DASS21 subscales

		1	2	3	4	5	6
1	BNSS Full Scale[8]	1	.821**	.792**	.848**	-.235*	-.348**
2	BNSS Autonomy		1	.490**	.549**	-.271*	-.362**
3	BNSS Competence			1	.495**	-0.172	-.275*
4	BNSS Relationships				1	-0.144	-.225*
5	DASS21 Anxiety					1	.845**
6	DASS21 Stress						1

N = 88 *Correlation is significant at the .05 level (2-tailed). **Correlation is significant at the .01 level (2-tailed).

5.2.2.4 RISK TAKING INDEX (A6) AND SINGLE RISK-TAKING ITEM (A7)

Certain risky behaviours such as substance use, binge drinking, dangerous driving, impaired driving (driving while engaging in substance use/alcohol consumption) and unsafe sexual

[7] DETAILS AVAILABLE ON REQUEST

[8] THE BNSS TOTAL SHOULD NOT NORMALLY BE CORRELATED WITH ITS COMPONENT SUBSCALES AS THIS BREAKS AN 'INDEPENDENCE OF OBSERVATIONS' REQUIREMENT FOR CORRELATION. THESE STATISTICS ARE LARGELY PRESENTED FOR COMPARISON BETWEEN BNSS ITEMS AND DASS21 ITEMS.

behaviours, among others, arise most frequently in the 18-25 age group (Arnett, 2000). The varying approaches to risk and risky behaviour at this age have been more recently studied as a coping mechanism for the stresses associated with formation of an adult identity (Holt, Mattanah, & Long, 2018). Given the potentially serious outcomes associated with some forms of risky behaviour (especially those related to health) from other studies in the Irish context (Dooley & Fitzgerald, 2012; Dooley, O' Connor, & O' Reilly, 2019), items measuring attitudes to risk taking give important context to risky behaviours of young adults in the ***Growing Up in Ireland*** study.

The Risk-Taking Index (Nicholson, Soane, Fenton-O'Creevy, & Willman, 2006), is a six-item self-report scale recording how often the Young Adult engages in six categories of risk-taking behaviours. The six categories of behaviours are recreational risks, health risks, career risks, financial risks, safety risks, and social risks (see Table 5.4 for sample items). The Young Adult was asked to indicate how often they engage in the behaviours in question, from 1 = Never to 5 = Very Often. This scale was new to the study at 20 years of age. Previous research has found that the scale has good internal consistency (α = .79), accompanied by high face and construct validity (Nicholson, Fenton-O'Creevy, Soane, & Willman, 2001).

Question A7 is a simple one item measure asking the Young Adult to record how prepared s/he is to take risks from 0 = unwilling to take risks to 10 = fully prepared to take risks. This question was also new to the study at 20 years of age. Descriptive for the item-level answers to the Risk-Taking Index at A6 are presented below in Table 5.4.

The mean score was higher than the median for all risk-taking items due to a skew towards risk aversion on each item. There was a reasonable variability across all items showing that there were no major issues with any of the individual questions working within the larger scale. Descriptives for the RTI scale total and alpha are presented below in Table 5.5.

Table 5.4: RTI (A6) items 1 – 6 descriptive statistics

N = 88 to 86	Recreational risks (e.g. rock climbing, scuba diving)	Health risks (e.g. smoking, poor diet, high alcohol consumption)	Career risks (e.g. quitting a job without another to go to)	Financial risks (e.g. gambling, risky investments)	Safety risks (e.g. fast driving, city cycling without a helmet)	Social risks (e.g. standing for election, publicly challenging a rule or decision)
Mean	1.56	2.48	1.26	1.23	1.72	1.75
Median	1	2	1	1	1	1
SD	0.786	1.277	0.636	0.620	1.017	0.938
Minimum	1	1	1	1	1	1
Maximum	4	5	4	5	5	4

Table 5.5: RTI (A6) scale average, descriptive statistics and alpha level; plus descriptive statistics for the separate single-item risk variable at A7

N = 86 - 88	RTI Item level Mean	RTI Total	(A7) How do you see yourself: Are you generally a person that is fully prepared to take risks or do you try to avoid taking risks?
Missing	1	3	1
Mean	1.66	10.03	5.78
Median	1.66	10	6
SD	0.49	2.96	2.24
Minimum	1	6	1
Maximum	3.67	22	10
Alpha	0.52		N/A
No of items	6		1

The overall alpha for these scales appeared quite low (α = .52) for the six-item RTI. There was no evidence that removing a single item would improve the internal consistency of the scale as a whole. Examining the mean RTI scale across genders, there was evidence for a different risk profile between males and females. Male risk-taking propensity (N = 36, M = 1.87 SD = 0.53) was significantly higher than females (N = 51, M = 1.53, SD = 0.42) (Mean difference = 0.34, t(85) = 3.358, p < .01). The 95 per cent confidence interval for this difference ranged from 0.14 to 0.54, which is a moderately sized effect when compared to the size of the standard deviation.

On this basis of the small to moderate sized effect observable from the confidence intervals, the RTI was examined for internal consistency following a gender split. However, this did not improve the alpha consistency values which fell to α = .48 for males, and α = .49 for females. In exploration of the content of these items, it was apparent that there were a lot of nested concepts in each of the questionnaire items. Each risk category contained multiple examples which were likely to distort any form of reliable responding. This was reflected in the poor alpha levels reported above. Overall, the performance of the six-item RTI was disappointing. Alternatives to its use were discussed by the Study Team, mainly concerning the use of the single risk taking item (A7) which had a moderate correlation of r = .39, p < .001 with the 6-item risk-taking index.

The recommendation for the main study was that Question A6 should be removed, and Question A7 should be retained.

5.2.2.5 SOCIAL MEDIA (A8A – D)

Questions A8a-A8d were concerned with social media profiles. They recorded information on whether the Young Adult has or had a profile; why they no longer had one (if relevant) and if it can be seen by others.

Feedback from interviewers indicated that these items did not work well in the pilot as they were cumbersome, and people seemed to find them difficult to answer. There was also feedback received from participants in the post-pilot focus group to the effect that questions such as whether an account was private or public varied depending on the specific app (e.g. Twitter vs Instagram). Therefore, a complete overhaul of these questions was undertaken between the pilot and main phase. Additionally, questions on this topic were moved from the main to self-complete questionnaire. See section 6.3.13.3 for a more detailed discussion of the additional questions.

5.2.2.6 IMPORTANCE OF VARIOUS ASPECTS OF YOUNG ADULTS' LIVES (A9 – A11)

Question A9 asked the Young Adult to rate how important each of 12 aspects of their lives is to them. The aspects of their lives included: parents and siblings; partnership; health care; religion; health. Items are rated on a scale from 1-10 where 1 = 'not important' and 10 = 'very important'. This question was previously asked at 17/18 years.

The three highest rated items in terms of importance were the 20-year-old's 'parents and siblings' (M = 7.5 SD = 2.4), 'friends and acquaintances' (M = 7 SD = 1.9), and 'health' (M = 6.9 SD = 2.2). By far the lowest rated item in terms of importance was 'religion' (M = 3 SD = 2.1). In the interests of reducing the response burden for the main questionnaire and given that these data were collected recently at the 17/18-year phase, these questions were removed following the pilot.

Question A10 focused on the young adult's religious and spiritual beliefs. These questions remained unchanged from previous rounds of the study and have the potential to provide important information on the formation of religious identity from childhood into adulthood.

5.2.2.7 CITIZENSHIP (A12)

Question A12 recorded the Young Adult's citizenship. The entire pilot sample indicated that they held Irish citizenship and did not indicate holding citizenship of any other countries.

These questions remained unchanged for the main study, however, as the main study sample will be substantially more diverse than the pilot sample with respect to citizenship.

5.2.2.8 ACCESS TO TRANSPORT (A13 – A15)

Questions A13-A15 recorded details on transport – issues around having a driving licence, access to their own vehicle and mode of transport to work or college. Full driving licences for cars were held by 25 per cent of the pilot sample, with an additional 32 per cent holding a provisional licence. Just a small percentage had a motorcycle or scooter licence of either status. Considerably more participants, (cumulatively 21%) indicated that they held either a provisional or full tractor licence.

For the main study, some travel options were collapsed together to make the lists of options faster to progress through and generate usable case numbers in the main study.

5.2.2.9 SOURCES OF INFORMATION AND HELP (A16)

Question A16 asked the Young Adult to indicate typical sources of information on a wide range of topics such as cooking, finding accommodation or applying for a loan. It was a new question developed for the study at this phase to capture the often informal supports that young people draw on to aid in the transition to adulthood. The feedback from interviewers on this item indicated that it took too long, had redundant items and too many response options.

The overall number of items was subsequently reduced from 12 to six to focus on key issues during the transition period such as being short of cash or finding accommodation. Item responses were also collapsed down from nine categories to seven response options: Online, Parents, Other Family, Friends, Other (specify), I wouldn't need help or information on this and N/A. This streamlined set of questions was carried forward to the main phase of the study.

5.2.2.10 SATISFACTION WITH LIFE (A17)

Question A17 asks the Young Adult to rate how satisfied they were with various aspects of their life such as health, sleep, personal income and social life. A scale of 0 to 10 was used, where 0 = 'completely dissatisfied' and 10 = 'completely satisfied'. This detail of this question was new to the pilot study at 20 years of age, although a general life satisfaction item was included at 17/18 years of age.

The category for satisfaction with 'work in the home' was removed as preliminary data showed that very few participants were likely to be homemakers and interviewer feedback indicated that this item was confusing. This category was combined with the 'work outside the home' category and renamed 'Your work'. Another category was renamed from 'Leisure time' to 'Free time' as feedback from the interviewers indicated that 'leisure time' could be interpreted as specifically attending a gym or leisure centre by participants.

5.2.2.11 TEN-ITEM PERSONALITY INVENTORY (A18)

The Ten Item Personality Inventory (TIPI) (Gosling, Rentfrow, & Swann, 2003) is a ten-item scale measuring openness to new experience, conscientiousness, extraversion, agreeableness and emotional stability. These dimensions of personality are known as the 'Big-Five'. Many of the personality scales measuring the 'Big-Five' personality dimensions are very long such as the 300 or 120 item International Personality Item Pool scales (IPIP) (Goldberg et al., 2006). Such extensive scales were not appropriate for use within the current study. Although the psychometric properties are somewhat inferior to standard multi-item instruments, the 10-item TIPI is still regarded as useful where personality is not the primary topic of interest in the research. It was previously used with Cohort '98 at ages 13 and 17/18 years (the former being reported by parents about the child). Table 5.6 below presents descriptive statistics and alpha

values for each of the five TIPI subscales. As each subscale is designed to represent a distinct psychological construct, there is no overall TIPI score, and a combined alpha value across all items would not be meaningful.

Table 5.6: Young Adult TIPI scale (A18) descriptives and alpha values

Young Adult on-self TIPI Scale					
N = 117	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness
Mean	4.9	4.9	5.2	4.6	5.5
SD	1.38	1.19	1.26	1.41	0.96
Minimum	1.0	1.5	1.5	1.5	3.0
Maximum	7	7	7	7	7
Cronbach's α	0.65	0.43	0.59	0.59	0.37

The spread of the means and standard deviations indicates that there were no problematic levels of skew and kurtosis, with each subscale sitting within the recommended ±1 for kurtosis and skewness. Low numbers of items in a scale tend to systematically depress the alpha value (Nunnally, 1978). Alpha values in the pilot study are therefore reasonably high for scales with only two items and align closely with values seen in other research (Gosling et al., 2003), but below the recommended cut-offs (of α= .7) used in most psychological research. This measure may provide important information on personality in the formative years when the sense of an adult identity is formed. The Study Team opted to retain this measure for the main study.

5.2.3 SECTION B ATTITUDES TO POLITICS, SOCIETY AND CIVIC PARTICIPATION

This section considers the Young Adult's attitudes to politics, State institutions and societal issues at home and abroad. With some exceptions, it was largely comprised of new content and captures attitudes to the topic rather than factual information.

5.2.3.1 TRUST IN OTHERS (B1A)

Young Adult respondents were asked a single item on whether people could generally be trusted on a scale of 0 "You can't be too careful in dealing with people" to 10 "Most people can be trusted" The mean score was 5.29 (SD = 2.09) with over half of the sample giving a mid-range score of 5, 6 or 7. The same question had been asked in the 17-year pilot when the mean (for respondents who took part at both waves) was 5.5 and the correlation between age 17 and age 20 was r = .45, suggesting that attitudes were relatively stable over time. This item was used in the main phase.

Table 5.7: Constructs in Section B, (p) represents information collected from a caregiver

Construct	20-year Questions	17/18 years	13 years	9 years
Trust in other people	B1a	√		
Confidence in State institutions	B2a-g	√		
Confidence in media/press	B2h			
Interest in politics	B1b			
Political activism	B3a-k			
Rating of political attitudes as right/left wing	B4a			
Participation in last general election	B4b-B4d			
Preferred political party	B4e			
Political cynicism/disengagement	B5a-c			
Concerns about political and social issues	B6a-p			
Factors influencing success in life	B7a-i			
Attendance at talk by Gardaí	B8			

5.2.3.2 TRUST IN STATE INSTITUTIONS (B2)

Respondents rated seven categories of State institutions such as the Gardaí and 'the church' plus the media/press on a four-point confidence scale of 'a great deal' to 'none at all'. Similar rating items have been used in other social surveys and were also asked of respondents at 17/18 years (a smaller subset in the pilot). The modal rating for each institution is given in Table 5.8 below. From this, it appears that most institutions typically received a confidence rating of 'quite a lot' [of confidence in it] but the church, politicians and the media/press got lower ratings with a modal response of 'not very much'.

Though these items were not designed as a scale targeting a specific psychological construct, a Cronbach's alpha value was calculated showing that the set of items had a good internal consistency (of $\alpha = .69$) across all items. All confidence items were retained for use in the main phase.

Table 5.8: Modal confidence rating for State institutions

Institution	Modal confidence rating at 20	Percentage at mode	Same modal response at 17/18 pilot?
Church	'Not very much'	55%	Yes (38%)
Education system	'Quite a lot'	56%	Yes (52%)
Gardaí	'Quite a lot'	56%	Yes (43%)
Social Welfare system	'Quite a lot'	46%	'Not very much' (45%)
Health care system	'Quite a lot'	41%	Yes (51%)
Politicians	'Not very much'	58%	n/a
Courts system	'Quite a lot'	57%	Yes (51%)
Media/press	'Not very much'	53%	n/a

5.2.3.3 ATTITUDES TO POLITICS (B1B, B3 – B5)

This 20-year wave saw the introduction of a new series of items capturing engagement in politics, likely voting patterns in the next general election, and political activism.

5.2.3.4 INTEREST IN POLITICS (B1B)

At B1b, respondents were asked to rate their interest in politics from 0 ('not at all interested') to 10 ('very interested'). The mean rating on this item was 4 (SD = 2.9) and 15 per cent of respondents gave the lowest score of 0 (with no participants giving the highest rating). This suggests that, overall, 20-year-olds were not highly interested in politics. This question remained in the current format for the main phase.

5.2.3.5 POLITICAL ACTIVISM (B3)

In contrast, the various political activism items at B3 suggested relatively high engagement with particular campaigns or issues. The most frequently endorsed item was 'signed a petition . . . about a political or social issue' (59% had done this in the last 12 months); 44 per cent had worn a badge, sticker or put up a poster and 30 per cent had changed their social media profile to support an issue or candidate. Using their wallet to express political opinion was also common, with 43 per cent of 20-year-olds boycotting a product and 36 per cent supporting companies whose values they liked by buying their products.

More direct engagement with traditional political fora was less common, however, with only 12 per cent contacting or visiting a public official and 7 per cent contacting a media outlet to express their opinion on an issue or candidate. Over a third had volunteered through a social or non-profit organisation but this was not necessarily for a political issue or campaign. Although these questions worked reasonably well, the Study Team recommended replacing them with a similar set of items adapted from the TISCH study which would reduce the overall number of items (given the need to shorten the interview overall) and improve comparability with European population surveys.

5.2.3.6 POLITICAL IDEOLOGY (B4A)

Item B4a was another question where respondents were asked to rate themselves on a scale of 0 to 10. This time it was to indicate how they placed their political attitudes on a scale from 'far left' (0) to 'far right' (10). The mean score was 4 (SD = 1.8) and nobody placed themselves on the maximum 10. A full half of respondents gave the midpoint score of 5 which suggests limited variability in answers. In addition, interviewers reported difficulty eliciting a clear response to this question due to a combination of respondents (a) not having previously considered where they lay on the political spectrum, (b) not engaging with the question and (c) not understanding what was meant by being 'right' or 'left' in political ideologies. Given an accumulation of minor issues with this particular question, it was removed from the questionnaire.

5.2.3.7 VOTING (B4B – D)

Questions B4b-d dealt with registration and eligibility to vote in the last general election prior to the survey (in 2016). Irish people become eligible to vote at the age of 18 years. While 88 per cent of 20-year-olds in the pilot reported being eligible to vote at the time, only 61 per cent of those had been registered (i.e. 53% of the overall sample had been eligible and registered to vote). Of the registered-and-eligible subset, 78 per cent had actually voted (41% of the total sample).

Respondents were then asked which party would get their first preference vote if there was a general election the following day. A list of parties was provided along with options for 'other, independent', 'other, please specify' and 'I wouldn't vote'. Interviewers reported some issues with this question such as respondents questioning the relevance of it, saying they would vote for the 'best' candidate regardless of party affiliation (this also came up in the participant focus group) and parents telling the young adult who they should vote for. Quite strikingly, the modal answer was "I wouldn't vote" at 27 per cent, followed by Fine Gael (the main government party at the time of the survey) at 26 per cent (both based on the valid percent). There was also quite a high rate of missing responses recorded as 'don't know' (9% of the entire sample). Although there were some issues with this question, the Study Team felt that it was important to assess both voter apathy and to get some sense of political ideology in the absence of the "right/left" question. To address some of the feedback from interviewers and participants, an explicit 'Would vote for a person, not a party' answer option was included for the main phase.

5.2.3.8 POLITICAL CYNICISM/DISENGAGEMENT (B5A – C)

The questions at B5a-c asked people to rate their agreement with three statements on a 7-point scale where 1 was 'strongly disagree' and 7 was 'strongly agree'. The mean score for B5a ('ordinary person has no influence') was 3.5 (SD = 1.5); for B5b ('I am better informed about politics than most people') the mean was 2.8 (SD = 1.9) and for B5c ('doesn't matter which party is in power') it was 4.1 (SD = 1.8). A high percentage – 37 per cent - gave the lowest rating of 'strongly disagree' to the B5b item on being well informed about politics; coinciding with some interviewers' perceptions that the 20-year-old participants were largely disengaged from political issues. As interest in politics was already picked up in an earlier question (B1b), item B5b was removed and B5a and B5c were retained.

5.2.3.9 CONCERNS ABOUT POLITICAL AND SOCIAL ISSUES (B6A – P)

In a new set of items devised by the Study Team, respondents were presented with a list of political and social issues – both domestic and global – and asked to rate how concerned they were about each issue. The scale went from 0 ('not at all concerned') to 10 ('very concerned'). It included items such as 'terrorism', 'Brexit', 'gender inequality' and 'abortion in Ireland' – see Appendix B2 for the full list.

The issues that got the highest concern ratings were 'terrorism' (M = 7.2) and 'poverty in Ireland' (M = 7.2). The lowest ratings were given to 'immigration to Ireland' (M = 3.4) and 'Brexit' (M = 4.8). Everything else had a mean rating of between 5 and 7. A large contributor to the low rating of concern with immigration was the relatively high proportion (13%) who rated their concern as zero, perhaps feeling that expressing any concern might be perceived as racist or xenophobic, and somewhat compromising the validity of the item. Alternatively, they might have actively welcomed immigration, but given that it is not possible to ascertain that from the rating structure, it further detracts from the usefulness of the item. The wording of B6j – concerns about 'abortion (in Ireland)' – may have been too ambiguous in not indicating whether a respondent was concerned about abortion not being made available or becoming available.

Although interviewers reported that young people were more engaged by these 'issues'-focused questions than the political ideology-type questions, the list at B6 is quite long and representative of current issues. Therefore, the Study Team proposed shortening the list to give priority to issues that (a) received the higher concern ratings and (b) are more domestic and policy relevant. This effectively means excluding items on 'the rise of the far right', 'immigration to Ireland', 'another financial recession', 'Brexit', 'poverty in developing countries', 'law and order in Ireland', 'trends in world politics' and 'other'. It was also proposed to add the item 'access to housing' given its visibility in public debate. The item on abortion was removed as the intention to hold a referendum on this issue was announced prior to the commencement of the main fieldwork.

5.2.3.10 FACTORS THAT INFLUENCE SUCCESS IN LIFE AT 20 YEARS (B7A – I)

Section B finished on a slightly different theme by asking 20-year-olds what factors they perceived as influencing how well you got in life. These questions were created by the Study Team in response to themes that had arisen in the focus groups.

There were eight themes presented plus an 'other' category. Each theme was rated on a 10-point scale from 0 ('Not at all important') to 10 ('Very important'). The theme receiving the highest importance rating was B7a 'your own effort' with a mean score of 9.1 out of 10 (SD = 1.2). The next highest was 'how hard you work' (M = 8.9, SD = 1.5) followed by 'support from your family' (M = 8.2, SD = 2.0). The lowest rating was given to 'your appearance/looks' with a mean of 5.6 (SD = 2.2). The 'who you know' item (which was prominent among the focus groups) was rated as 7.1 out of 10. The Study Team proposed some changes to this set of items as follows: removing B7b ('how hard you work') given its similarity to B7a ('your own effort'); combining B7c and d to a single 'education/training' category; and adding a new item 'luck'.

5.2.3.11 ATTENDANCE AT PRESENTATION BY AN GARDA SÍOCHÁNA (IRISH POLICE SERVICE) (B8)

The last question in Section B was a single yes/no item on whether the 20-year-old had ever attended a talk/presentation by the Gardaí on avoiding crime and anti-social behaviour. In the pilot sample, 40 per cent said they had. Given its potential policy relevance, this question was retained but moved to the Self-Complete Questionnaire with other questions on crime and contact with Gardaí.

5.2.4 SECTION C LOCALITY

This section considers the Young Adult's perceptions of their local area. Questions in this section have been asked at previous waves of ***Growing Up in Ireland***, with the information coming from the parent at Waves One and Two. These questions worked well in producing differentiated responses and in having few missing values and were therefore recommended for the main study.

Table 5.9: Locality questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Time in local area	C1	√	√(P)	
Perception of local area	C2 – C3	√	√(P)	√(P)
Likelihood of continuing to live in Ireland	C4	√	√(P)	

5.2.4.1 TIME IN LOCAL AREA (C1)

Question C1 asked the Young Adult how long they had been living in their local area. There were a couple of queries about which area the young adult should talk about (e.g. if they spent time in a term-time address as well as parental address). For the main phase, it was recommended to specify the area the 20-year-olds spent the most time in. Looking at the data, most participants talked about the area of their parental address as 67 per cent of participants said they had been living there for 17 years plus.

5.2.4.2 PERCEPTION OF LOCAL AREA (C2 – C3)

Questions C2 and C3 asked the Young Adult to rate various statements about the quality of their local area. There were no problems reported with these questions. In general, most participants rated their area highly; 93 per cent of participants rated their area as a safe place, 81 per cent of participants said vandalism and damage to property was uncommon and 73 per cent of participants said there were leisure and sports facilities suitable for young adults in this area.

5.2.4.3 LIKELIHOOD OF LIVING IN IRELAND IN 5 YEARS' TIME (C4)

Question C4 asked the Young Adult their likelihood of living in Ireland in 5 years' time. Fifty-one per cent of participants said they were either very or possibly likely to be living abroad in

the next five years. The most common reason participants provided was that they wanted to travel/see the world (51%). Participants in the focus groups mentioned that they may not be resident in Ireland in 5 years' time for a number of reasons; therefore, the response option on this question was changed to 'tick all that apply' to capture the many reasons participants may not be resident in Ireland in five years' time.

5.2.5 SECTION D YOUNG ADULT'S HEALTH

This section recorded details on the Young Adult's health, including any chronic health conditions, health care utilisation, medical card cover, sleep and oral health.

Table 5.10: Young Adult's Health questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Current health Status	D1	√	√(P)	√(P)
Chronic, longstanding illnesses, conditions, and treatment	D2 – D11b	√	√(P)	√
Supports provided	D12	√	√(P)	
Number of nights spent in hospital in last year	D13	√	√(P)	√(P)
Reason for medical attention	D14			
Health care utilisation	D15	√	√(P)	√(P)
Ease of consulting GP and if relevant reason for not consulting GP[9]	D16 – D17	√	√(P)	√(P)
Ease of consulting medical consultant and if relevant reason for not consulting consultant	D18 – D19			
Medical card	D20	√(P)	√(P)	√(P)
Private medical insurance	D21 – D23	√(P)	√(P)	√(P)
Sleeping patterns	D24 – D26	√		
Sleep difficulty	D27	√		
Dental Health	D28	√	√(P)	√(P)

5.2.5.1 GENERAL HEALTH STATUS (D1)

Self-rated health is a frequently used health indicator and has been found to predict a number of physical health outcomes (Breidablik, Meland, & Lydersen, 2009). The question was asked of participants at 17/18 years, and prior to that the parent rated the child's health. It presented no issues in the pilot (or in previous waves of data collection) and was retained for the main phase.

[9] ANY MEDICAL CARE AT PREVIOUS WAVES – NOT SPLIT BY GP/OTHER MEDIC.

5.2.5.2 DISABILITY AND LONG-TERM HEALTH CONDITIONS (D2 – D8)

Pilot questions D2 – D8 recorded information on different types of disability including how long the person had the condition, if it was diagnosed by a doctor, if it hampered the person and whether they took medication for it. Other health conditions not covered by the list at D2 were recorded as 'other' at D7/D8. Although the section did not present problems as such in the pilot phase, the feedback from respondents and interviewers was that it was a lengthy and somewhat repetitive section.

The Study Team proposed to shorten and simplify the section by replacing Pilot questions D2-D8 with a more open-ended question on chronic illness, recording the nature of the illness or disability, whether or not diagnosed by a medical professional, whether or not hampered in daily activities by the illness/disability and timing of onset of the illness/disability.

5.2.5.3 MEDICAL ATTENTION (D9 – D14)

Question D12, which looked at the Young Adult's health supports within an educational setting, has been removed from the questionnaire. This question was asked at age 17/18 and was more relevant in the school context; however, when asked in relation to college/university, this question was poorly answered by participants (resulting in very small numbers in any given category). The main categories in this question were also asked in question D15. Therefore, it was decided to merge both questions. Some specific questions on supports at third level were added to section H where they will only be asked of participants attending third-level institutions.

Question D13 asked the Young Adult how many nights they had spent in hospital in the last year. There were no problems reported in relation to this question. The majority of participants had not spent any nights in hospital due to illness or injury (90%); the small number of individuals who had spent a night in hospital had spent between 1 and 14 nights.

Question D14 looked at the reasons participants may have required medical attention in a hospital or accident and emergency department since being interviewed at 17/18. This question worked well in capturing a range of reasons. The answer categories 'road accident (driver or passenger in vehicle)', 'road accident (cyclist)' and 'road accident (as a pedestrian)' had a small number of participants in each category; therefore, it was decided for the main phase to combine these into one category – 'road accident'. Sports-related injury was the most common reason why participants required medical attention, followed by a road accident and drug intoxication/poisoning.

5.2.5.4 HEALTH CARE UTILISATION (D15 – D19)

Question 15 looked at any barriers the Young Adult had to health care access. Apart from GP (70%) and practice nurse (23%), each category had a small percentage; however, this is expected to be larger in the main study. As psychiatrists and psychologists have very different

roles, it was decided to include a separate answer category for both. It was also decided to include the frequency of the Young Adult's visits to the dentist. This is an age group which has poor attendance at the dentist due to a number of reasons (finance, gender, health insurance); therefore, it was important to include this in the main study (Slack-Smith, Mills, Bulsara, & O'Grady, 2007).

Question D18 and D19 asked the Young Adult whether they needed to attend a medical consultant but did not; this question was new to the study at 20 years of age. There were a small number of responses as to why the young adult did not consult a medical professional; however, the frequencies should be greater in the main study and as this connects to important policy issues, the question was retained for the main study.

5.2.5.5 MEDICAL CARD & HEALTH INSURANCE (D20 – D23)

These questions asked if the Young Adult had a medical card or private health insurance. In general, these questions worked well. Some interviewers reported that there was some confusion as to what a medical card was; therefore, it was decided to provide more explanation in the question "Are you covered by a medical card - and so get medical services free of charge?". Nineteen per cent of individuals in the study had a medical card and 53 per cent had private health insurance. Given the apparent confusion about medical coverage among the 20-year-olds, similar questions were included on the parental questionnaire.

In the focus group with pilot participants, some individuals mentioned that while they knew they had private health insurance, they did not know what the policy entailed. A question is included on the parent main questionnaire asking about the young adult's private health insurance and if it includes the cost of GP visits.

5.2.5.6 SLEEP (D24 – 27)

Questions D24-D27 looked at the Young Adult's sleep and any sleep difficulties. These questions worked well in terms of the differentiation among responses and there were no issues reported. The majority of participants got between 6 and 8 hours of sleep a night (85%) and 44 per cent of participants reported that they had some difficulty with sleep. These questions were continued in the main study.

5.2.5.7 DENTAL HEALTH (D28)

There was no problem with the self-rating of dental health at question D28; similar questions have been used successfully at previous waves of the study. In the pilot, the majority of participants rated their dental health as good (39%) or very good (30%). Asking about dental health is important as poor oral health is related to serious long-term health conditions such as coronary heart disease (Humphrey, Fu, Buckley, Freeman, & Helfand, 2008). A further question was added for the main phase asking about frequency of dental visits to provide a more complete picture of dental health.

5.2.6 SECTION E DIET AND EXERCISE

This section focused on the Young Adult's dietary profile and exercise.

Table 5.11: Diet and Exercise questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Young Adult's dietary profile	E1	√	√	√
Cups of tea/coffee drank daily	E2	√		
Type of diet (e.g. vegetarian, vegan)	E3	√		√(P)
Use of supplements	E4	√		
Knowledge on calorie intake	E5a – b			
Exercise	E6 – E8	√	√	√
Reasons for participation in sport	E9a			
Reasons for not participating in sport	E9b		√	√

This section was answered well by participants and a number of small changes have been proposed for the main phase.

5.2.6.1 FOOD DIARY (E1 – E2)

Overall, this question was answered well by participants, producing good differentiation in responses. Some clarification was added to consumption of tea/coffee by specifying "caffeinated" beverages.

5.2.6.2 TYPE OF DIET (E3)

The frequencies for this question were relatively low, with small numbers who followed a vegan diet and none who identified as pescatarian. This may be due to the small sample size, however, and was expected to be larger in the main study; hence the question was retained.

5.2.6.3 USE OF SUPPLEMENTS (E4)

This question asked the Young Adult if they took any supplements. This question worked well and was included at previous waves of the study. However, with a view to reducing response burden and possible embarrassment, it was proposed to remove the response categories 'non-prescribed steroids' and 'supplements to block fat or carbohydrate absorption'. Both response categories had numbers too small to report in the pilot. Roughly 30 per cent of participants took food supplements and a majority of these were individual vitamins or minerals (18%) and protein shakes (21%).

5.2.6.4 KNOWLEDGE ON CALORIES INTAKE (E5A – B)

These questions asked the Young Adult about their knowledge of the average daily calorie intake and were answered quite poorly by participants. Only 19 per cent of participants knew the recommended intake for a male (2,500 Kilocalories) and 37 per cent of participants knew

the recommended daily intake for females (2,000 Kilocalories). The reason for the poor response may be that calorie intake can be specific to the individual (based primarily on their weight and level of activity). For the main phase, the phrase "daily calorie intake for an average adult [man/woman]" was used for ease of interpretation.

5.2.6.5 PHYSICAL ACTIVITY (E6 – E9B)

These questions looked at the Young Adult's levels of physical activity. Questions E6 and E7 were combined to establish the physical activity levels of young adults, and also classify them as active or inactive according to current adult international guidelines (adults who complete at least 5 bouts of 30 minutes of moderate physical activity per week are considered to be physically active). These questions have been amended from those used at 17/18 years because now that the participants are all adults, their physical activity guidelines have changed significantly from those of adolescents (previously 60 minutes of moderate activity per day). The updated questions are specifically designed to establish if these young adults are physically active according to the international guidelines developed by the World Health Organization (WHO, 2017) and cited in Get Ireland Active (Healthy Ireland, 2016). In the pilot 69 per cent of the sample were physically active according to these guidelines.

Questions E9a and E9b were new to the study at 20 years of age. The most popular motivation for participating in sport or other physical activity (E9a) was 'to improve my health and fitness' (50%), followed by 'to control my weight'. These questions worked quite well; however, the remaining response options were edited to drop low frequency items ('compete with others', 'relax', 'spend time with family and friends') and two new categories were added: 'I enjoy it' and 'I enjoy meeting people and participating with others in sport'.

Question E9b dealt with reasons for a lack of participation in sport. In the pilot, the most common reason given was 'I don't have enough time' (46%). As some options had very low frequencies in the pilot, the response categories for the main study were streamlined to 'not interested', 'not enough time' and '[already] get all the exercise I need/like' plus 'other, please specify'.

5.2.7 SECTION F SCHOOL

This section looked at the Young Adult's educational background. Topics addressed included performance in the Leaving Certificate, choice of college course and attitudes towards school. Only a small minority (approximately 15%) of respondents had completed the Leaving Certificate when they were interviewed at 17/18 years of age and so these questions must be included for the majority of participants at this round of interviewing. Questions around intentions regarding further/higher education were also included.

Table 5.12: Structure of Section F

Construct	20-year Questions	17/18 years	13 years	9 years
Details on when the Young Adult left school	F1	√		
Programme undertaken in final year of school and satisfaction with this choice	F2 – F4	√		
Leaving Certificate subjects/results	F5 – F7, F9, F11, F13, F14	√		
Leaving Certificate Vocational Programme	F8	√		
Leaving Certificate Applied subjects	F10, F12	√		
(If didn't sit the Leaving Cert) Age on leaving school and factors influencing choice	F15-F19	√		
Likelihood of returning to education in next 5 years	F20	√		
Use of grinds/private tuition	F21	√		
Career guidance and resources used in decision making	F22 – F23	√		
Attitudes to school and teachers	F24	√	√	√
Perceived benefits of school	F25	√		
Work experience placement as part of education	F26	√		
Choice of course/apprenticeship	F27 – F34	√		
Reason for not applying for further/higher education places	F35	√		

5.2.7.1 THE LEAVING CERTIFICATE PROGRAMME (F1 – F14)

Questions F1-F14 recorded details on the Young Adult's final years in school - when they left school, the last programme they took in school, their satisfaction or otherwise with that programme and their final Leaving Certificate results (if relevant).

Questions F2-F4 asked about the type of programme taken (i.e. 'regular/established' Leaving Cert. or a variant) and satisfaction with it. The most common programme completed was the regular Leaving Certificate (91%). Regardless of programme taken, 83 per cent of respondents were satisfied or very satisfied with the programme they took. For the main study, at the start of this section a series of short questions were added in order to capture attitudes towards the participant's schooling before more detailed questions on subjects taken and so forth. These new questions comprised:

- The name and address of the last school they attended (now F2[10])
- A question asking the respondent to rate their ability in Irish/English/Maths on a five-point scale ranging from 'above average' to 'below average' (now F6)

[10] SEE GROWINGUP.IE FOR QUESTIONNAIRES USED IN MAIN PHASE.

- A question on how important it was to the respondent to do well in the Leaving Cert. (now F7)

Questions F5 – F11 collected detailed information on the Leaving Certificate examination including subjects taken and grades achieved. All of the sample had taken Leaving Cert examinations. Almost all of the respondents had taken Irish, English, and Maths. French (52%), and Biology (71%) were the other most common subjects taken. Question F13 asked about modules taken for respondents who had taken the Leaving Cert. Applied programme. These questions remained largely unchanged for the main study except the routing was modified so that students who had sat the regular Leaving Certificate, but had completed additional modules from the Leaving Certificate Vocational Programme, could include information on those too.

At F14a/b, 20-year-olds were asked if they had any regrets about their subject choice for the Leaving Cert. and, if so, what subject and why. These questions were carried forward to the main study but moved to a slightly later point, after new additional questions on the benefits of secondary education.

5.2.7.2 EARLY SCHOOL LEAVERS (F15 – F19)

Questions F15-F19 were aimed at recording details from early school leavers on the age at which they left school, factors influencing their decision to leave, and experience of early leaving among family and peer group. Although this situation did not apply to any of the actual pilot participants, they were continued for the much bigger sample in the main study, given the policy relevance of the topic, with one extra item ('to take up training or apprenticeship') added to question 16.

5.2.7.3 GRINDS (F20)

F20 was a question on the use of grinds (excluding special needs support). In Ireland some pupils (and/or their parents) pay for private tuition based to prepare for the Leaving Cert. exams, either after school hours or as a block during school holidays (sometimes both); these are known colloquially as 'grinds'. Of the current sample, 53 per cent had taken grinds. In the main study, the single yes/no question on the taking of grinds from the pilot was expanded to collect details on whether the 20-year-old had found the grinds useful and their pattern of attendance in response to a desire from stakeholders to know more about this issue (which is largely unregulated as they are private arrangements between tutors and students/parents). Similar questions had been asked at age 17/18 years.

The information collected in relation to support with school studies was further expanded for the main study with the reintroduction of questions used at 17/18 years, which asked about extra help received within school including subjects, type of help and whether it was useful. This was to equivalise the information collected at both waves and in response to interest

from stakeholders. Young Adults who had not received extra help in school were asked if they would have liked some help.

5.2.7.4 ATTITUDES TO SECONDARY SCHOOL; WORK EXPERIENCE AS PART OF THE CURRICULUM (F21 – F22)

Details of the Young Adult's attitudes to secondary school itself were recorded at F21. They were a reduced set of similar ones to those asked at 17/18 years: 'disliked being at school', 'teachers were friendly' and 'could talk to teachers'.

Question F22 and follow-on questions asked about the respondent's experience of doing a short-term work placement (as part of the school curriculum rather than part-time work outside school); 85 per cent of respondents had done such a placement. Both F21 and F22 were retained for the main study.

This topic area was considerably expanded for the main study with the reintroduction of questions asked at 17/18 years on whether secondary school had benefited the young person in a range of areas such as 'increasing self-confidence', 'knowing how to acquire a new skill' and 'preparing you for adult life' (new F37 on the main study questionnaire[11]). Other 17/18-year questions that were brought back for the main study included two sets of items (new F35 and F36) about whom or what the young adult had consulted in making decisions about what to do after school (e.g. guidance counsellor, university website etc.).

It was decided to reintroduce the questions in these areas for the main phase at 20 years so that questions allowing reflection on answers given in a previous wave would be available for everyone at the same time-point. For example, the young adult may feel differently as to whether school prepared them for adult life at age 20 than at age 17. Information and advice of various kinds sought after the 17/18-year interview (when most of the cohort were still at school) may have been influential in shaping their post-school pathways.

5.2.8 SECTION G CURRENT STATUS/EVENT HISTORY GRID

For the first time in ***Growing Up in Ireland***, and because of the importance of this transition phase from school to new pathways in education, training and employment, an 'event history' type grid was administered. This grid sought to summarise the changes in the Young Adult's principal economic status (on a month-by-month basis) since they left school.

As pilot fieldwork took take place from August to December 2017, the grid used at that time was considerably shorter than the one expected to be used in the course of the main fieldwork (which would ultimately cover the period from January 2016 to June 2019). This extension of

[11] SEE GROWINGUP.IE FOR QUESTIONNAIRES USED IN MAIN PHASE

the event history grid in the main study would be automatically managed by the CAPI program, which would use the calendar month at the time of the survey to decide how many events are required to fill out the event history grid.

When completing the grid, respondents chose from 14 different statuses which were grouped under the five major headings of (i) 'school', (ii) 'further/higher education', (iii) 'in work', '(iv) in training' and (v) 'Not in school, Education, work (Employment) or Training (including gap year) - NEET'. Only one main status per month was allowed.

Overall, the economic status history grid in its current format worked very well in the pilot. At this stage in their lives, it would seem that most young adults have a relatively predictable sequence of transitions structured by the academic year, so the monthly calendar format of the 'event history' grid was not particularly problematic or onerous for most respondents. It took slightly longer to fill out for the minority of young adults who were in and out of temporary employment, but this was not recorded as burdensome by the interviewers.

The main feedback that emerged from the interviewer debriefing was that several young adults had taken "off" the summer period between finishing the Leaving Certificate and starting college, i.e. they were no longer in school but were not yet searching for work and were reluctant to describe themselves as 'unemployed' for that period. The Study Team therefore added another status category of 'taking the summer off' to resolve this difficulty for the main phase.

The final question at G2 clarified the 20-year-old's current economic status before proceeding with the rest of the questionnaire.

5.2.9 SECTION H POST-SCHOOL PATHWAYS

For the pilot, Section H on post-school pathways was divided up into three areas reflecting different patterns of activity such that, depending on their current principal economic status at G2, respondents answered the questions in one of:

- Section H1 – those currently in further/higher education or training
- Section H2 – those currently at work but who may have participated in post-school education or training
- Section H3 - those not currently in education, training or employment (NEET).

The text that follows considers individual questions according to the structure used in the pilot. It should be noted, however, that a significant restructuring of Section H was performed prior to the main study to (a) capture all pathways as much as feasible (e.g. entered employment for a year then went back to college or applied for a course but didn't take it up) and (b) minimise repetition.

5.2.9.1 SECTION H1 PARTICIPANTS IN EDUCATION

This section was intended for those whose current status was in Further or Higher Education.

Table 5.13 lists the items associated with each section below.

Table 5.13: Structure of Section H1

Construct	20-year Questions	17/18 years	13 years	9 years
If young adult is currently in education				
Details of current course	H1 – H6	√		
Funding of these activities	H7 – H8	√		
Opinions on satisfaction, stress and compliance on course	H9 – H11			
Placements	H12a – H12b	√		
Details of part-time work	H13 – H19	√		
Other training/education activities since leaving school	H20			
Course completion	H21 – H23			
Other applications without participation	H24a – H24b			
Links to Central Applications Office (CAO) database	H26	√		

5.2.9.2 DETAILS ON CURRENT COURSE (H1 – H6, H12A – B)

Question H1 collected information on the type of course the participant was doing (e.g. postgraduate, honours bachelor, Post-Leaving Cert course etc.). The most common response was 'Honours bachelor degree'. The question worked well but as part of the streamlining noted above, H1 was expanded to include not just the course currently studied but also any courses which had been applied for, an offer received, registered for and completed or not. This represented a merging of later questions on other courses that featured at, for example, H20, H21 and H24 on the pilot. Furthermore, in the main study this expanded H1 question was asked of everyone.

At questions H2 and H3, the 20-year-old was asked for details (in open-ended text format) for the name and address of the institution where they were doing their course or apprenticeship, and the name of that course. For this and the following questions, participants' answers referred to their highest-level course if there was more than one. H4-H6 collected data on the date of starting the course, its expected duration and if it was full or part-time.

Later questions H12a-b recorded whether the young adult would have, had or was currently on a work placement as part of their course. These questions were continued for the main study with an additional question on when they started the work placement job.

5.2.9.3 FUNDING OF EDUCATION/TRAINING (H7 – H8)

Questions H7 and H8 asked how the Young Adult's studies were funded: grant, scholarship, money from family, earnings from employment etc. This set of questions (H2-H8) was retained for the main study but H7 and H8 were moved to later in the sequence.

5.2.9.4 ATTITUDES TO COURSE (H9 – H11)

Questions H9-H11 were a new set of questions relating to the 20-year-old's perceptions of satisfaction and stress associated with their course. In addition, they were asked to rate their compliance with the course requirements. Each item was rated on a 10-point scale. The mean scores were 8.17 for level of satisfaction with current course, 5.95 for how stressful the course is, and 8.3 for level of compliance with course requirements. Information such as this may be useful for comparing to course outcomes, particularly where people ultimately leave before finishing, so they were retained for the main study.

5.2.9.5 PART-TIME WORK DURING TERM-TIME (H13 – H19)

Information was collected about paid work the Young Adult undertook during term-time - separate from any work placement - such as type of job, number of hours, duration and pay; 67 per cent of respondents had a part-time job. H19 asked about any work for a family member's business whether paid or unpaid. The impact of working concurrently with studying is an important area of investigation and so these questions were retained for the main study.

To better cater for young adults doing an apprenticeship, additional questions were added on the nature of the work undertaken as part of that training for the main study. They were similar to questions asked of those in full-time employment such as nature of work, hours, pay and membership of a trade union (new questions H18-H21[12]).

5.2.9.6 OTHER COURSES APPLIED FOR OR PARTICIPATED IN (H20 – H25)

The questions at H20 – H24 collected some basic information on other courses the 20-year-old may have participated in (H20-H23) or applied for without participating. Apart from the level of the course (H20 and H24 – Post Leaving Certificate (PLC) course, ordinary bachelor etc), if the respondent had participated in another course, they were asked if they had completed it, and if not, the reasons for non-completion. If they had received an offer of a course but not participated in it, H25 asked them the reasons for non-participation. Although this information continued to be collected in the main phase, the questions were streamlined such that the respondent indicates all courses at the start of section H (new H1) – whether completed or not – and questions such as reason for non-completion are routed from that.

[12] SEE GROWINGUP.IE FOR THE FINAL QUESTIONNAIRES USED IN THE MAIN PHASE OF COHORT '98 AT AGE 20

5.2.9.7 FURTHER ADDITIONS TO THIS SECTION FOR THE MAIN STUDY

Post-pilot, it was evident that there were some gaps in the coverage of post-secondary educational experiences in the area of special needs support and influences on choosing a particular institution. To address the former, a question was added that asked the Young Adult if they had a special educational need, and if so, had they received any supports in post-secondary education, what form they took and if they were useful (new questions H8-H9c).

The question on factors that influenced their choice of institution was reinserted from the 17/18-year questionnaire (new H7). Respondents were asked to rate the importance of considerations such as 'an institution offering their desired course', 'if they could live at home', and 'reputation' on a four-point scale. Although not piloted for 20-year-olds, this set of items had worked well in the main phase of the previous wave.

5.2.9.8 SECTION H2 – PARTICIPANTS WHO ARE IN WORK

This section was intended for those whose current status was 'At work outside the home' (as identified at question G2), and only those individuals. Information was recorded on the nature of the employment, the 20-year-old's perceptions of the job (such as security), and an effective repetition of the questions in section H1 on previous participation in post-secondary education. As previously outlined, these questions were streamlined for the main study so that participation in (or applications for) courses and subsequent routed questions on the nature of the course or reason for non-participation etc. are asked of all participants at the start of section H. Therefore, the individual pilot questions of H41-H55 shall not be discussed further here. In the main study, it was decided to allow all participants to be routed into this section if they answered 'yes' to the first question "are you currently in paid employment?", excluding term-time employment or apprenticeship details covered elsewhere. This change for the main study was more flexible in capturing different arrangements: for example, a 20-year-old who was a student but who could be interviewed during the summer months while they were working full-time. Furthermore, participants who had been in paid employment (but not currently) were asked many of the questions about their previous job – this was a significant change for the main study that potentially enables much more data about employment among Young Adults to be gathered.

The remaining discussion focuses on the questions asked in the pilot.

Table 5.14: Structure of Section H2

Construct	20-year Questions	17/18 years	13 years	9 years
If Young Adult is currently working				
Work status and details of current/most recent job	H27 – H31	√		
Satisfaction with job	H32	√		
Perception of job security	H33	√		
Training for job	H34 – H35			
Knowledge and skills utilized for job	H36 – H39			
Membership of Trade Union	H40			
Other training/education activities since leaving school	H41 – 46			
Funding of these activities	H47 – 48	√		
Course completion/reason for leaving	H49 – H50	√		
Details of courses applied for but not participated in	H52 – H53			
Access to Central Applications Office (CAO) records	H54	√		
Likelihood of returning to education	H55	√		

5.2.9.9 DETAILS OF CURRENT JOB (H27 – H33, H40)

The first group of questions collected data on the nature of the job such as employment status (including a new option for zero-hour contracts); type of work; duration; hours worked and pay. A minority of respondents had a job; however, this number was expected to be higher given the larger sample size of the main study.

For questions H32 and H33, the Young Adult was asked to rate (out of 10) their liking for the job and how secure they felt it was. Question H40 asked about being a member of a trade union.

These questions were retained for the main study, with the addition of an 'internship' category in terms of contract type. Two new questions were also asked in the main study as to whether the employment was for a family member's business, or if they did any additional work for a family member (new questions H44 and H45).

5.2.9.10 TRAINING AND SKILLS MATCH (H34 – H39)

H34-35 were questions about training received in relation to the current job, such as on-the-job training or attending an evening class, and if the training was done before the last year. The following questions, H36 – H38, related to the 20-year-old's perceptions of how well their skills matched the needs of the work (either over- or under-skilled). At H39, they were asked if they viewed the current job as a stopgap or the start of a long-term career.

5.2.9.11 SECTION H3 PARTICIPANTS WHO ARE NOT IN EDUCATION, EMPLOYMENT OR TRAINING

In the pilot, 20-year-olds who were not in education, employment or training (NEETs) were asked to record their main reason for their current status (H56). Most of the remaining section was a repeat of earlier questions on previous participation in post-secondary education; and, as already outlined, this process was streamlined for the main study so that all respondents completed the same section (and were routed to follow-up questions as appropriate).

Table 5.15: Structure of Section H3

Construct	20-year Questions	17/18 years	13 years	9 years
If Young Adult is not in education, employment or training				
Main reasons for not engaging with work, education or training.	H56	√		
Details of past participation on course/courses	H57 – H62			
Funding of these activities	H63 – H64	√		
Course completion / reason for leaving	H65 – H66			
Details of courses applied for but not participated in	H68 – H69			
Access to Central Applications Office (CAO) records	H70	√		
Likelihood of returning to education	H71	√		
Any part-time work in last week?	H32	√		
Details of any recent work	H28 – H31	√		

5.2.10 SECTION J ATTITUDES TO WORK AND PERCEIVED SKILLS

This section on attitudes to work and their current skills and competencies was asked of all 20-year-olds, regardless of their economic status (i.e. whether or not they were working).

Table 5.16: Attitudes to work and perceived skills questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Hopes for future	J1			
Dream job	J2a-J2c	√	√	√
Things to look for in a job	J3	√		
Skills and competencies	J4			
Skills for living independently as an adult	J5			

5.2.10.1 HOPES FOR THE FUTURE (J1)

Question J1 asked the Young Adult to choose three things they would like to have achieved by the time they are thirty. In the focus group, participants stated that they found it difficult to decide on three things that they hoped to have achieved by the age of thirty. Therefore, it was decided to change the response option for each category to a ten-point scale from 1 not

at all important to 10 very important. The category 'Have a postgraduate degree' was removed.

5.2.10.2 DESIRED JOB (J2)

Questions J2a-J2c asked participants what job they would like to have by the time they are 30 and if they thought they would attain this job. A majority of participants (60%) thought they would be in the job they want by the age of 30. Those who didn't think they would achieve their dream job were asked to specify why not. These questions were answered well by participants and were continued for the main study. The study has asked participants this type of question at every interview since they were 9 years old.

5.2.10.3 THINGS TO LOOK FOR IN A JOB (J3)

This question asked the young adult to choose three factors that would be important to them when choosing a job. There were a wide range of characteristics such as 'high income', 'interesting job', and 'be our own boss'. Again, individuals in the focus group mentioned it was difficult to select just three things, although 'high income' was the most popular. Therefore, it was decided to change the response option for each category to a ten-point scale from 1 not at all important to 10 very important. This change also harmonised the response categories with other questions in this section for the main study but reduced the comparability to the question format used in the previous wave.

5.2.10.4 SKILLS AND COMPETENCIES (J4)

This question was new to the study at 20 years of age and worked well in the pilot. Participants were asked to rate their competency on various skills such as 'good written communication' and 'using tools' on a five-point scale (where 0 was 'not at all' and 5 was 'to a great extent'). In general, participants rated their competencies quite highly, for example, 55 per cent of participants rated their 'analytic skills' as 4+ out of 5, 88 per cent rated their ability to 'work well with others' as 4+ out of 5 and 69 per cent rated their ability to 'care for others' as 4+ out of 5. Therefore, it was decided to keep the overall question focussed on ratings of competencies, but to extend the answer categories from 1 'not at all' to 10 'to a great extent' for the main study to allow for greater variability in the recorded answers. In addition, some of the categories of skill were removed to reduce the overall response burden of the question, namely: 'come up with new ideas . . .', 'foreign language', 'knowledge of field of study', 'ability to work well under pressure', and 'care for elderly person or young person with special needs'.

5.2.10.5 SKILLS FOR LIVING INDEPENDENTLY AS AN ADULT (J5)

This question asked participants to rate a number of skills needed for living independently as an adult, such as opening a bank account or cooking a healthy meal. Given the number of existing 'rating' scales in this section, and that the majority of participants (73%) said that they

had all of the skills listed, this set of items was removed from the questionnaire for the main study.

5.2.11 SECTION K INCOME AND EXPENDITURE

The final section in the Young Adult Main Questionnaire looked at the 20-year-old's income, expenditure, financial problems, rent and ability to save.

Table 5.17: Income and Expenditure questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Percentage income from social welfare payments	K1	√(P)	√(P)	√(P)
Degree of ease in making ends meet	K2	√(P)	√(P)	√(P)
Any difficulties in paying back loan	K3 – K4	√(P)		
Basic Deprivation Scale	K5 – K7	√(P)	√(P)	√(P)
Monthly income	K8	√(P)	√(P)	√(P)
Partner's monthly income & source of income	K9 – K10			
Amount paid by individual/their parents/partner for living costs	K11	√(P)		
Amount paid by individual/their parents/partner for study-related costs	K12	√(P)		
Difficulties of finding accommodation	K13			
Advantages/Disadvantages to living at home	K14 – K16			

5.2.11.1 SOCIAL WELFARE (K1)

This question asked participants about social welfare payments and no difficulties were reported. While only a small number of pilot participants were receiving social welfare payments, this is not surprising as many of the sample were in further or higher education. Though the overall percentages receiving social welfare payments at 20 years of age are expected to be relatively small, this question is expected to be relevant to an important group of participants in the main study given the much larger total sample size.

5.2.11.2 DEGREE OF EASE IN MAKING ENDS MEET (K2)

This question asked participants how easy they found making ends meet. Three-quarters of participants reported they found it 'fairly easy', 'easy' or 'very easy' to make ends meet. As this is a key question on financial stress, and no issues were reported in the pilot, it was retained for the main study.

5.2.11.3 ANY DIFFICULTIES IN REPAYING A LOAN (K3 – K4)

This question asked participants if they were having any difficulty repaying a loan. The response to this question was low with over 85 per cent of participants indicating that they did not have a loan. However, this was an important question related to indebtedness and

deprivation, and so was retained for the main study in anticipation of potentially greater endorsement among the bigger sample.

5.2.11.4 BASIC DEPRIVATION SCALE (K5 – K7)

This Basic Deprivation Scale was developed by the Economic and Social Research Institute (ESRI) and has been previously used very widely in research on income, poverty and deprivation within Ireland and elsewhere. The Basic Deprivation scale is made up of 11 items relating to poverty in areas such as food, clothing, furniture, debt and minimal participation in social life.

This scale has been used previously for parents at all waves of ***Growing Up in Ireland***. However, given how frequently 20-year-olds have fluid household arrangements (e.g. in a house-share arrangement with other students during the week, at the parental home at the weekend), answering what is meant by (which) household 'not being able to replace worn-out furniture' for instance can be difficult. It was, therefore, decided not to administer these items to Young Adult respondents at this wave.

5.2.11.5 MONTHLY INCOME (K8)

This question (K8) asked the Young Adult to provide the average monthly income at their disposal, and where this income came from (e.g. job, parents etc). This question worked well in the pilot, however, as not many individuals had a partner at 20 years of age, the first source of income was changed to 'from parents' instead of 'family/partner' and a category 'from other family' was added. The option of 'student loan- to be repaid at some time' was changed to 'A loan from a bank, Credit Union etc.'.

5.2.11.6 PARTNER'S MONTHLY INCOME & SOURCE OF INCOME (K9 – 10)

Question K9-K10 asked the Young Adult about their partner's total income and the source of this income. As previously noted, however, very few 20-year-olds in the pilot resided with a partner and so these questions were removed for the main study. An additional question was, however, included as question 'K10' which asked the 20-year-old if they lived with a spouse/partner with whom they shared income.

5.2.11.7 AMOUNT PAID BY INDIVIDUAL/THEIR PARENTS/PARTNER FOR LIVING COSTS (K11)

This question asked participants to provide the amount paid by participants, their parents and a potential partner towards living costs (e.g. rent, utilities, food, childcare etc.). In the post-pilot debriefing, a number of interviewers reported that participants found this question particularly onerous, and the perception was that 20-year-olds could only make very rough estimates of actual amounts (e.g. by them versus by their parents). The focus group participants echoed these sentiments. In response to this feedback, the question was

considerably simplified for the main study by asking the Young Adult to indicate who contributed to these costs rather than the actual amount. The category 'savings' was removed. In addition, given the small percentage of 20-year-olds living with a partner the "who pays" options were condensed to (a) you (and your spouse/partner if relevant) and (b) your parents.

5.2.11.8 AMOUNT PAID BY INDIVIDUAL/THEIR PARENTS/PARTNER FOR STUDY-RELATED COSTS (K12)

This question asked participants to provide the amount paid by 20-year-olds, their parents and a potential partner for study-related costs. Similar to the previous question, the feedback was that it was difficult to apportion actual amounts to different people. Therefore, the question was simplified along the same lines of the living costs question at K11, with the 20-year-old just asked to indicate 'who pays' rather than how much each contributed. The categories of study-related costs were also updated by removing the 'social welfare contributions to the university/college and student associations' - which was not readily interpretable - and adding a 'training related costs (e.g. purchase of tools, work wear etc)' item to better cover those undertaking courses with practical elements.

5.2.11.9 DIFFICULTIES OF FINDING ACCOMMODATION (K13)

This question asked the Young Adult if difficulty in finding/affording accommodation limited their choice in work or education. It was new to the study at this phase. While nearly all pilot participants had not felt that difficulty in finding/affording accommodation had limited their work or education choices, given the potential policy relevance of this item it was nevertheless retained for the main study. It was expected that the larger sample size for the main study would yield more from this item.

5.2.11.10 ADVANTAGES/DISADVANTAGES TO LIVING AT HOME (K14 – 16)

These questions asked the participants about their opinions on living at home (if relevant), including the extent to which their decision to live in the parental home was influenced by financial reasons. These questions were new to the study at 20 years of age and appeared to work well, with good differentiation in responses. However, at the interviewer debriefing, it was noted that participants found the question 'There are advantages and disadvantages to living at home with your parent(s). From the following list can you tell me which apply to your situation' confusing. Participants were unsure if they were to focus on the advantages or the disadvantages. For the main study the questions were introduced with a more neutral statement: 'Here are some opinions on living at home with your parent(s)'.

5.2.11.11 ADDITIONAL QUESTIONS FOR THE MAIN PHASE

Given the removal of some of the original pilot items on deprivation and actual amounts spent on living costs, the Study Team decided to introduce some additional questions on

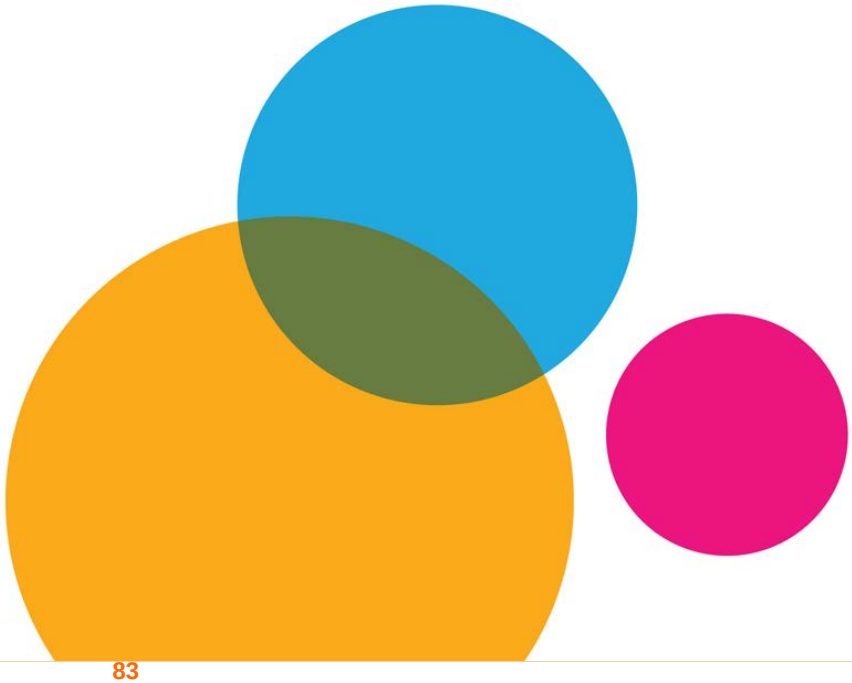
expenditure and ability to save. It was hoped that these would provide some illumination on the financial situation of 20-year-olds. One question (following the question on sources – and amounts – of income) asked the young adult for an estimate of how they paid for household bills such as accommodation, food and electricity. This should help to estimate the respondents' remaining disposable income and was the 'new' question K6.

The other new questions were a simple yes/no items on whether the 20-year-old was able to save, and secondly how they would cope with an unexpected expense of €250. The answer options – on a tick all that apply basis – included 'cut back on other expenditure', 'borrow from parents' and 'credit card' among others. These items are indicative of the Young Adult's financial security and were placed as the 'new' K10 and K11 on the main phase questionnaires.[13]

[13] THE QUESTIONNAIRES USED IN THE MAIN STUDY ARE AVAILABLE ON GROWINGUP.IE.

Chapter 6

YOUNG ADULT SELF-COMPLETE QUESTIONNAIRE



6 YOUNG ADULT SELF-COMPLETE QUESTIONNAIRE

6.1 INTRODUCTION

This questionnaire addressed a range of somewhat more sensitive issues with the 20-year-old. It was self-completed on a laptop. On completion it was 'locked down', so that no-one in the field (respondent, interviewer or third party) was able to access it (as was the case with all questionnaires on completion). The interviewer prepared the laptop for the 20-year-old and took him/her through a few simple demonstration questions, to ensure that the respondent fully understood how to fill out the Self-Complete Questionnaire. There were no open-ended or free-text answer options of any sort on this questionnaire.

A copy of the 20-year-old's Self-Complete Questionnaire is enclosed as Appendix B3.

6.2 SENSITIVE NATURE OF THE INFORMATION RECORDED IN THIS QUESTIONNAIRE

The questionnaire had 14 sections as follows:

Section A	Friendship networks, discrimination, and ideal partner
Section B	Smoking, alcohol and drugs
Section C	Gender identity and intimate relationships
Section D	Sexual experiences
Section E	Children
Section F	Adverse life events and victim of crime
Section G	Feelings about yourself, self-esteem
Section H	Family relationships
(No Section I)	
Section J	Mental health – stress, happiness and depression
Section K	Self-harm
Section L	Coping and support
Section M	Contact with Criminal Justice System
Section N	Internet and technology use
Section O	Reflections on childhood

By design, almost all the topics included in the self-complete questionnaire were of a potentially sensitive nature, some more so than others. As in the previous chapter, each section is considered below. The main focus of the questions, in particular considering any scales used, and some principal

findings from the pilot study are described. In each section there is a table to indicate the extent to which the topic has been covered (note that this refers to topic coverage and topics are not always covered with the exact wording across waves) in the three previous rounds of the study.

6.3 QUESTIONNAIRE CONTENT

6.3.1 SECTION A – FRIENDSHIP NETWORKS, DISCRIMINATION, IDEAL PARTNER

This section tapped into friendship networks. It included details on number of friends and close friends; the 20-year-old's perceived experience of different forms of discrimination (the Everyday Discrimination Scale); and their views on the ideal partner. Overall, this section worked well in the pilot study, providing good differentiation in responses and few item non-responses.

Table 6.1: Social relationship questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Number of friends	A1	√	√	√
Number of close friends	A2a	√	√	√
Ability to count on close friends	A2b			
Perceived experience of discrimination	A3-A5	√		
Perception of ideal partner	A6			

6.3.1.1 FRIENDSHIPS (A1 – A3)

These questions (A1-A2b) asked the 20-year-old about the number of friends they hang around with (mode = 4), the number of 'close' friends and if they can rely on these close friends. They have been used at previous waves of ***Growing Up in Ireland***, worked well in the pilot, and were continued for the main phase.

6.3.1.2 EVERYDAY DISCRIMINATION SCALE (A3 – A5)

The Everyday Discrimination Scale was a 5-item measure asking participants to indicate how frequently they experienced various forms of interpersonal mistreatment in their day-to-day lives, assessed on a six-point scale (where 0 = 'never', 1 and 5 = 'almost every day'). Examples of items in the scale include: 'You are treated with less courtesy than other people' and 'You receive poorer service than other people at restaurants or stores'. Follow-up questions were asked of respondents who answered 'a few times a year' or more, to ascertain what they thought was the main reason for the experience and from whom they experienced this discrimination. The scale was previously asked of Cohort '98 at age 17/18.

Psychometric information.

This five-item scale was adapted from the original nine-item version of the EDS (D. R. Williams, Yan, Jackson, & Anderson, 1997), which demonstrated good reliability and validity (E.g. Bernstein, Park, Shin, Cho, & Park, 2011). Stucky et al. (2011) found that a shortened version of the EDS retained strong psychometric properties; good reliability (α = .84) was found with an African American sample of law

students (N = 589) and with a more representative sample of African Americans (α = .82) (N = 3,570), obtained as a subsample of the National Survey of American Life (Pennell et al., 2004).

Table 6.2 below presents a summary of the psychometric properties of the scale in the main study at Wave 3 and in the Wave 4 pilot.

Table 6.2: Psychometric properties of the Everyday Discrimination Scale at Wave 3 and Wave 4 pilot

Everyday Discrimination Scale	17/18 Years-of-age Main study W3	20 Years-of-age Pilot W4
Mean	1.23	1.43
Median	1.20	1.40
SD	0.85	0.78
Minimum	0	0
Maximum	5	4
Alpha	.74	.71

This scale worked well from a technical point of view in the pilot, with little difference in scores in comparison to performance in the main phase at 17/18 years of age. The reliability statistics for the EDS were adequate (α = .71). Notwithstanding this, however, with the pressing need to reduce respondent burden, this scale was not used in the main phase of fieldwork. The rationale for this decision was that the information was collected recently at 17/18 years of age and could be collected in subsequent waves.

6.3.1.3 PERCEPTION OF IDEAL PARTNER (A4)

This question was new to the study at 20 years of age. In terms of what Young Adults thought was important in a romantic partner, 73 per cent of respondents rated 'personality' as very important and 24 per cent said their 'looks' would be very important. The proportion of respondents rating a potential partner's 'money' as very important was too small to report but just 27 per cent of participants rated it as unimportant. This question worked well in terms of showing variability in responses and provided new information to the study, so was retained for the main phase. At a time when Young Adults will be forging new relationships with 'significant others', and in the context of being surrounded by many 'ideal' comparators in the media, the information will be an interesting reflection of values for this generation.

6.3.2 SECTION B – SMOKING, DRINKING AND DRUG-TAKING

This section was quite extensive in covering three areas of substance use/abuse – cigarettes, alcohol and other drugs. Questions were, however, extensively routed in order to ask many of the questions only of those for whom they were relevant.

6.3.2.1 SMOKING

A majority of the sample (71%) had smoked a cigarette, and the age range for starting to smoke was 10-19 years. While the percentage that had ever smoked a cigarette was high, only 16 per cent of the sample smoked daily and 20 per cent smoked occasionally. A total of 42 per cent of the sample had smoked an e-cigarette. All of these questions were retained for the main study.

Table 6.3: Smoking questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Ever smoked	B1a	√	√	
Age when first smoked	B1b	√	√	
Frequency of smoking and number smoked per week	B1c – d	√	√	
Ever tried to give up smoking	B1e	√		
Ever smoked e-cigarettes & how often	B2a – b	√		

6.3.2.2 ADDITIONS FOR THE MAIN PHASE

The international reviewers were keen to collect additional data on the reasons why smoking (and drinking and drug-taking) takes place. For the main phase, a new question on the 20-year-old's most important reason for smoking, e.g. 'I enjoy it', 'It helps me to cope with stress' etc. was added.

6.3.2.3 ALCOHOL (B3 – B5)

This section recorded details on the young adult's alcohol use and included the Alcohol Use Disorders Identification Test (AUDIT) (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001) measure to tap into alcohol misuse.

Table 6.4: Alcohol questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Ever drank and age at first drink	B3-B4	√	√	
Frequency of alcohol consumption	B5	√		
The Alcohol Use Disorders Identification Test (AUDIT)c	B6a-B7	√		
Where the young adult normally drinks and who with	B8			
Attempts to reduce alcohol consumption	B9			

Nearly the entire sample (97%) had consumed alcohol at some point, and the age range for starting to drink was 10-19 years of age. While participants did not drink frequently (48% typically drank 2-4 times per month), the quantity consumed on a drinking occasion tended to be quite substantial, with over half typically having seven or more units. In addition to the AUDIT described below, there were new questions in the pilot for this wave on the 20-year-old's attempts to cut down on their drinking. The pilot questions were also retained for the main phase.

6.3.2.4 ALCOHOL USE - AUDIT SCALE (B6 – B7)

Potentially hazardous alcohol consumption by participants was measured using the AUDIT. The AUDIT (Babor et al., 2001) is a 10-item screening tool developed by the World Health Organization (WHO) to determine if a person's alcohol consumption may be harmful. Scores can be used to indicate the likelihood of hazardous or harmful alcohol consumption, and alcohol dependence. The WHO proposes the following interpretation of AUDIT scores in an intervention context: scores 8-15 warrant advice on the reduction of hazardous drinking; scores 16-19 suggest counselling and monitoring and scores above 20 warrant further diagnostic evaluation and intervention for alcohol dependence (WHO, 2017).

Psychometric information

The AUDIT has good concurrent validity and correlates with other self-report alcohol-use measures, e.g. the CAGE alcohol screening measure (Hays, Merz, & Nicholas, 1995). It demonstrated good reliability (α = .83) among 832 hazardous drinkers (ibid.), and also in a sample comprised of non-hazardous drinkers, cocaine users, and alcoholics (α = .86) (M. Sinclair, McRee, & Babor, 1992; S. J. Sinclair et al., 2012). Table 6.5 presents psychometric properties of the AUDIT scale in the current pilot phase and previously the 17/18-year wave.

Table 6.5: Psychometric properties of the AUDIT scale in the GUI Wave 3 and in the Wave 4 pilot

AUDIT total score	17/18-year-olds Wave 3	20 years of age Pilot Wave 4
Mean	7.6	11.5
Median	7	10
SD	4.96	4.71
Alpha	.76	.80

Comparing alcohol AUDIT scores between 17/18 and 20 years from Table 6.5, it can be seen that both the mean and median scores have increased, representing a general increase in alcohol consumption for the majority of the sample. This is not an unexpected trend (especially given that the legal age for buying alcohol is 18 years in Ireland) and is also reported in the majority of literature and research exploring alcohol consumption at this age group (Dooley & Fitzgerald, 2012; Mongan, 2016).

Findings for the pilot show that the reliability for the overall AUDIT measure was good (α = .80). The percentage of young people classified as potentially harmful drinkers in the pilot was just over one-quarter. Looking at the total score on the AUDIT, no significant gender differences were observed. It was, however, observed that higher scores on the AUDIT were positively associated with lower mood (higher scores on SMFQ – a measure of depressive symptoms) ($r = .39$, $p < .05$).

6.3.2.5 CONTEXT FOR ALCOHOL CONSUMPTION

A number of new questions relating to drinking were added at 20 years of age, on where the Young Adult drank and with whom. These questions worked well, provided some extra contextual

information on alcohol consumption and were continued in the main phase. A majority of participants drank in a pub/club (74%) and did so with friends (90%).

To expand on this new information on context – as noted above in relation to smoking - a new (closed) question on why the young adult drinks alcohol (e.g. 'I enjoy it'; 'It helps me to relax', etc.) was added to this part of the questionnaire for the main phase of the study.

6.3.2.6 DRUG USE (B10 – B15)

This section tapped into the use of cannabis, aerosols and glue as well as various other drugs, including misuse of some prescription drugs.

Table 6.6: Cannabis questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Ever tried cannabis and frequency of use	B10a – B10c	√	√	
Use of aerosols, solvents, glue, etc.	B11	√	√	
Use of other drugs (Ecstasy, heroin, LSD, cocaine etc.)	B12 – B13	√	√	
Use of prescription drugs for "recreational" purpose	B14	√		
Modified CAGE for drug addiction	B15a – B15d			

It was found that 54 per cent of pilot participants had used cannabis, but only a minority were currently frequent users. In relation to non-prescribed drugs, just over a quarter of participants had used non-prescribed drugs, with cocaine the most prevalent. A minority of participants felt they should cut down on their drug use.

It was mentioned in the focus group with pilot participants that some of the street names for the non-prescribed drugs listed were somewhat out-of-date. The Study Team consulted with the Department of Justice and other sources to update this list to reflect current trends prior to the main phase. The other questions, as well as the CAGE measure described below, were retained for the main study.

6.3.2.7 MODIFIED CAGE FOR DRUG ADDICTION PRELIMINARY ITEM STATISTICS (B11A – B11D)

Questions B11a-B11d are new to the study at 20 years of age. They make up the so-called CAGE questionnaire which is a widely used screening test for alcohol and drug addiction (Ewing, 1984). The questions focus on Cutting down, Annoyance by criticism, Guilty feeling and Easing of withdrawal symptoms (CAGE). Item responses on the CAGE are scored 0 for "no" and 1 for "yes", answers with higher scores are indicative of drug addiction problems. A total score greater than 2 is considered clinically significant. This scale has been used previously in a young adult population demonstrating good internal consistency (α = .78) (Meneses-Gaya, Zuardi, et al., 2010).

Item statistics for the CAGE are presented below in table 6.7. These answers are restricted to the 55 per cent of the pilot sample who self-reported as having taken drugs on at least one occasion.

Table 6.7: CAGE items and CAGE score descriptive statistics and Alpha level 20-year pilot

N = 64 – 65 across variables	Have you ever thought you should cut down your drug use?	Have you ever felt annoyed when people have commented on your drug use?	Have you ever felt guilty or badly about your drug use?	Have you ever used drugs or alcohol to ease withdrawal symptoms, or to avoid feeling low after drug use?	CAGE Score
Mean	0.36	0.28	0.37	0.14	1.16
Median	0	0	0	0	0
SD	0.48	0.45	0.49	0.35	1.46
Minimum	0	0	0	0	0
Maximum	1	1	1	1	4
Alpha	-	-	-	-	.83
No. of items	1	1	1	1	4

The CAGE score itself is supported by a high internal consistency score (of α = .83); the median score on the scale is zero, indicating, that the majority of 20-year-olds who have taken drugs did not report clinically relevant symptoms of addiction as defined by the CAGE scale.

Further validation of this scale was sought by correlating the CAGE score with the previously validated AUDIT scale. It was hypothesised that 20-year-olds who demonstrated drug addiction symptoms would likely also have issues with alcohol consumption. Therefore, a positive correlation between CAGE and AUDIT scores was expected. Given the high positive skew in the data (most participants had a score of zero), a Spearman correlation was used (Rs). The correlation between the AUDIT and CAGE scores was found to be relatively small rs(64) = .242, p = .054. This correlation is non-significant due to the low sample size, but trends in the expected direction in this sample.

6.3.2.8 ADDITIONAL QUESTIONS FOR THE MAIN PHASE

As outlined for smoking and alcohol, additional questions on the context for drug use were added for the main phase. These comprised a question on why (the most important reason) the 20-year-old uses cannabis ('I enjoy it' etc) and where and who with other illicit drugs are consumed.

6.3.2.9 GAMBLING (B16)

This section recorded details on the 20-year-old's gambling behaviours. Table 6.8 demonstrates that these are new questions that have not appeared before in GUI instruments and were adapted from the National Longitudinal Study of Adolescent Health (Harris & Udry, 2018).

Table 6.8: Gambling questions in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Frequency of purchasing lottery tickets	B12a			
Frequency of use of casino tables or video games for money	B12b			
Frequency of use of other games such as cards or bingo for money, betting on horse racing etc.	B12c			

While most participants had never bought a scratch card (60%), played casino tables or video games for money (81%) or played other games such as cards or bingo for money (57%), a substantial minority had at least experimented. These questions were retained for the main study.

6.3.3 SECTION C – GENDER IDENTITY AND INTIMATE RELATIONSHIPS

This section recorded details on the young adult's sexual orientation and relationship status. It included new questions on the quality of the relationship with their partner.

Table 6.9: Gender identity and intimate relationship questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Age at menarche	C1	√	√	
Sexual orientation; transgender; gender identity	C2-C4	√		
Current and past relationship status	C5-C9, C11	√		
Quality of the relationship	C10			

6.3.3.1 AGE AT MENARCHE (C1)

There were no problems reported in relation to this question. Although most female respondents will already have answered this question at previous waves, there may be some who missed this important maturation question (e.g. because they missed intervening interviews since age 9).

While there was limited variation in the answers to these questions on orientation and gender identity in the small pilot sample, a more diverse mix is expected among the much larger main phase sample. As the current setup of questions also appeared to work well in the main 17/18-year questionnaire, they were retained for the main study.

6.3.3.2 CURRENT AND PAST RELATIONSHIP STATUS (C5 – C9, C11)

The questions C5 to C8 asked whether the 20-year-old was in a relationship, what was the status of that relationship and some basic demographic details on their partner. Approximately 31 per cent of participants were single, 20 per cent were casually dating but not exclusive and 38 per cent were dating one person. A very small number of participants recorded themselves as another status (living together, engaged, married or other), although this would be expected to increase among the much larger sample used in the main phase. Question C9 asked participants in a relationship for their

prediction of that relationship status in five years' time (i.e. with the same individual); quite a high proportion of relevant respondents saw themselves as living with this person or engaged to them in five years' time (if currently dating or in a more serious relationship).

C11 asked about the number of boy/girlfriends in the past year. All of these questions were continued into the main phase.

6.3.3.3 QUALITY OF ROMANTIC RELATIONSHIP VARIABLES - PRELIMINARY ITEM STATISTICS

Question C10 was adapted from the PAIRFAM study (Thönnissen, Gschwendtner, Wilhelm, Fiedrich, & Walper, 2014) and looked at the quality of the Young Adult's relationship. Question C10 consists of six statements across three subscales (intimacy, admiration and conflict) in which the young adult indicated how often particular behaviours occur in the relationship - from 1 (Never) to 5 (Always). Sample items are 'You tell him/her, what you're thinking' and 'You disagree and quarrel'.

In the pilot, 44 per cent of the sample indicated that they were in a romantic relationship and were correctly routed into this set of questions. The overall quality of the individual items was high, with no missing data amongst those who answered this section. On average, those reporting that they were in a relationship reported that it was of good quality with mean scores approaching the high ends of the ten-point scales for Intimacy M = 8.9 and Admiration M = 9.1. Conflict was recoded such that higher numbers indicated a more harmonious relationship; this score trended more towards the centre of the scale with a mean of 7.1 with greater variability than the other scales (SD = 1.6).

Alpha levels support the internal consistency of these scales which were all above an alpha value of .80 for the subscales and $\alpha = .67$ for the scale as a whole. Following the 'buffering hypothesis', the quality of romantic relationships total scale score was correlated with the anxiety and stress subscales of the DASS21. It was hypothesised that a high-quality relationship would provide protection against stress and anxiety, which was modestly supported by weak negative correlations between these variables of $r(52) = -.270$ and $-.276$ ($p > .05$) for the anxiety and stress subscales respectively. The small sample size here meant that these correlations were non-significant, but overall, the trends observed add support to the construct validity of the quality of relationship scale.

Table 6.10: Quality of Relationship items descriptive statistics – 20-year-pilot

Valid N (Those in a relationship) = 52. Missing/(Not in relationship) = 66	C10a. You tell him/her, what you're thinking	C10b. You share your secrets and private feeling with him/her	C10c. He/ She shows recognition for the things you do	C10d. He/ She shows you that he/she respects and likes you	C10eR. You are annoyed or angry with each other (Recoded)	C10fR. You disagree and quarrel (Recoded)
Mean	4.50	4.37	4.42	4.69	3.52	3.54
SD	0.58	0.72	0.69	0.58	0.83	0.89
Minimum	3	2	3	3	1	1
Maximum	5	5	5	5	5	5

Table 6.11: Quality of Relationship subscales, scale total and descriptive statistics and Alpha values – 20-year-pilot

Valid N (Those in a relationship) = 52. Missing/(Not in relationship) = 66	Intimacy in romantic relationship	Admiration in romantic relationship	Conflict in romantic relationship (Higher value = less conflict)	Total Quality of Relationship Score
Mean	8.87	9.12	7.06	25.04
SD	1.19	1.15	1.59	2.67
Minimum	5	6	2	19
Maximum	10	10	10	29
Alpha	.80	.76	.85	.71
Number of items	2	2	2	6

6.3.4 SECTION D – SEXUAL EXPERIENCES

This section referred specifically to the 20-year-old's sexual experiences, including, the first-time s/he had sexual intercourse. Overall, there were no problems reported with these questions.

Table 6.12: Sexual Experiences questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Sexual behaviour (adapted from the Adolescent Sexual Activity Index)	D1a-k	√		
Sexual orientation of the person you first had sex with	D2	√		
Relationship with the person you first had sex with	D3	√		
Precautions used the first-time having sex	D4	√		
Regrets about first sexual experience	D5	√		
Still in a relationship with first sexual partner	D6	√		
Number of sexual partners	D7	√		
Use of condom	D8	√		
Use of contraception	D9	√		
Experience of sexually transmitted disease	D10	√		
Sexual Health Knowledge	D11-D12			

The 20-year-old's sexual behaviour was measured using an 11-item scale adapted from the Adolescent Sexual Activity Index (Hansen, Paskett, & Carter, 1999). This is used to measure the spectrum of sexual behaviours typical of adolescents. The items were presented sequentially with several points where the section could end, depending on the participant's responses. The last item on the scale is 'have you had sexual intercourse?'.

In the 20-year pilot, information was forward-fed from the 17/18-year interview and so the interview with the 20-year-old started at the point on the progressive scale of activities where it had ended at 17/18 years of age. Thus, participants would not be re-answering questions they had already completed in a previous wave. By 20 years of age a majority of participants had reached the top end of the sequence of activities.

6.3.4.1 CHANGES FOR THE MAIN STUDY

There had been a significant increase in the Young Adult's stage of sexual activity by 20 years of age. In total, 79 per cent of the sample had had sexual intercourse. Although there was no negative feedback about the scale, the Study Team noted that using the forward feed from the 17/18-year interview could mean the awkward presentation of the first (i.e. next) question – effectively continuing the progressive scale nearly three years later without the context of the earlier questions. For example, a respondent who ended the progressive scale of questioning at "have you cuddled?" at 17/18 years of age would begin the scale at 20 years with "has someone put their hands under your clothing?". Out of context, this could seem an off-putting question to begin this important section on sexual experiences. To avoid these sorts of issues, and given the high proportion of 20-year-olds who had reached the last (intercourse) item on the scale in the pilot, in the main study respondents who had not had sexual intercourse at 17/18 years of age would simply be asked whether they have ever had sexual intercourse. On consultation with the REC, the wording of the question was expanded from

the simple question on the original scale to 'have you ever had sexual intercourse, that is, made love, had sex or 'gone all the way' with someone?'.

6.3.4.2 FIRST SEXUAL INTERCOURSE (D2 – D6)

Of the respondents who had sexual intercourse for the first time since the age of 17, 96 per cent had sex with someone of the opposite sex and 64 per cent were in a steady relationship at the time. A total of 96 per cent of individuals used contraception the first time they had intercourse. A majority of individuals felt that it was just about the right time to have had sexual intercourse, but a minority felt they should have waited longer. These questions were answered well by participants and were retained for the main study.

6.3.4.3 SEXUAL BEHAVIOUR (D7 – D10)

There were no problems reported with these questions (D7-D10), which covered number of sexual partners, consistency of condom and contraception use, and experience of having a sexually transmitted disease. While some questions will apply only to a relatively small minority of respondents, they are important questions and were retained for the larger sample in the main study. As well as individual outcomes, they are highly policy relevant: for example, only 40 per cent of participants reported using contraception every time they had sex.

6.3.4.4 SEXUAL HEALTH KNOWLEDGE (D11 – D12)

These questions were new to the study at 20 years of age and asked the participant if they knew the time of the menstrual cycle when a woman was most likely to get pregnant (D11) and the most effective method for preventing sexually transmitted diseases. There was sufficient variability in the answers to merit their inclusion in the main study.

6.3.5 SECTION E – CHILDREN

This section asked a number of questions regarding pregnancies the 20-year-old may have had. This section is being introduced to the study for the first time at 20 years of age.

Table 6.13: Questions on dependents and pregnancy in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Young Adult has children of their own	E1	√		
Current pregnancy status	E2m	√		
Ever been pregnant	E2bf	√		
Number of pregnancies and outcome of each	E3f-E4			
Baby weight at birth	E5			
Breastfeeding	E6-E7			
How many children like to have	E8			

6.3.5.1 PREGNANCY AND CHILDREN (E1 – E7)

No individual in the pilot had children and very few from this relatively small sample had ever been pregnant; however, given the importance of the information, these questions were nonetheless retained for the much larger sample in the main study. For the main phase, the questions on 'ever pregnant' were rephrased so they could be asked to both males and females "[if ever pregnant, or got a girl pregnant] how many pregnancies have you had (been involved in)?".

Questions for live births, such as baby weight and breastfeeding, were retained for the main study although not utilised in the pilot.

6.3.5.2 NUMBER OF CHILDREN THE YOUNG ADULT WOULD LIKE TO HAVE (E8)

This was a new question on aspirations for family formation, specifically the number of children the 20-year-old would like to have (including through adoption or long-term fostering). It was asked of all participants in the pilot and retained for the main study. The most popular answers in the pilot were to have two (31%) or three (35%) children.

6.3.6 SECTION F – LIFE EVENTS AND BEING THE VICTIM OF A CRIME

This section included some questions on the Young Adult's experience of adverse life events.

Table 6.14: Questions on adverse life events and victimisation in previous GUI waves

Construct	20 year Questions	17/18 years	13 years	9 years
Adverse life events	F1	√	√	√(P)
Victim of crime	F2			

There were no problems reported for this section and similar questions on adverse life events (F1) have been included in most previous rounds of interviewing. To reduce respondent burden, and to make room for the addition of a question on bullying, the Study Team removed these questions from the main phase at age 20 years. This information has already been collected at multiple time-points from Cohort '98, most recently at 17/18 years, and events in the intervening period could be collected retrospectively at the next interview.

It was decided to focus on the new data being collected in relation to being the victim of a crime. Therefore, the previously-routed pilot question F2 on type of crime experienced was instead routed on a new question at F1 'have you been the victim of a crime in the last two years?'. One further change was the disaggregation of the 'assault' item into two separate categories: 'you were threatened with assault by someone you knew' and 'you were assaulted or threatened with assault by a stranger'.

6.3.6.1 ADDITIONAL QUESTIONS ON BULLYING

Bullying questions had previously been administered at ages 9, 13 and 17/18 years but were not included in the 20-year pilot due to pressure on space and the change in context from school.

However, in light of continued concern about bullying – especially cyber-bullying, it was decided to re-insert a question on this topic for the main phase of the 20-year wave. A single question presented the young adult with different kinds of bullying (physical, verbal etc) and asked them to tick all that had happened to them (if any) in the last three months – i.e. as victim rather than perpetrator. If they had experienced any type of bullying, there was a follow-on question on how often it occurred. These questions were the 'new' F3 and F4.[14]

6.3.7 SECTION G – FEELINGS ABOUT YOURSELF, YOUR SELF-ESTEEM

The measures in Section G were aimed at ascertaining the 20-year-old's view of themselves.

Table 6.15: Questions on self-esteem and self-perception in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Rosenberg self-esteem scale	G1	√		
Perception of weight	G2	√	√	√
One-item life satisfaction	G3	√		

6.3.7.1 ROSENBERG SELF-ESTEEM SCALE (G1)

Self-esteem was measured using a shortened form of the Rosenberg Self-Esteem (RSE) scale (Rosenberg, 1979). The RSE is the most commonly used and well-validated measure of global self-esteem (Robins, Hendin, & Trzesniewski, 2001). The Rosenberg Self-Esteem scale contained six items (out of the original 10) rated on a 4-point scale ranging from 1 (strongly disagree) to 4 (strongly agree). This shortened form was also used in the main 17/18-year wave.

Psychometric information

The scale was originally designed to measure the self-esteem of high school students. However, it has been very successfully used with a variety of groups, including adults. The RSE has good concurrent validity with other measures of self-esteem, such as the Coopersmith Self-Esteem Inventory and Harter's Self-Perception Profile for Adolescents (Hagborg, 1993). The measure also demonstrates good internal consistency (α = .88) (Roth, Decker, Yorck Herzberg, & Brahler, 2008). Table 6.16 presents descriptive statistics on the Rosenberg Self-esteem scale at wave 3 (age 17/18) and in the 20-year pilot.

[14] SEE GROWINGUP.IE FOR QUESTIONNAIRES USED IN THE MAIN PHASE

Table 6.16: Psychometric information for the Rosenberg Self-esteem scale at 17 and 20 years

Rosenberg Self-esteem scale	17 years	20 years
Mean	12.01	11.45
Median	12	12
SD	3.54	3.73
Minimum	0	1
Maximum	18	18
Alpha	.84	.91

Findings from the pilot showed that reliability for the short self-esteem measure was high (α = .91). It was continued for the main phase of the study.

6.3.7.2 PERCEPTION OF WEIGHT (G2)

This question worked well in the pilot, providing good variability in responses. A majority of participants rated themselves as either just the right size (43%) or a bit overweight (38%). For the main phase of the study, the question was rephrased from 'skinny' to 'underweight' as a more 'adult' word.

6.3.7.3 LIFE SATISFACTION SCALE (G3)

This one item life-satisfaction measure has been used previously at 17/18 years of age and seemed to work well in the pilot at 20 years of age. A majority of participants rated themselves towards the upper end of the scale (10 = extremely satisfied). Higher life satisfaction was positively associated with greater self-esteem (r = .64), negatively associated with low mood (r = -.50) and negatively associated with stress (r = -.38). The item was retained with no change for the main study.

6.3.8 SECTION H – FAMILY RELATIONSHIPS

This section considered the 20-year-old's relationship with adult members of their family, and people they turn to for advice.

Table 6.17: Family Relationships questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Relationship with mother	H1-H3	√	√	√
Relationship with father	H4-H6	√	√	√
Other adults you would turn to for advice	H7	√	√	√
General family relationship	H8	√	√	
Caring for another family member	H9	√		

6.3.8.1 NETWORK OF RELATIONSHIP INVENTORY (H1 – H6)

Positive and supportive interactions between parents and children have been shown to impact positively on social behaviour, school grades and externalising behaviours (O'Connor, Hetherington, & Clingempeel, 1997; Mosley & Thompson, 1995).

Questions on the relationship with mother and father were taken from measures used by the German PAIRFAM study (Brüderl et al., 2018; Thönnissen et al., 2014). The 20-year-old reported on four dimensions of their relationship with their parents: 'intimacy', 'admiration', 'conflict' and 'reliability'. Each subscale comprises two items rated on a five-point Likert scale that goes from 'never' to 'always'. Sample items are 'you tell your mother what you're thinking' and 'your mother shows recognition for the things you do'. A fifth dimension, 'fear of love withdrawal', has three items rated on a five-point scale ranging from 'not at all true' to 'completely true'. All questions were asked separately about mothers and fathers. They are a subset of items previously used in ***Growing Up in Ireland*** at 17/18 years.

Table 6.18: Network of Relationships Inventory at 17- and 20-years psychometrics - (Mother)

	Mother Intimacy subscale		Mother Reliability subscale		Mother Conflict subscale		Mother Admiration subscale	
	17 years	20 years	17 years	20 years	17 years	20 years	17 years	20 years
Mean	6.14	6.62	3.26	3.04	5.29	5.21	8	8.33
Median	6	7	3	2	5	5	8	8
SD	1.98	1.89	1.55	1.34	1.57	1.63	1.69	1.61
Minimum	2	2	2	2	2	2	2	2
Maximum	10	10	10	7	10	10	10	10
Alpha	.82	.87	.56	.30	.84	.91	.80	.84

Table 6.19: Network of Relationships Inventory at 17- and 20-years psychometrics - (Father)

	Father Intimacy subscale		Father Reliability subscale		Father Conflict subscale		Father Admiration subscale	
	17 years	20 years	17 years	20 years	17 years	20 years	17 years	20 years
Mean	5.15	5.14	3.48	3.36	5	4.73	7.62	7.71
Median	5	5	3	2.5	5	4	8	8
SD	1.99	1.81	1.78	1.76	1.7	1.57	1.92	1.9
Minimum	2	2	2	2	2	2	2	2
Maximum	10	10	10	9	10	8	10	10
Alpha	.82	.85	.63	.55	.87	.86	.85	.88

Internal consistency for the measure was generally high for nearly all the subscales, except for the reliability subscale (mother) which had $\alpha = .30$. Upon investigation, it was noted that there were several outliers skewing the reliability analysis (discrepancies in the response to the two questions which may be due to a misreading of the question); when these outliers were removed, reliability increased to $\alpha = .53$. This scale was used without further change in the main phase for 20-year-olds.

6.3.8.2 OTHER ADULTS THE YOUNG ADULT CAN TURN TO FOR ADVICE (H7)

A large majority of participants reported that they had someone they could turn to for advice (94%). There were no issues with this question, and it was used again for the main phase.

6.3.8.3 GENERAL FAMILY RELATIONSHIP (H8)

The majority of participants felt their family got on well and had a score towards the high end of the scale: 75 per cent of participants had a score of 7 or more on the scale where 10 = 'we get on very well' (range = 9). It was retained for the main phase.

6.3.8.4 CARING FOR ANOTHER FAMILY MEMBER (H9)

A substantial minority of 20-year-olds in the pilot reported caring for another family member (25%); however, the pilot did not collect any further information in terms of the nature of the caring, to whom it was delivered etc. It was felt that this topic merited additional questions which were added for the main study as new questions H10-H12. These included details on how the person being cared for was related to the 20-year-old (if the Young Adult says they care for a younger sibling they are asked if this is babysitting or something more than this) and how much time this role takes up.

6.3.9 SECTION J – MENTAL HEALTH

This section contained a number of scales measuring different aspects of the Young Adult's mental health.

Table 6.20: Mental Health questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Depression – Short Mood and feelings Questionnaire (SMFQ)	J1	√	√	
Life satisfaction				
Anxiety and Stress – 2 subscales of the DASS	J3	√a		
Psychotic symptoms	J3	√		
Diagnosis/treatment for depression and/or anxiety	J4-J6	√	√	
Diagnosis/treatment for another psychological illness	J7-J9			

a. **The DASS anxiety subscale, but not stress, was used at 17/18 years.**

6.3.9.1 SHORT MOOD AND FEELING QUESTIONNAIRE (J1).

The pilot used the Short Mood and Feelings Questionnaire (SMFQ) (Angold et al., 1995), included at question J1. This scale was chosen for use in ***Growing Up in Ireland*** as it is a brief (13-item) self-report, and easy-to-administer measure of depressive symptoms. It was used at both 13 and 17/18 years of age. The authors of the Short Mood and Feeling Questionnaire intended it to be used with children and adolescents up until the age of 18 (Angold et al., 1995), though the ALSPAC study has continued the use of the scale up until the age of 22 (Boyd et al., 2013). Descriptive statistics and psychometric information for the SMFQ are presented below in Table 6.21.

Table 6.21: Psychometric information for the Short Mood and Feelings Questionnaire (SMFQ) Total score – Pilot Wave 4

	17 years (Wave 3)	20 years (Wave 4)
Mean	5.98	7.56
Median	4	6
SD	6.65	6.86
Minimum	0	0
Maximum	26	26
Alpha	.95	.94

The Short Mood and Feeling Questionnaire worked well at 20 years of age and was found to have high internal reliability (α = .94). The mean score was higher than found in the main phase at 17 years of age (M = 5.98). Higher scores in the SMFQ are associated with more depressive symptoms. However, this apparent difference may be due to the smaller sample size allowing a small number of higher scores to skew the mean upwards.

While there were no problems with the SMFQ at age 20 years, the Study Team considered that now would be an appropriate juncture to switch to an alternative measure of depression whose use is better established among an adult population. The Center for Epidemiological Studies Depression Scale (eight-item) (CESD-8) is a short self-report screening instrument for depression in the general population. It is the measure that ***Growing Up in Ireland*** has used in all previous waves for adult (i.e. parent) respondents. The CES-D has been used in numerous studies to measure depression symptoms in adolescence (Roberts, Andrews, Lewinsohn, & Hops, 1990), adults (Mohebbi et al., 2018) and the elderly (Ylli et al., 2016). Therefore, the CESD-8 replaced the SMFQ as the measure of depressive symptoms for Young Adult respondents in the main study.

6.3.9.2 LIFE SATISFACTION (J2)

A number of items were included on general life satisfaction. These questions were included to provide some positive statements in a very negatively worded section. However, given the overlap with other similar items elsewhere in the questionnaire, it was decided to remove these questions to reduce the burden on participants.

6.3.9.3 DASS21 (DEPRESSION, ANXIETY, STRESS SCALES) (J3)

The DASS is a set of three self-report scales designed to measure the negative emotional states of depression, anxiety and stress. Previous research has shown that the scale has good internal reliability (α = .90 for anxiety subscale and α = .93 for the stress subscale), construct validity, and good convergent and discriminant validity when compared with other measures of anxiety and stress (Henry & Crawford, 2005).

Each of the three DASS21 scales contains 7 items. The depression subscale would heavily overlap with the Short Mood and Feelings Questionnaire (SMFQ) or CES-D, so only the anxiety and stress subscales

were used in the pilot. The anxiety scale assesses physical sensations such as trembling and dry mouth, and feeling anxious. The stress scale is sensitive to levels of non-specific arousal such as difficulty relaxing and being easily upset/agitated, irritable/over-reactive and impatient (Henry & Crawford, 2005).

Tables 6.22 and 6.23 display item level descriptive statistics for the DASS21 items. Exploration of the descriptives shows that the overall pattern in the DASS21 items is for a skew biased towards the low end of the scale for all items. This is not unexpected in a non-clinical sample. Table 6.24 shows that the skew is carried through into the subscales though other descriptives were within expected bounds. The subscale items themselves show a highly consistent relationship their constituent items. This is reflected in the high internal consistency values (of α = .88, and α = .91) for Anxiety and Stress respectively.

Section 5.2.1.3.3 used the DASS21 items as a tool to establish the construct validity of the BNSS scale. The DASS21 items used in the pilot behave in a theoretically consistent manner with a set of relevant correlates from the BNSS. Evidence of concurrent validity enhances the overall construct validity of both scales.

The buffering hypothesis followed in this section explored correlations from Table 5.3. These correlations revealed that the BNSS items were more strongly related to the DASS21 stress subscale, than the anxiety subscale. This demonstrates that though current levels of anxiety may be of substantial clinical interest, the presence of ongoing chronic stressors may have better predictive validity and therefore be more useful in the context of a longitudinal study. Although the value of both subscales was recognised, given the imperative to reduce the burden on respondents – especially the disproportionate number of negative items – it was decided to discontinue the anxiety subscale for the main study. The stress subscale was retained as this information has not been collected from the cohort before and is particularly apposite for this transition phase of the life course.

Table 6.22: DASS 21 Anxiety items descriptive statistics Items A-G

N =62 - 63	J3a.	J3b.	J3c.	J3d.	J3e.	J3f.	J3g.
	I was aware of dryness of my mouth	I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)	I experienced trembling (e.g., in the hands)	I was worried about situations in which I might panic and make a fool of myself	I felt I was close to panic	I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)	I felt scared without any good reason
Missing	1	0	0	0	0	0	0
Mean	0.53	0.40	0.56	0.89	0.73	0.56	0.57
Median	0	0	0	1	0	0	0
SD	0.72	0.73	0.84	1.05	0.88	0.88	0.89
Minimum	0	0	0	0	0	0	0
Maximum	3	3	3	3	3	3	3

Table 6.23: DASS 21 Stress items descriptive statistics Items H-N

N = 63	J3h.	J3i.	J3j.	J3k.	J3l.	J3m.	J3n.
	I found it hard to wind down	I tended to over-react to situations	I felt that I was using a lot of nervous energy	I found myself getting agitated	I found it difficult to relax	I was intolerant of anything that kept me from getting on with what I was doing	I felt that I was rather touchy
Missing	0	0	0	0	0	0	0
Mean	0.71	0.86	0.81	0.84	0.78	0.60	0.57
Median	0	1	1	1	0	0	0
SD	0.85	0.96	0.96	0.99	0.96	0.75	0.69
Minimum	0	0	0	0	0	0	0
Maximum	3	3	3	3	3	3	2

Table 6.24: Descriptive statistics for the DASS21 subscales

N = 62 - 63	DASS21 Anxiety	Dass21 Stress
Missing	1	0
Mean	4.11	5.17
Median	2	3
SD	4.59	5.05
Minimum	0	0
Maximum	19	18
Alpha	.88	.91
No of items	7	7

6.3.9.4 DIAGNOSIS/TREATMENT FOR DEPRESSION AND/OR ANXIETY (J4)

A relatively high proportion of the pilot sample – 19 per cent - reported that they had been diagnosed with depression or anxiety by a doctor/psychologist/psychiatrist. The questions were continued for the main study with the addition of a third item asking the participant if they were on a waiting list for treatment (new J6).

6.3.9.5 DIAGNOSIS/TREATMENT FOR ANOTHER PSYCHOLOGICAL ILLNESS (J5 – J7).

Questions on other types of psychological or psychiatric diagnoses were new at this timepoint. Although only a small percentage of the pilot sample reported other diagnoses, it was decided to retain this question for the much bigger sample to be used in the main study. The list of diagnoses was, however, streamlined for the questionnaire in the main phase and the following items were removed because they are captured elsewhere in the survey and/or they were likely to have a low prevalence; 'Addiction (e.g. alcohol, drugs, gambling', 'Stress (not PTSD)', 'Problem with attention or learning', 'problem with controlling your behaviour', 'Having physical symptoms thought to have a psychological cause (i.e. 'somatoform disorder')', 'Problems after brain injury or disease such as amnesia, delirium', and 'Dissociative disorder'.

6.3.9.6 ADDITIONS TO THIS SECTION FOR THE MAIN STUDY

Two new topics were added to this section for the main phase of interviewing with 20-year-olds. The first related to difficulties accessing mental health treatment. The 'new' J9 asked (similarly to the question on barriers to other health services in the main questionnaire) whether the young adult had ever needed to consult a mental health specialist but did not. If 'yes', 'new' J10 asked for reasons why not (again similar to the other health question), including not being able to afford it or being unable to get an appointment.

The new question at J11 was included at the request of the Steering Group to include more questions on positive as well as negative experiences. Four items previously used in the 'Healthy Ireland' survey but originally part of the RAND Healthcare 36-Item Short Form Survey Instrument were added to measure energy and vitality. They ask about feeling 'full of life' and being 'a happy person'. The answer option for each item is a six-point frequency scale ranging from all of the time to none of the time.

6.3.10 SECTION K – SELF-HARM

Section K contains a set of brief questions on self-harm. These questions were also was asked at 17/18 years of age.

Table 6.25: Self-harm questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Ever self-harmed	K1	√		
Frequency, and method	K2-K3	√		

The pilot data indicated that a minority of 20-year-olds had hurt themselves on purpose in the past 12 months, of which cutting was the most common method of injury. While absolute numbers were small in the pilot, the questions were retained for the main phase in recognition of the importance of the topic.

6.3.11 SECTION L – COPING AND SUPPORT

This section looked at the 20-year-old's coping strategies with life problems and whom they are likely to turn to or confide in about personal thoughts or feelings.

Table 6.26: Coping and Support questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Coping mechanisms	L1	√		
Whom they confide in	L2			

6.3.11.1 NEW COPING STRATEGY MEASURE (L1)

The 20-year-pilot used a new set of items which was loosely based on a strategy-based inventory scale similar to the Brief COPE inventory (Carver, 2013). The Brief Cope inventory was itself a shortened version of the full COPE inventory (Carver, Scheier, & Weintraub, 1989). The approach to coping at 20 years is different to the one adopted at 17/18 years of age, which focused on style of coping in contrast to specific strategies. The rationale for piloting an alternative to the abbreviated Amirkhan coping style measure as used at age 17/18 years (Amirkhan, 1990) was (a) to include a wider range of coping strategies, (b) to include strategies and/or phrasing that would be particularly applicable to Young Adults in Ireland and (c) with a view to potentially assessing the usefulness of individual strategies from a policy perspective. The set used with 20-year-olds in the pilot had 20 possible strategies such as 'I discuss the problem with my parents or other family members', 'I take drugs that are prescribed for me' and 'I exercise or play sports'. The answer categories were 'often', 'sometimes', 'rarely' or 'never'.

Factor analysis and reduction of coping strategy measure items.

Following the meeting with the international reviewers, the Study Team undertook an exercise to determine if the new measure could be reduced in length without compromising its usefulness. The initial strategy was to review items that were rarely endorsed. Although most coping strategies were used by a number of people, the item 'praying or meditating' was virtually unused. This was the first item to be eliminated. A factor analysis was then run using the coping strategies data from the pilot study. The factor analytic results were reviewed to determine the underlying pattern of items relating to distinct coping strategies. Potentially these coping strategy factors could still be adequately measured with fewer items in the questionnaire (see Technical Appendix 1 attached to this report for the fuller details).

Principal Axis Factor Analysis was used to generate a parsimonious model of the data where the factors themselves may also correlate. The results need to be interpreted with caution due to the low

sample size (N = 87) relative to the overall number of items (20). Exploration of the factor analysis suggested that a reduced scale of 14 items would retain good coverage of the six factors identified in the full scale, with between two and three items defining each factor. Proposed factor labels and alpha values are presented in Table 6.27 below. This produces a structure akin to the related Brief COPE inventory (Carver, 2013) which contains 14 factors with two items loading onto each factor.

Table 6.27: Proposed shortened coping scale (L1) Alpha values and number of items per factor

Factors representing coping strategies						
	Avoidant	Medical	Self-Care	Social	Stimulant	Strategize
Cronbach's Alpha	.55	.61	.62	.63	.73	.80
Number of items	2	2	2	3	2	3

Overall, the alpha values observed in Table 6.27 demonstrate reasonable levels of item consistency. Cronbach's Alpha tends to be suppressed in subscales with small numbers of items (Nunnally, 1978). The strong factor loadings seen in Table 9.10 can be considered stronger empirical support for the usefulness of these items (Technical Appendix 1).

In summary, the new coping strategies measure constructed for the 20-year phase was retained for the main study but was reduced to 14 items instead of the original 20. These included a mixture of constructive approaches (e.g. 'I analyse the problem and work out a strategy to deal with it') and less healthy behaviours (e.g. 'I drink alcohol or smoke a cigarette').

6.3.11.2 WHOM THE YOUNG ADULT CONFIDES IN (L2)

This question worked well, providing good differentiation in responses, and was retained for the main phase with one small amendment: combining grandparent and other relative into one category. A majority of participants talked to their friends about their personal thoughts and feelings (89%), followed by their mother (76%), brother/sister (52%), boyfriend/girlfriend (51%) and father (45%).

6.3.12 SECTION M – CONTACT WITH CRIMINAL JUSTICE SYSTEM AND ATTITUDES TO CRIME

This section addressed the Young Adults' interactions with the criminal justice system as well as their attitudes towards crime. There were substantial changes between the pilot and main phases.

Table 6.28: Contact with criminal justice system questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Garda Youth Diversion Programme	M1	√		
[Likelihood] of committing anti-social behaviours	M2	√	√	
Trouble with the Gardai (Police)	M3 – M7	√	√	

6.3.12.1 CONTACT WITH GARDAÍ (M1; M3 – M7)

Only a minority (17%) answered 'yes' to the first question, 'have you heard of the Garda Youth Diversion Project?' (M1). Similarly very small numbers of pilot participants had participated in that programme (M5) or had other contact with the Gardaí in terms of being in trouble, being cautioned, appearing in court or being found guilty of an offence. To a large extent, this was anticipated given the relatively small sample in the pilot compared to the main phase; but it did signal the need to restructure this set of questions so that participants would not be frustrated by answering questions that were clearly irrelevant to them (e.g. one would not appear in court accused of a crime, be found guilty of a crime or spend time in prison without first being arrested).

For the main phase, therefore, a hierarchical sequence of questions for 'contact with Gardaí' (new M2)[15] was implemented which started with '[have you] ever attended a Crime Prevention Talk, given by the Gardaí in your school or elsewhere?' – which does not imply 'being in trouble' – and progressed to:

- Stopped and questioned
- Formal warning or caution
- Arrested
- Appeared in court accused of a crime
- Found guilty of a crime
- Spent time in prison or juvenile detention centre

For a level of contact at 'formal warning or caution' or above, the 20-year-old was asked about the nature of the offence that related to (as a 'tick all that apply' option). The original list at question M7 (now M3) was reduced to just five categories of crime plus an 'other specify' option. The separate question about participation in the Garda Youth Diversion Project was retained and asked of all respondents, but the question about having heard of this scheme was removed.

6.3.12.2 LIKELIHOOD OF COMMITTING ANTI-SOCIAL BEHAVIOURS (M2)

Respondents were asked a sequence of questions about 17 types of anti-social behaviours. These ranged in seriousness from 'not paying the correct fare on a bus' to 'carrying a knife or weapon; using force or threats to get money or something else from someone; hitting, kicking, or punching someone to hurt or injure them'. The questions were developed by researchers in the Edinburgh Study of Youth Transitions (Smith et al., 2001) and were also used in the Belfast Youth Development Study (Percy, Higgins, & McCrystal, 2001). In the 13- and 17/18-year main phases, the then-adolescents were asked about anti-social behaviours they had committed themselves but for the 20-year pilot they were phrased as 'you or your friends [have done this]'. This strategy was suggested both to avoid putting

[15] SEE GROWINGUP.IE FOR QUESTIONNAIRES USED IN MAIN PHASE

the now-adult participants in the awkward position of admitting to a crime (that might be otherwise undetected) and to get a sense of how close the 20-year-old was to this type of activity even if not engaging in it themselves. The prevalence of anti-social activities was low. The most commonly occurring activity (by a young adult or their friends) was not paying the correct fare on a bus or train: (21% 'several times' and 32% 'once or twice').

Post-pilot there was a lengthy consideration of the usefulness of these questions for an adult (as opposed to an adolescent) population, particularly if they were not specific to the 20-year-old. Ultimately it was decided to replace this question (originally M2a-q) with a new measure where the young adult would self-report their aggressive behaviour: a scale called the Reactive-Proactive Aggression Questionnaire (RPQ: Raine et al., 2006). This scale has 23 items which can be used to calculate 'proactive aggression' (organised, initiated by the 20-year-old, e.g. 'used physical force to get others to do what you want') and 'reactive aggression' (responding aggressively to some kind of provocation or frustration, e.g. 'yelled at others when they have annoyed you'). Subscale scores can be combined for a total aggression score. The scale was psychometrically validated with a sample of children and adolescents by its authors (Raine et al., 2006) and was most recently validated by Brugman et al. (2017) using an adult sample. Results of this study demonstrated good internal reliability with Cronbach's alpha of .851 for proactive aggression, and .847 for reactive aggression for the scale when used with an adult sample, supporting the two factor (proactive/reactive) model. The scale appears at question M1 on the 20-year main phase self-complete questionnaire.

6.3.13 SECTION N – INTERNET AND TECHNOLOGY USAGE

Section N looked at how much time the Young Adult spends at a computer/television screen and the nature of their internet use.

Table 6.29: Internet and technology usage questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Screen time	N1 – N2	√	√ (P)	√ (P)
Details of internet usage	N3	√		

6.3.13.1 AMOUNT OF SCREEN TIME (N1 – N2)

In relation to screen time (N1), a majority of participants spent three hours or more online during a typical weekday and weekend (42%). The most common reasons for being online was for 'social media' (96%), 'music/television/games' (96%), 'news updates' (73%), 'messaging/calling friends or family' (97%), for 'college work' (87%) and 'searching for information' (93%). The single question on 'multi-screening' (N2) was retained without change for the main phase.

6.3.13.2 ONLINE ACTIVITIES (N3)

After feedback from the interviewer debriefing, and the relatively high proportion of 20-year-olds spending three hours or more online on a typical day, for the main phase the upper categories of screen-time were disaggregated from 'more than 3 hours' to '3 – 5 hours' and 'more than 5 hours'.

There was also some disaggregation and additions to the list of uses for time online (N3). The category 'music/television/games' was separated into 'music/television' and 'games/game streaming'. Game streaming is a term that captures the activity of broadcasting live or pre-recorded footage of computer games. A new category of 'posting YouTube videos with a view to earning money (now or in the future)' was added.

6.3.13.3 ADDITIONAL QUESTIONS ON SOCIAL MEDIA USE (NEW N4 – N7)[16]

In response to policy-maker interest in more specific details on social media use by young adults, and some negative feedback on the questions piloted as part of the main (face-to-face) questionnaire, new and more detailed questions on the use of social media apps were added to the self-complete questionnaire for the main phase.

In (new) question N4, respondents who had indicated social media use in question N3 were asked whether they had an account with a particular site and if so, whether they had a public profile, if they were frequent users, and whether they knew how to change their privacy settings. Seven types of social media app were listed (e.g. Twitter, Instagram) and the list was based on relative popularity statistics for Ireland (Ipsos MRBI, 2017, as cited by McGarrity, 2017). If a respondent indicated at question N3 that they did not use social media, they were asked a follow-up question at N6 on whether they had ever had an account.

New question N5 asked respondents who used social media about privacy on social networking sites, such as removing their name from photos that have 'tagged' them or if they had ever regretted sharing things online. The new question at N7 was a yes/no item on meeting someone that you first met online face-to-face (in the last year).

6.3.14 SECTION O – REFLECTIONS ON CHILDHOOD

Section O contains questions that were new to the study at 20 years of age and asked the Young Adult to reflect on their childhood and teenage years.

Table 6.30: Reflections on childhood questions used in previous GUI waves

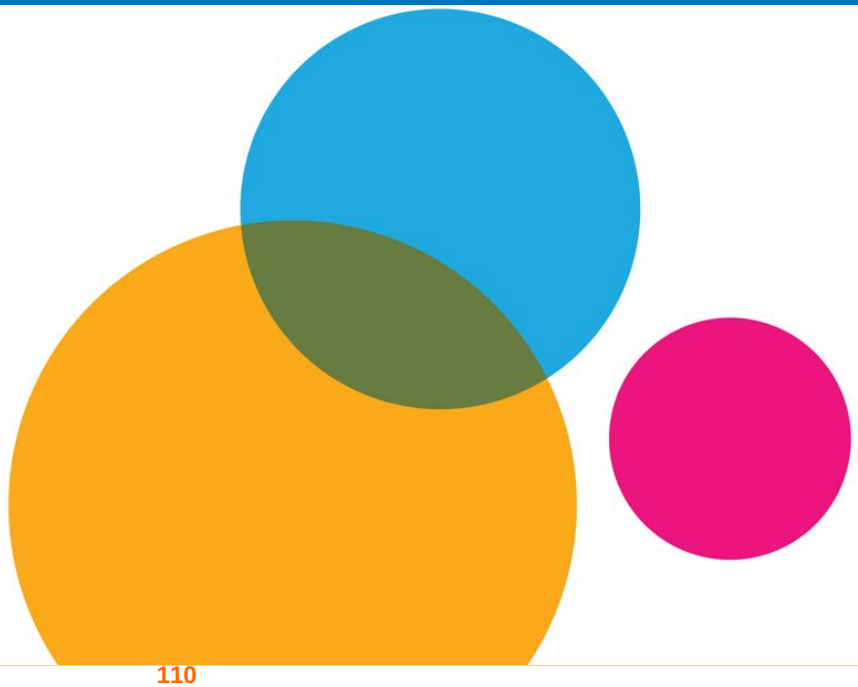
Construct	20-year Questions	17/18 years	13 years	9 years
Reflections on childhood	O1			

The majority of participants said they had a happy childhood (88%); this dropped slightly when asked in relation to the teenage years (65%). No issues were identified with these questions and they were retained for the main phase of the study.

[16] SEE GROWINGUP.IE FOR QUESTIONNAIRES USED IN THE MAIN STUDY

Chapter 7

YOUNG ADULT'S COGNITIVE ASSESSMENT, TIME-USE DIARY & PHYSICAL MEASUREMENTS



7 YOUNG ADULT'S COGNITIVE ASSESSMENT, TIME-USE DIARY & PHYSICAL MEASUREMENTS

7.1 INTRODUCTION

Two cognitive tests were administered to the 20-year-old in the pilot interview – the 'Fruit Naming' Test (Tombaugh, Kozaki, & Rees, 1999) and the Shipley-2 Abstraction subscale (Shipley, Gruber, Martin, & Klein, 2009). In terms of physical measurements, the height, weight, blood pressure and waist circumference of the 20-year-old, as well as the height and weight of their parent, were recorded.

7.2 COGNITIVE ASSESSMENT

At age 17/18 years, the Study Team administered three brief measures to record details on the Young Adult's cognitive ability. These were the 'Animal Naming' test in which the respondent was asked to list all animals they could think of in one minute. This assessed their verbal semantic fluency. This type of test draws on general knowledge in long-term memory and requires use of executive function to access that knowledge and self-monitor responses for repetitions, acceptable items etc. (Storm, 2016). In addition, they were asked to complete a vocabulary test. This was similar to one used in the British Cohort study ('BCS70') (University College London, 2017), when respondents were 42 years of age. Finally, they were asked to complete three questions requiring mathematical calculations which comprised a short measure derived from previous research in The Irish Longitudinal Study on Ageing (TILDA, 2018).

The study team considered that repeating these same measures just two years later may be of limited usefulness and would likely lead to pronounced practice effects (Salthouse, 2018). The international advisors had also emphasised the importance of keeping the time spent on cognitive assessments to a minimum, given the necessity of collecting detailed information on key aspects of the transition process. In view of its importance to the 20-year-old's longer-term development, it was decided to test two measures of cognitive ability in the pilot. These were the 'semantic fluency' test and the Abstraction sub-scale from the Shipley-2 measure of cognitive functioning.

The semantic fluency task, was the same type of cognitive test used in the 17/18-year pilot and main phases of interviewing but with a different target category. The task requires the participant to name as many items in a particular category in one minute as they can. At 17/18 years of age the category was 'animals'. To differentiate it somewhat from the previous round of interviewing at 20 years, the category chosen was 'fruit'. It was expected that the fruit category might be slightly more difficult than animals, but the underlying processes involved, and patterns of association should remain the same (Tombaugh et al., 1999).

The second task was a reasoning/problem-solving task called the 'abstraction' test from the Shipley - battery. This is a measure of fluid (as opposed to crystallised) cognitive ability in which the participant is presented with 25 incomplete sequences and asked to write in the next item in the sequence (e.g.

1, 2, 3, 4, 5, ?) (Shipley et al., 2009). This test has not previously been used in ***Growing Up in Ireland***. As part of the pilot, the sample was split in two, with one group filling out their answers in the traditional paper format and the other completing on the laptop (CASI mode).

7.2.1 SEMANTIC FLUENCY TASK

The 20-year-olds were given one minute to call out as many fruits as they could. The interviewer made a written note of the fruits called out and also made a digital voice recording in order to check their results after the interview.[17] There was one point for each fruit named, with repetitions being ignored. Interviewers were instructed to accept all types of fruit, vegetables that are technically fruit (such as tomato and cucumber), some other related categories such as nuts and rhubarb, and different varieties of a particular fruit (e.g. Granny smith and pink lady apples) as correct answers.

The mean number of fruits named was 14.4 (SD = 4.5, n = 94). Although interviewers reported that naming fruit seemed more difficult than naming animals, the data show that, while the mean number of items named was lower (a mean of 14 fruits in the 20-year pilot compared to a mean of 22 animals in the 17/18-year pilot), there was sufficient variance in the range of answers for the score to be a useful measure of semantic fluency.

7.2.1.1 INTER-RELATIONSHIPS

The correlation between the fruit-naming task and previous performance on the animal-naming task at 17 years was r = .334, n = 40, p < .05. Informal feedback, and indicated by the lower mean score, suggests that the task of naming fruit was more difficult than naming animals. However, this can be overcome in analysis by standardising the raw scores, if desired. The current fruit-naming score had a correlation of r = .353 with an earlier measure of vocabulary and of r = .324 with a measure of financial literacy (both administered at 17/18 years, see Table 7.1 for full details). The correlation between fruit-naming score and Leaving Certificate points was in a weak positive direction but was not significant given the low sample size (r = .214, n = 69, p = .08).

7.2.2 ABSTRACTION/REASONING TEST

The Shipley-2 is a brief standardised battery of cognitive ability/IQ (Shipley et al., 2009). The full battery comprises a vocabulary test to measure crystallised intelligence and one of a choice of two measures of fluid intelligence (the abstraction test and a block pattern test). The abstraction test was used in the 20-year pilot. As already outlined, participants were given 25 items consisting of a part sequence and asked to record the next item in the sequence. There was a mixture of number- and letter-based sequences, and they were ordered in a fairly steep hierarchy of difficulty. All participants

[17] THE VOICE RECORDINGS WERE ALSO CHECKED BY STUDY TEAM STAFF IN HEAD OFFICE AS A QUALITY CONTROL ASSURANCE OF THE FRUIT-NAMING TEST.

received all 25 items to work through in their own order and pace, only subject to a 12-minute time limit.

For the 20-year pilot, the Study Team received permission from the test publishers to trial a CASI (laptop-based) self-completion mode alongside the traditional pencil and paper format. Participants who completed on CASI were given a laminated card showing all items as they would appear for the paper-completion group. This was to ensure that the respondents completing the test on the laptop in CASI were presented with the same information as those who were completing it on a paper and pencil basis.

The combined mean raw score on the Shipley abstraction test was 13.9, with a median of 15, based on 84 cases. Scores ranged between 0 and 22 (SD = 4.2). Overall, no problems were reported for either administration mode, either by the participants who took part in the post-pilot focus group or by interviewers in their de-briefing session. There were no differences ($t(82) = 0.54$, $p=.59$) in the results from the two split samples (albeit small split samples). CASI participants had a mean score of 14.1 correct (SD = 3.7, range 4-22) and paper participants had a mean score of 13.5 correct (SD = 5.2, range 0-19).

The Shipley 2 provides tables for various transformations of the raw score per age group. The standard score transforms the score to (an expected) mean of 100. For the ***Growing Up in Ireland*** 20-year pilot sample, the mean standard score was 96.8 (SD = 17.7), but with a median score of 101, which suggests the level of scoring is broadly in keeping with the original test norms. The Shipley 2 manual also converts the standard scores into interpretative categories; doing so would place about one-third of participants in the 'average' and another third in the 'above average' group.

7.2.2.1 INTER-RELATIONSHIPS

The correlation between the standard score of the Shipley 2 abstraction test and number of correct items on the fruit-naming task was $r = .519$, $df = 65$, $p < .001$. In addition, with the exception of a very small number of outliers, 20-year-olds who reported a higher number of points on their Leaving Certificate exams had higher scores on the abstraction test ($r = .30$, $df = 56$, $p < .05$).

Longitudinally, participants who performed better on a vocabulary measure administered when they were 17/18 years tended to do better on the abstraction reasoning test at age 20 years ($r = .569$, $p < .001$; see Table 7.1). Higher scores on the Shipley 2 were also retrospectively associated with higher scores on questions testing financial literacy at 17 ($r = .656$, $p < .001$), although the finding should be read with caution given the limited range of scores from 0-4 on the financial literacy scale. There was a more modest correlation ($r = .330$, $p < .05$) between the 20-year abstraction test and the 17/18- year animal naming task.

Table 7.1: Correlations for cognitive tests within and between 17/18-year and 20-year interviews

	20-year Fruit naming	17/18-year Vocabulary	17/18-year Financial literacy	17/18-year Animal naming
20-year Shipley Abstraction/Reasoning	.519*** N = 67	.569*** N = 46	.656*** N = 46	.330* N = 46
20-year Fruit naming test		.353* N = 40	.324* N = 40	.334* N = 40
17/18-year – Vocabulary test			.438** N = 55	.596** N = 55
17/18-year – Financial literacy				.271* N = 55

7.2.3 CHANGES FOR MAIN PHASE

The two cognitive tests used in the pilot phase of the study worked well. Both the interviewers and young adults reported enjoying the brief and challenging nature of the fruit-naming test, and it was a good icebreaker for the more challenging abstraction test which was perceived as quite difficult. In view of the goal of limiting the response burden on the 20-year-old, and the concerns of one of the international reviewers that the harder abstraction test might deter some young adults from continuing with the study, it was decided that only the verbal semantic fluency (i.e. fruit naming) would be continued into the main phase. This was expected to reduce the response burden for the 20-year-old by at least 14 minutes.

7.3 THE 20-YEAR-OLD'S PHYSICAL MEASUREMENTS

7.3.1 HEIGHT

The 20-year-old's height was measured in the pilot using the same type of stadiometer (measuring stick) as used in all previous waves of ***Growing Up in Ireland***. The mean height was 171.5cm (SD = 9.7), ranging between 153 and 193cm.

Table 7.2: 20-year-old's physical measurements

	Height (cm)	Weight (kg)	WC (cm)	BMI
N	76	77	75	76
Mean	171.5	71.1	80.5	24.2
S.D.	9.7	14.6	10.9	4.7

7.3.2 WEIGHT

The 20-year-old's weight was recorded using the same type of analogue (mechanical) scale as previously used at earlier waves of data collection. The mean weight of 20-year-olds in the pilot was 71.1kg (SD = 14.6), with a minimum of 43kg and a maximum of 116kg. At 17/18 years of age, this cohort had a mean weight of 67kg.

7.3.3 BODY MASS INDEX (BMI)

As in previous waves of data collection, BMI was calculated using the height and weight measurements, with a view to establishing levels of overweight and obesity among the respondents.

Mean BMI for the respondents was 24.2, ranging from 16 to 42. Mean BMI at 17/18 years of age was 21. BMI was used to classify participants according to their weight status based on adult IOTF guidelines (Cole & Lobstein, 2012). Overall, 65 per cent of respondents were non-overweight, and the remainder were overweight or obese.

At 17-18 years of age levels of overweight and obesity for this sample were 18 per cent and 6 per cent, respectively. Whilst this suggests that the prevalence of overweight/obesity may be unusually high in the pilot sample at 20 years of age, the most recent findings from Healthy Ireland reported levels of overweight and obesity amongst adults aged 15+ of 37 per cent and 23 per cent, respectively (Healthy Ireland, 2017). Looking specifically at 15-24-year-olds in the Healthy Ireland survey, just 22 per cent were overweight and 7 per cent obese; slightly less than in the pilot respondents but potentially explained by the younger age profile in Healthy Ireland.

7.3.4 WAIST CIRCUMFERENCE (WC)

Waist circumference was also recorded in the pilot, the first time this measurement was taken in the study. Interviewers were instructed on where to place the measuring tape on the respondent, midway between the lowest ribs and the iliac crest, over one layer of light clothing such as a tee-shirt or shirt. No issues were raised in the taking of this new measurement in the course of the pilot from respondents or interviewers.

Based on their measurements, participants were classified as normal, at increased risk or at substantially increased risk (of metabolic and cardiovascular disease - CVD). The norms were derived from gender-specific World Health Organization guidelines (WHO, 2017). On this basis, 73 per cent of the sample were 'normal' and the remainder were at some level of increased risk.

As expected, the correlation between BMI and waist circumference measurements was high ($r = .862$, $p < .001$). However, waist circumference provides an independent prediction of risk of disease, based on the measurement of abdominal adipose tissue. It can predict CVD risk in the absence of an elevated BMI. This is reflected in the fact that waist circumference displayed a somewhat stronger correlation with blood pressure ($r = .355$, $p < .05$) than BMI ($r = .324$, $p < .05$), although both associations were significant. Although recording waist circumference could, in principle, be seen as a potentially more invasive procedure than the other measurements recorded in the course of the interview, as noted above, no negative feedback was received (from interviewers or participants) regarding the procedure in the course of pilot work.

7.3.5 BLOOD PRESSURE.

Blood pressure and heart rate can be an important indicator of cardiovascular health. Although usually more prevalent in the older population, cardiovascular disease is Ireland's number one cause of death

among the population as a whole, accounting for 33 per cent of all deaths and 13 per cent of premature deaths (i.e. under 65 years-of-age) (Irish Heart Foundation, 2017). Obesity and overweight are major risk factors for poor cardiovascular health and are strongly correlated with hypertension (i.e. high blood pressure) in children and adolescents (Riley & Bluhm, 2012), as well as adults, and has been flagged as "a growing health problem that is often overlooked by physicians" (ibid). Hypertension may also indicate an underlying condition (i.e. 'secondary' as opposed to 'primary' hypertension) such as kidney disease.

Blood pressure was recorded twice in the course of the 20-year-old's interview in the pilot. Interviewers were instructed to take two measurements in quick succession after the main questionnaire was completed. Feedback was not explicitly provided on these measures although respondents were welcome to look at the readings on the monitor themselves. They were also provided with an information sheet detailing the importance of blood pressure and information on healthy and risky blood pressure values.

Participants were classified as having a normal, pre-high or high blood pressure reading. In the pilot sample of 20-year-olds, 72 per cent of the respondents recorded a normal BP, with the remainder being high or pre-high.

Whilst this represents an expected slight increase in the aggregate prevalence levels of pre-high and high blood pressure readings from 17/18 to 20 years, there was notable fluctuation at an individual level. Just 66 per cent of 20-year-olds had a normal blood pressure at both 17/18 years and 20 years of age. The remainder were either high at both waves or changed status between waves. This demonstrates that blood pressure should be recorded at regular intervals in future waves of ***Growing Up in Ireland***.

Measuring blood pressure from adolescence and tracking health parameters into adulthood could potentially help identify the adolescent/early adulthood predictors and long-term cardiovascular implications of childhood/adolescent hypertension for young Irish adults. It is also worth noting that the 20-year pilot focus group found the information sheet on blood pressure to be very informative.

In view of their importance as health markers and the relative ease with which they can be recorded, both blood pressure and waist circumference measures were continued for the main phase.

7.4 TIME-USE DIARY

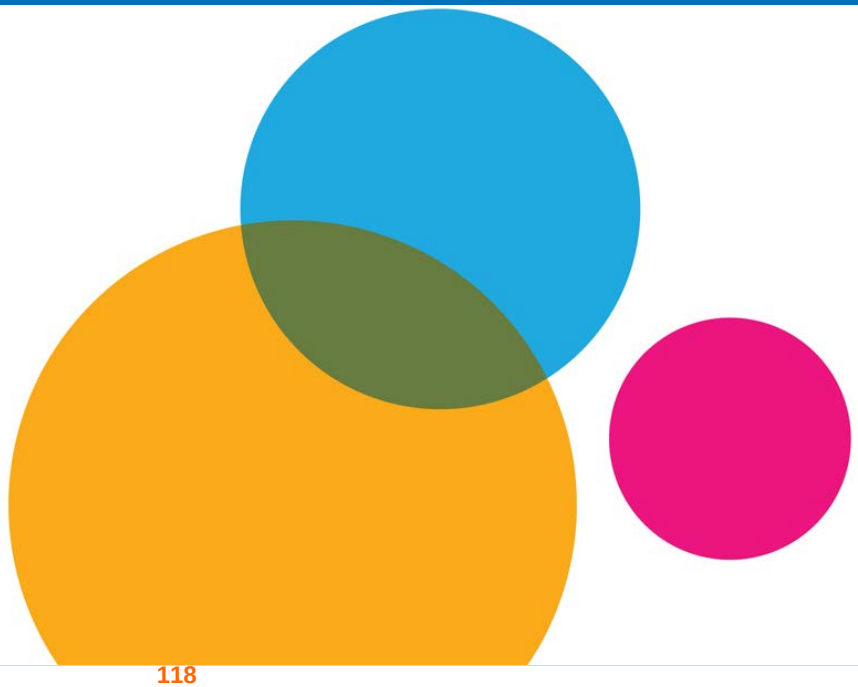
A "light" one-day time use diary for self-completion and postal return was left with the 20-year-old when their interview was completed. The interviewer went through a sample diary and instruction sheet with the respondent. The day of the week on which the diary was to be completed was randomly assigned to participants. A postage-paid envelope was provided for the return of the diary.

This approach was very successfully used with Cohort '98 at each of 9, 13 and 17/18 years of age. With appropriate follow-up reminders the response rate for the postal diary at each round was

approximately 65 per cent. No issues were raised by respondents in the course of pilot fieldwork and so the same materials and process were used in the main phase of the 20-year wave.

Chapter 8

PARENT MAIN QUESTIONNAIRE



8 PARENT MAIN QUESTIONNAIRE

8.1 INTRODUCTION

This chapter considers the main questionnaire completed by the parent (typically the Primary Caregiver/Parent One from previous waves), as used in the pilot phase of the 20-year study. At age 20 years, only one parent was interviewed and there was no interview with the Secondary Caregiver/Parent Two. The full text of the Parent Main Questionnaire which was used in the pilot is in Appendix B7. It is intended that this chapter would be read in conjunction with the appendix. Please note that the question numbers referred to throughout the chapter are those used in the pilot questionnaire, and that they may be altered slightly for the main study. The revised Parent Main questionnaire used in the main phase of interviewing can be found on the growingup.ie website.

Each questionnaire section below is tabulated to summarise the content and indicate whether measures and/or topics had also been included in the 13-year or 17/18-year waves of the Child Cohort/Cohort '98. Where appropriate, the psychometric properties of scales are described. The discussion focuses on new questions or those for which issues arose during the pilot. For fuller discussion of previously used measures, the reader should consult the relevant design or pilot reports from previous waves.

8.2 QUESTIONNAIRE CONTENT

The Parent Main Questionnaire recorded details on the parent and principally his/her relationship with the 20-year-old, in contrast to factual information on the Young Adult him/herself. The questionnaire used in the pilot had eight broad sections, as follows:

Section A	Household Composition
Section B	Parent Health
Section C	Family Context
Section D	Young Adult's Emotional Health and Wellbeing
Section E	Parent's Socio-demographics – PES, Class
Section F	Parent Background Characteristics
Section G	Household Income
Section H	Neighbourhood/ Community involvement

8.2.1 SECTION A HOUSEHOLD COMPOSITION

The purpose of Section A was to record details on the composition of the 20-year-old's household, where his/her main residential address was the parental home. The main household grid section was preceded by a 'section XA' that collected details on any other address the 20-year-old might have, and how many nights he/she spent in the parental home if they did have another address. Section A

recorded demographic details such as the name, gender, date of birth, economic status and relationship to the parent and 20-year-old of each person resident in the household. This section also recorded details on those entering or leaving the household since the last interview.

Table 8.1: Household Composition questions used in previous GUI waves

Section A	Construct	Question at 20yrs	Included at 17yrs	Included at 13yrs	Included at 9yrs
Household Composition	Household composition & family structure (including changes from age 13 on)	A1 - A8	√	√	√
	Siblings living outside the household	A9	√	√	

These variables are essential for examining structural family and relationship issues that affect the Young Adult. They are also essential for deriving key measures such as family type and equivalised income. The information which was recorded at 17/18 years of age was fed forward to the interviewer's laptop. This was verified, amended and updated as appropriate by the family. These questions were administered in a similar way at all other previous waves of ***Growing Up in Ireland*** so far and no changes were required for the main collection. The only amendment for age 20 years was allowing interviewers to exclude the 20-year-old cohort member from the parental home household grid, now that it would be possible for him/her to have permanently moved to their own address.

8.2.2 SECTION B PARENT HEALTH

This section looked at parental health in terms of their general health and presence of chronic conditions. It also asked about whether the parent or 20-year-old had a medical card or private medical insurance.

Table 8.2: Parent Health questions used in previous GUI waves

Construct – Section B	Question at 20yrs	Included at 17yrs	Included at 13yrs	Included at 9yrs
Parent general health	B1	√	√	√
Ongoing chronic illness or disability	B2	√	√	√
Parent and Young Adult medical insurance cover/medical card	B3-B7	√	√	√

8.2.2.1 PARENTAL HEALTH STATUS (B1 – B2)

These questions worked well and there were no issues reported; however, question B2 on presence of a chronic condition was expanded to include the nature of the chronic illness or disability (as used in previous waves) to improve the usefulness of these data. Following the same change being made to the 20-year-old interview, for the main study interviewers would be provided with a laminated prompt card and temporary marker for instances where the respondent would rather write down their illness/condition than answer aloud.

8.2.2.2 MEDICAL CARD AND PRIVATE MEDICAL INSURANCE COVER (B3 – B7)

These questions asked about the parent's own medical card (i.e. free health care provided by the State) and private health insurance (B3 – B4). The parent was also asked about the 20-year-old's cover (B5-B7); the feedback from interviewers in the pilot was that many young adults were unsure what their cover was as it was mainly organised for them by their parents. Parents reported that 52 per cent of Young Adults were covered by medical insurance and 16 per cent were covered by a medical card. No changes to these questions were made prior to the main collection.

8.2.3 SECTION C FAMILY CONTEXT

This section considers the relationship between the parent and 20-year-old. Specifically, it recorded details on the parent's engagement with the Young Adult on their plans for the future and the parent's educational aspirations for them. Parents were also asked five items relating to how much the 20-year-old voluntarily discloses to the parent information about their friends, school and what they do in their spare time using the disclosure subscale from the Monitoring and Supervision Scale (Kerr & Stattin, 2000).

Table 8.3: Family Context question used in previous GUI waves

Construct – Section C	Question at 20yrs	Included at 17yrs	Included at 13yrs	Included at 9yrs
Young Adult's education status	C1	√	√	√
How often discussed school/college and plans for the future with the young adult	C2	√		
Educational aspirations for the young adult	C3	√	√	√
Young Adult's disclosure	C4	√	√	

8.2.3.1 PARENTAL ENGAGEMENT WITH YOUNG ADULT'S EDUCATION (C1 – C3)

Parents of Young Adults who were still in education, or who had left within the last six months, were asked questions about how often they talked to their son/daughter about college-related issues such as the amount of work and how they get on with their lecturers. These questions were retained for the main study. Question C3 repeated a question from earlier waves on how far the parent thought their child would get in education (from Junior Cert to postgraduate degree). This question was removed for the main phase as most of the cohort are already well beyond Leaving Cert level.

8.2.3.2 DISCLOSURE TO PARENT'S SUBSCALE (C4)

The disclosure subscale, based on five items, displayed good internal consistency in the pilot phase (α = .74). Table 8.4 displays summary statistics for the disclosure subscale in the pilot study. However, given the age of the cohort at this wave, these questions were removed for the main phase due to the lessened relevance – especially given that many 20-year-olds would be living away from parents during the week, and none were still in secondary school.

Table 8.4: Summary statistics for the Monitoring and Supervision Scale: Disclosure subscale

Disclosure Subscale	
N	112
Mean	19.6
SD	3.98
Minimum	8
Maximum	25
Cronbach's α	.74

8.2.4 YOUNG ADULT'S EMOTIONAL HEALTH AND WELLBEING

This section recorded details from the parent on the Young Adult's personality and probed further on the quality of the parent-child relationship. It included the Ten Item Personality Inventory (TIPI), developed by Gosling et al. (2003), measuring openness, conscientiousness, extraversion, agreeableness, and neuroticism; and which the parent completed about the Young Adult. This section also included a 4-item warmth/closeness scale.

Table 8.5: Young Adult's Emotional Health and Wellbeing questions used in previous GUI waves

Construct – Section D	Question at 20yrs	Included at 17yrs	Included at 13yrs	Included at 9yrs
PCG rating of Young Adult's personality - Ten Item Personality Inventory	D1	√	√	√
Concerns about Young Adult	D2	√		
Amount of time spent with Young Adult	D3			
Disagreements with Young Adult	D4			

8.2.4.1 TIPI SCALE (D1)

The TIPI scale has previously been used in ***Growing Up in Ireland*** for parents to describe their child's personality. Psychometrically it performed well again in this context in the pilot phase at age 20. Summary statistics for the TIPI scale are presented in Table 8.6.

Table 8.6: Summary statistics for the TIPI Scale (Parent assessment of Young Adults' personality)

Parent assessment of Young Adult personality on TIPI scale					
N = 120	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness
Mean	4.8	5.5	5.2	4.8	5.5
SD	1.58	1.24	1.60	1.49	1.29
Minimum	1	2.5	1	1	2
Maximum	7	7	7	7	7
Cronbach's α	0.52	0.35	0.59	0.56	0.39

This is the same scale used with the 20-year-old to self-report their own personality, as discussed in more detail in section 5.2.2.11. For the main phase, the Study Team opted to remove the scale from

this section to reduce the response burden on the parent. Instead, a decision was made, based on the recommendation of one of the international reviewers, for the parents to describe their own personality using the TIPI and the assessment of the Young Adult's personality to be confined to their self-report.

8.2.4.2 PARENTAL CONCERNS FOR THE 20-YEAR-OLD (D2)

Question D2 asked the parent to answer "yes" or "no" to five statements regarding concerns or worries they might have about the Young Adult such as not doing well in education or developing a drink problem. Results demonstrated that parents were most concerned about the Young Adult being involved in an unhappy relationship. These questions seemed to work well, providing variability in responses, and no issues were reported. For the main phase, an additional concern, 'He/she has or will have difficulties in getting a good job', was included.

8.2.4.3 QUALITY OF PARENT'S RELATIONSHIP WITH THE 20-YEAR-OLD (D3 – D4)

Question D3 – D4 were new questions that further explored the parent-Young Adult relationship in terms of engaging in activities together (D3) and disagreements (D4). They are based on similar questions used in the (American) National Survey of Families and Households. The items relating to closeness and joint activities scale (D3) clustered reasonably well as a scale, with the modest internal reliability likely explained by the limited number of items. Summary statistics are presented in Table 8.3.

Table 8.7: Summary statistics for the Warmth/Closeness Scale

Warmth/Closeness Scale	
N	112
Mean	3.5
SD	0.9
Minimum	1
Maximum	6.8
Cronbach's α	.58

The items at D4 asked the parent how often they and the 20-year-old had disagreements about things such as how they dress, their friends and money. The issues that caused the most concern were the young adult's drinking, smoking, and drug use, and helping around the house. The questions seemed to work well, providing variability in responses and few item non-responses; no issues were reported from fieldwork and both D3 and D4 were retained for the main phase.

8.2.5 SECTION E PARENT'S SOCIO-DEMOGRAPHICS

This section recorded details on the background socio-demographics of the household, including information on accommodation, parental work status and occupation. They are largely a repeat of standard questions used in most previous waves of ***Growing Up in Ireland***.

Table 8.8: Parent's Socio-Demographics questions used in previous GUI waves

Construct – Section E	Question at 20yrs	Included at 17yrs	Included at 13yrs	Included at 9yrs
Details on family's accommodation	E1	√	√	√
Work status, occupation and working hours of parent	E2 – E17	√	√	√
Occupation of Spouse/Partner	E18 – E19	√	√	√

8.2.5.1 ACCOMMODATION (E1)

Question E1 was a standard question on the nature of the parent's occupancy of their accommodation. Respondents selected one option from a list that included 'owned with a mortgage', 'rented from a local authority' and 'rented from a private landlord' among others. In more recent waves, an option of 'emergency accommodation' has been included.

8.2.5.2 PARENTAL EMPLOYMENT (E2 – E22)

Questions E2-E22 recorded details around parental (and their spouse's) employment history and nature of work experience. This information is used to assign a Social Class classification as used by the Irish Central Statistics Office. There were no changes for the main phase.

8.2.6 SECTION F PARENT BACKGROUND CHARACTERISTICS

Section F focused on parent's education and languages spoken in the home. It also asked about their political preferences and their own personality traits (the latter using the TIPI which has been covered in Section 5.2.1 and Section 8.2.7).

Table 8.9: Parent background characteristics questions used in previous GUI waves

Construct – Section F	Question at 20yrs	Included at 17yrs	Included at 13yrs	Included at 9yrs
Parent education	F1 – F7	√	√	√
Language spoken most often in the home	F8	√	√	√
Political preferences	F9 – F10			
TIPI	F11			

8.2.6.1 PARENTAL EDUCATION AND LANGUAGE SPOKEN IN THE HOME (F1 – F8)

Level of parental education is an important explanatory variable in the analysis of educational, health and socio-economic variation in 20-year-old's outcomes (Davis-Kean, 2005; Nilsen, Krokstad, Holmen, & Westin, 2010). Questions F1-F7, about parent's educational attainment, are essential for socio-demographic classification of both the Young Adult and their family and have been asked at all previous waves of the GUI to date. Information provided at the 17/18-year wave of interviewing was forward-fed and only changes were recorded in the 20-year pilot interview, and there were no changes planned for the main phase. In the unlikely event of a new parental respondent at this wave, fresh educational information would be collected. Question F8, on the language most often spoken in the home, was also continued for the main phase.

8.2.6.2 POLITICAL ATTITUDES (F9 – F10)

Question F9 asked parents to rate themselves as politically 'right' or 'left' leaning by rating themselves on an 11-point scale where 0 was 'far left' and 10 was 'far right'. This was a new question for the 20-year pilot and was also asked of the Young Adults. As already mentioned, however, interviewers noted difficulties with this question for both groups of respondents. They reported that people had difficulty understanding 'Left' and 'Right' in this context. Accordingly, the Study Team discontinued this question for the main phase. Question F10 on which political party the respondent would vote for in an election was more easily answered. However, based on feedback received during the 20-year-old's focus group (who were also asked this new question), an extra answer category of, 'I would vote for a person, not a party', was added.

8.2.6.3 PARENTAL SELF-REPORT OF PERSONALITY (TIPI)

Question F11 was the Ten-Item Personality Inventory (TIPI), completed here by the parent with regard to him/her self. Just ten items make up five subscales reflecting the 'Big Five' personality traits (see Table 8.10). As mentioned previously in Section 5.2.2.11, internal reliability is expected to be low (reflected in the low α scores), as it is based on only two items per subscale; summary statistics for parent self-report are presented for the TIPI scale in Table 8.10 and show that the scale functions well overall.

Table 8.10: Summary statistics for the Adult TIPI Scale

Parent assessment of own personality on TIPI Scale					
N = 120	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness
Mean	4.6	5.6	6.0	5.1	5.3
SD	1.55	1.05	0.98	1.41	1.19
Minimum	1	2.5	3	1	1.50
Maximum	7	7	7	7	7
Cronbach's α	.65	.18	.26	.60	.30

Collecting data on parental personality was strongly recommended by one of the international reviewers and is new information for ***Growing Up in Ireland*** (although the TIPI has been previously used in relation to the young cohort member). The scale was retained for the main study.

8.2.7 SECTION G HOUSEHOLD INCOME

This section records details on sources and level of household income and social welfare dependency, along with information on difficulty in making ends meet, indicators of deprivation and financial support which the parents may be giving to their 20-year-old.

Table 8.11: Household Income questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Sources of household income	G1-G2	√	√	√
Household income from all household members	G3-G5	√	√	√
Social welfare dependency	G6	√	√	√
Deprivation including Basic Deprivation Scale	G7, G9-G11	√	√	√
Degree of ease of difficulty in making ends meet	G8	√	√	√
Financial circumstances since last interviewed	G12	√	√	
Financial support provided to the Young Adult	G13-G14	√		
Money received from the Young Adult	G15	√		

8.2.7.1 SOURCE AND AMOUNT OF HOUSEHOLD INCOME (G1 – G6)

Questions G1-G6 record sources of household income and have been used at all previous waves of the study. They allow for the estimation of the family's overall income and (in conjunction with the information from the household register) the calculation of equivalised household income, an important socio-economic classification variable. Respondents who are unable to provide an exact income figure were guided through a two-stage estimation process using the tables presented in G4 and G5. Question G6 asked the parent to estimate the proportion of household income that comes from social welfare and indicates welfare dependency. There were no changes for the main phase.

8.2.7.2 HOUSEHOLD DEPRIVATION AND FINANCIAL STRESS (G7 – G12)

The Basic Deprivation Scale (G7, G9-G11), developed by the ESRI, is a scale of 11 items relating to poverty in areas such as food, clothing, furniture, debt and minimal participation in social life. This measure has been previously used with both ***Growing Up in Ireland*** cohorts. Question G8 is a single-item indicator of financial stress where parents rate how much difficulty they have in making ends meet. It has been used in most previous waves of ***Growing Up in Ireland*** and has proved very valuable for analysis.

Question G12 records details on whether family circumstances have changed since the Young Adult was 17/18 years of age. There were three options of 'gotten worse', 'stayed the same' or 'improved'. All questions in this sub-section were continued in the main collection.

8.2.7.3 FINANCIAL SUPPORT TO AND FROM THE YOUNG ADULT (G13 – G15)

Question G13 asked about the type of supports provided by parents to 20-year-olds such as paying for their education, accommodation and transport costs. If there were direct cash transfers from parent to child, G14 collected details on the regularity and amount of these payments.

In contrast, G15 asked about financial support received by the parents from the 20-year-old. There were a number of options such as contributing to their 'keep', loaning money to parents and direct cash transfers. These important questions on intra-family finances were retained unchanged for the main phase of the study.

8.2.8 SECTION H NEIGHBOURHOOD/COMMUNITY INVOLVEMENT

Parents were asked about their time living in the local area and their perceptions of the quality and safety of the area.

Table 8.12: Neighbourhood/ Community involvement questions used in previous GUI waves

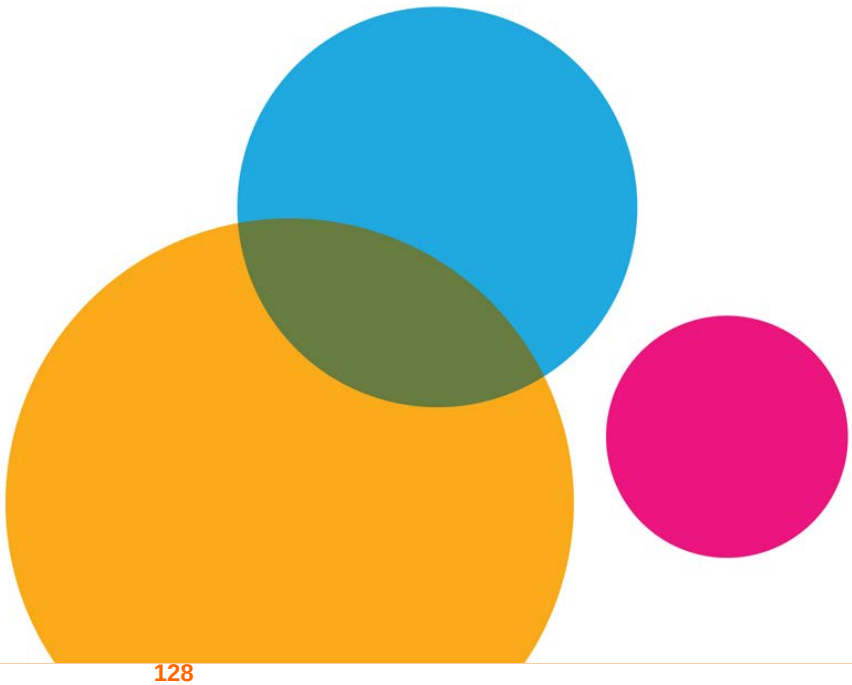
Construct	20-year Questions	17/18 years	13 years	9 years
Time in local area	H1	√	√	√
Likelihood of living in Ireland in 5 years' time	H2	√		
Perceptions of local area – quality and safety	H3-H4	√	√	√

These questions have been asked at previous waves and provide important contextual information on the family's community and local physical environment. Question H1 was a single item on how long the parent had lived in that area. Questions H2 and H3 were multi-item sets, used in most previous waves, on the physical condition of the neighbourhood (e.g. rubbish and litter); perceived safety of the neighbourhood and availability of facilities for young adults. The item at H4 notes the size/location of the area – village, town, city etc. – and is used to classify households as urban or rural. These questions remained unchanged for the main phase.

One question, H5, on whether the parent intended to continue living in Ireland, was removed post-pilot as it was insufficiently related to the Young Adult. In addition, there was considerable overlap with question H3d on whether the family intended to continue living in the local area.

Chapter 9

PARENT SELF-COMPLETE QUESTIONNAIRE



9 PARENT SELF-COMPLETE QUESTIONNAIRE

9.1 INTRODUCTION

This chapter covers the contents of the Parent Self-Complete Questionnaire. This questionnaire recorded some slightly more sensitive information from the parent and was completed on a computer-assisted self-completion (CASI) basis. The full text of the questionnaire as it was used in the pilot is included in Appendix B8. As with earlier chapters, it is intended that this section would be read in conjunction with that appendix.

The self-complete questionnaire continued many elements from the previous waves of the (Child) Cohort '98, most recently at 17/18 years. New questions on the parent's relationship with the now-adult 20-year-old were added and a previously used module on shared parenting with a non-resident parent was discontinued. It worked well in the pilot and trends from the data were very much in line with expectations. As with the main questionnaire, the self-complete module for parents was only completed by one parent – usually the Primary Caregiver/Parent One from previous waves.

9.2 QUESTIONNAIRE CONTENT

As in previous waves, the self-complete questionnaire used in the pilot recorded some more sensitive information from the respondent. It contained the following broad sections:

Section A	Relationship to 20-year-old (and if required – reasons for any departures from the household grid)
Section B	Parental Marital Status
Section C	Parental Alcohol Use
Section D	Parental Smoking and Drug-Taking
Section E	Parental Depression
Section F	Parental and Relative's Trouble with the Gardaí
Section G	Relationship with Young Adult

9.2.1 SECTION A RELATIONSHIP TO 20-YEAR-OLD

Questions AS1-AS3 recorded details on person(s) who were no longer on the household grid according to changes noted on the main grid as part of the face-to-face interview. Questions S1-S3 recorded if the parent was the biological, adoptive or foster parent of the 20-year-old.

Table 9.1: Relationship to 20-year-old questions used in previous GUI waves

Construct	20-year questions	17/18-year	13-year	9-year
Details on person(s) from Wave 1 who are no longer on household grid	AS1-AS3	√	√	
Is respondent the biological parent?	S1	√	√	√
Is respondent the adoptive parent?	S2	√	√	√
Is respondent the foster parent?	S3	√	√	√

These questions have been asked at all previous waves without issue (changes in household grid since age 13). Very importantly, they record details on the reasons for departure of members from the household since the 17/18-year interview. There were no changes to this section between the pilot and main phases.

9.2.2 SECTION B PARENTAL MARITAL STATUS

This section recorded details on the parent's marital status and the quality of their relationship with their partner, including the four-item short form of the Dyadic Adjustment Scale (DAS-4) (Villeneuve et al., 2015). This is an assessment of the couple (dyadic) satisfaction used as a means of categorising couple relationships (spousal or otherwise) as either distressed or adjusted.

Table 9.2: Parental Marital Status questions used in the previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Marital status	QS4a	√	√	√
Living situation with Young Adult's biological parent	QS4b		√	√
Quality of marital / partner relationship including Dyadic Adjustment Scale	QS5-S10	√	√	√
Family relationship	QS11	√		

The short version outlined here has the advantage of being extremely brief and therefore less time consuming for respondents. It has been used successfully in previous waves of ***Growing Up in Ireland***. Reliability of the dyadic relationship scale at age 17/18 of ***Growing Up in Ireland*** had an alpha value of $\alpha = .66$ for the Primary Caregiver which is acceptable for a scale with a small number of items (Nunnally, 1978).

Questions S4 – S10 in this section provide further information, also collected at all previous waves, regarding the legal marital status of the parent (married, widowed etc.) and whether they lived with a spouse/partner. Question S11 is a more recent one in which the parent was asked to rate how well the household as a whole got on together (not just the couple relationship). It is a single item where 0 indicates 'we don't get on at all' and 10 is 'we get on very well'. There were no changes to Section B before the main collection.

9.2.3 SECTION C PARENTAL ALCOHOL USE

Section C focuses on the frequency and the quantity of consumption of wine, beer and spirits in "an average week", while further questions screen for alcohol misuse through the Fast Alcohol Screening Test (FAST) (Hodgson, 2002). Questions S12 and S13 asked about the frequency and type of alcohol consumption among the parents of the respondents (mostly their mothers).

Table 9.3: Parental Alcohol Use questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Alcohol consumption	S12 – S13	√	√	√
Problematic alcohol consumption (FAST)	S14b – S14e	√	√	

The FAST is a short version of the AUDIT questionnaire, an extremely useful and robust screening test for problematic alcohol use, which appeared at S14 on the questionnaire. The FAST scale consists of just four items and screens for hazardous drinking as well as harmful drinking and dependence (Meneses-Gaya, Crippa, et al., 2010). Average administration time is less than 20 seconds; a positive response to the first question leading to three further questions. The FAST scale has been used in previous rounds of ***Growing Up in Ireland***, aiding longitudinal continuity in measuring alcohol consumption behaviour.

Problematic alcohol use was uncommon among the parents in the pilot sample, who were primarily the mothers of the 20-year-olds; however, in the larger main phase sample it would be important to identify issues with alcohol among parents and how this might affect interactions with the now-adult Study Child. Hence this section on alcohol use and misuse was continued for the main collection.

9.2.4 SECTION D PARENTAL SMOKING AND DRUGS

Questions S15-S17 recorded details from the respondent about their current smoking, use of e-cigarettes and how many people in the household smoked.

Table 9.4: Parental Smoking and Drugs questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Current smoking (tobacco)	S15	√	√	√
E-cigarettes/vaping	S16			
Number of smokers in household	S17	√	√	√
Current use of illicit drugs	S18	√	√	√

The question about parental use of e-cigarettes or vaping is new to the questionnaire at age 20. The other questions have been used in previous waves of the study, and in the pilot phase of this study no negative issues were reported by interviewers or respondents. There were no changes for the main phase.

9.2.5 SECTION E PARENTAL DEPRESSION

This section contained a short self-report screening scale for depression, the Center for Epidemiological Studies Depression Scale (CES-D) (Mohebbi et al., 2018).

Table 9.5: Parental Depression questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
CESD Depression Scale	S19	√	√	√

The CES-D 8 is a widely used self-report measure developed specifically as a screening instrument for depression in the general population, as opposed to being a diagnostic tool that measures the presence of clinical depression.

Growing Up in Ireland has previously used this short (eight item) version of the CES-D in various waves of the study. In previous studies, the short form has been found to correlate highly with the full 20-item version (Mogos et al., 2015; Mohebbi et al., 2018). The scale displayed good internal reliability at Wave 3 of ***Growing up in Ireland*** (α = .86 for the Primary Caregiver and α = .83 for the Secondary Caregiver). Internal reliability in the pilot phase was again high (α = .84) for the Primary Caregiver. A small number of parents in the pilot reached the threshold score for 'depression'. This important scale was retained unchanged for the main phase and was also substituted for the Short Mood and Feelings Questionnaire in the Young Adult Self-Complete Questionnaire.

9.2.6 SECTION F PARENTAL AND RELATIVE'S CONTACT WITH GARDAÍ AND CRIMINAL JUSTICE SYSTEM

This section addressed contact with the criminal justice system by the parent and other family members.

Table 9.6: Parental and Relative's Trouble with the Gardaí questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Contact with Criminal Justice System and prison	S20-S21	√	√	√
Contact with the Gardaí or CJS by Young Adult's sibling	S22-S23	√		
Contact with the Gardaí or CJS by Young Adult's aunts/uncles	S24-S25	√		

All of these questions were used in the most recent main wave at 17/18 years. The information provides broad details on social context for the 20-year-old in terms of family contacts with the Gardaí (police) and criminal justice system. No issues were reported, and no changes made post-pilot. Even though they were expected to apply to a minority of parents, these questions provide key contextual information for the bigger sample in the main collection.

9.2.7 SECTION G PARENT'S RELATIONSHIP WITH YOUNG ADULT

This section considers the quality of the relationship between the parent and the 20-year-old; how disagreements are handled, how well parent and 20-year-old get on and how the parent feels about their child's development. The questions from this section were taken from the National Survey of Families and Households (Acock, 1995) and were new to the study at age 20. They provide important new information given the potential change in the dynamic of the parent-child relationship now that they are both adults.

Table 9.7: Parent's Relationship with young adult questions used in previous GUI waves

Construct	20-year Questions	17/18 years	13 years	9 years
Handling of disagreements with Young Adult	S26			
Quality of relationship with Young Adult	S27			
Satisfaction with Young Adult's life choices	S28			
One item satisfaction with relationship	S29			

Question S26 asked the parent about how they dealt with conflict including four strategies such as 'refusing to talk about it' and 'discussing your disagreements calmly'. Participants answered on a five-point scale from 'never' to 'always' and there was also a sixth option of '[we] don't have any serious disagreements'. 'Discussing your disagreements calmly' was the most endorsed strategy by the pilot respondents.

Question S27 presented a Likert scale on the quality of the relationship between the parent and the young adult. Each item was rated on a five-point scale from 'strongly agree' to 'strongly disagree'. Sample items included 'it's easy for me to laugh and have a good time with [young adult]' and 'I feel on edge or tense when I'm with [young adult]'. Internal consistency for this scale was high ($\alpha = .79$), although it was slightly moderated by one particular statement "I would like more influence over his/her decisions", which was poorly correlated with most other statements. However, the Study Team decided to keep the scale 'intact' for the main phase.

There were three items making up question S28 which recorded details on the parent's level of satisfaction with aspects of their 20-year-old's life at the moment. The majority of parents reported being at least somewhat happy with their child's schooling, boyfriend/girlfriend and career progression. Question S29 was a single item on which parents rated their overall relationship with the 20-year-old from 0 for 'really bad' and 10 for 'absolutely perfect'.

There were no changes made to this section prior to the main phase.

Chapter 10

SUMMARY

10 SUMMARY

This report summarised the pilot fieldwork carried out with individuals from the pilot sample of ***Growing Up in Ireland*** Cohort '98 at 20 years of age. Fieldwork for the 20-year-pilot was carried out between August and December 2017 with a longitudinal pilot sample used since the inception of the study in 2006. These participants were first interviewed in 2007.

The pilot was developed with input from a wide range of stakeholders, including focus group feedback from the young people themselves; feedback from experienced fieldworkers; input from a Scientific Advisory Group (SAG) and international advisors; surveys of policy makers, and the ***Growing Up in Ireland*** Steering Group members. The pilot was also overseen by a Research Ethics Committee (REC) as in previous waves of the study.

Pilot respondents included the Young Adult, as well as one parent, who was ideally the Primary Caregiver from previous waves. Families were recruited via introductory letters to the (now adult) Study Child and to the parent. This was followed up with in-person visits from fieldworkers to arrange suitable times to complete the questionnaire. Informed consent was gained separately from both the 20-year-old and their parent. The survey was typically administered in the parental home, though could occur at different addresses depending on the living situation of the 20-year-old.

Fieldworker-administered, self-completed, and postal questionnaires were piloted along with short cognitive tests and fieldworker-administered physical measurements. Detailed feedback from participants and fieldworkers revealed an urgent need to reduce the length of the questionnaire, especially for 20-year-olds, to ease the burden of participation in the project. Criteria for reduction of the number of questions in the main phase of research were explored in Section 1.4 of this report.

The data recorded in the 20-year-pilot performed well overall, with numerous changes being recommended based on exploration of the data as well as through the direct feedback from participants. These changes have been detailed at the end of each subsection of this report. Continuity with previous waves was also tabulated within each chapter. Summaries at the end of each section detailed scales and topics that were modified, added or removed for the main phase of data collection.

The 20-year-pilot phase maintained a focus on collecting information on four broad domains: health and physical well-being; educational and occupational outcomes; socio-emotional well-being and behaviours; and economic and civic participation. These topics remain highly relevant to policymakers and the pilot data revealed a need to improve the questionnaire structures to best capture the transition out of second-level education and into work/education/training or into periods of youth unemployment, for instance.

The overall analytical framework for considering the variety of contexts in which the Child/Young Person/Young Adult grows and develops now accommodates the shift from the 'child' to 'adult'. This has been reflected in changes to long-used measures in order to select more developmentally appropriate ones to best capture a concept. For instance, the removal of the child/adolescent Short

Mood and Feelings Questionnaire (SMFQ), replaced by the adult Center for Epidemiological Studies – Depression Scale (CES-D).

Much of the information collected in the pilot phase had not been recorded in previous rounds of the ***Growing Up in Ireland*** study. As such, many new variables tested in the pilot in preparation for the main 20-year-old wave of data collection will be considered adult outcome variables, thus positioning the study for longitudinal analysis into adulthood. It also supports the capacity of researchers to use ***Growing Up in Ireland*** as a data source for more meaningful causal analyses for developmental trends and outcomes.

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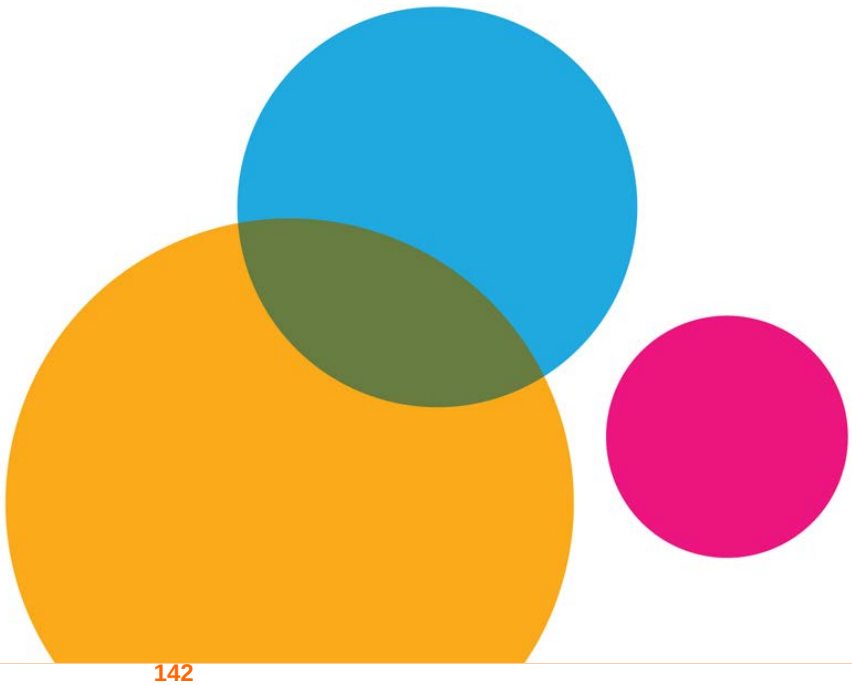
Technical Appendix 1

COPING STRATEGIES



12 TECHNICAL APPENDIX 1 – COPING STRATEGIES

Some of the basic steps on shortening the coping strategies measure have been discussed in the main text. This technical appendix expands on this analysis with a fuller output of all the steps taken in that analysis. This begins with an exploration of initial assumptions for factor analysis of the coping strategies pilot data.

Principal Axis Factoring was used to generate a parsimonious model of the data where the factors themselves may also correlate. The results need to be interpreted with caution due to the relatively low sample size (N = 87) compared to the overall number of items (20). Inspection of a correlation matrix of the items demonstrated that there were a number of correlations above .3, and that there were unlikely to be issues with collinearity as there were no correlations in the range of .9.

The determinant was found to exceed the recommended threshold of 0.00005 at 0.002, and Bartlett's test was significant ($p < .001$). These figures support the initial consultation of the correlation matrix that shows that there are sufficient moderate correlations in the data for factor analysis. The Keyser Meyer Olkin sampling size adequacy test was found to be 0.632 which is still quite close to the recommended cut-off of 0.6; so overall the outputs here should be interpreted with some caution.

Consulting the table of communalities, it can be seen that the items have a number of strong loadings on the overall factor structure. However, item L1c (recoded) "I spend time with people I love even if I don't tell them about my problem" looks weakly related to any of the factors with a communality of 0.154. A strong communality relationship is seen for L1e(recoded) "I drink alcohol or smoke a cigarette" at 0.779. This shows that there is further support for the factorability of the data.

The scree plot and table of Eigen values indicate that the set of 20 items currently has seven factors with Eigen scores over the Kaiser-Guttman criterion of 1. A Principal Axis factor analysis with an oblique rotation was used to allow these factors to potentially correlate. The extracted factors explain 49 per cent of the variance in the scale.

For brevity, the full outputs for this stage of analysis will be omitted. There was evidence of a considerable amount of item redundancy in the scale, with up to five items loading on a "social" response to the stress variable, for instance. This preliminary seven factor structure was explored with a view to reducing the overall number of items required to measure the factors. An example of the factor loadings from a restricted version of the coping strategies measure is presented below.

Table 12.1: Factor structure of shortened Coping Strategy Scale (L1)

Variable name and content	Strategize	Stimulant	Avoidant	Self-Care	Medical	Social
L1rR. I try and anticipate what challenges might arise and prepare for them	0.92					
L1qR. I analyse the problem and work out a strategy to deal with it	0.71					
L1tR. I see what I can learn from the experience to help me in the future	0.63					
L1eR. I drink alcohol or smoke a cigarette		0.88				
L1fR. I take some recreational drugs		0.67				
L1iR. I watch more television			0.64			
L1kR. I take to the bed			0.62			
L1oR. I exercise or play sports				0.82		
L1pR. I treat myself to something nice				0.65		
L1gR. I take a drug that has been prescribed for me					0.66	
L1dR. I consult a professional					0.65	
L1mR. I spend time doing things I enjoy, like listening to music or a hobby, to cheer myself up						0.68
L1aR. I talk to my friends						0.53
L1bR. I discuss the problem with my parents or other family members						0.53

The proposed factors now have either two or three indicators per factor. One of the factors has been removed by dropping items associated with it. This factor did not display a consistent pattern of cross-loading with other items, and as there was no clear theme, it was removed in order to simplify the scale structure. The overall alpha values suffer slightly as a result of shortening the scale, but all values remain close to the recommended cut-off of $\alpha = .6$. A table of alpha values for proposed shortened scales is presented below.

Table 12.2: Proposed shortened coping scale, Alpha values and number of items per scale (L1)

	Factors Representing Types of Response					
	Avoidant	Medical	Self-Care	Social	Stimulant	Strategize
Cronbach's Alpha	.55	.61	.62	.63	.73	.80
N of Items	2	2	2	3	2	3

The current shorter measure does have empirical support from the factor analysis, and this is partially supported by the Cronbach's alpha values with this small sample. An alpha for a full 'scale' is not presented as a "total" would not be meaningful in the context of the presence or absence of types of behaviour.

Technical Appendix 2

FOCUS GROUPS

13 TECHNICAL APPENDIX 2- FOCUS GROUPS

Twenty-three participants who lived within a reasonable commuting distance of central Dublin were invited to take part in a post-survey focus group. A gift voucher of €50 was offered in acknowledgment of the travel costs and inconvenience associated with the out-of-home consultation. Subsequently, a focus group was conducted with six of these Young Adults who had recently participated in the pilot phase of the 20-year wave. Four of the group were female, all were in further/higher education and everyone still lived at home with parents/family.

Recruitment

Asked about their motivation to participate in the latest wave of GUI, participants seemed aware of the importance of conducting surveys to help develop government policies, so they wanted to take part in the study for the benefit of the population at large. They also spoke positively about their long-term involvement in the longitudinal survey, given they had been involved since they were 9 years old. They spoke fondly of their previous encounters with interviewers, and the fact that they were being re-interviewed by the same interviewer again was deemed mostly positive.

The 20-year-olds stated that the interviewers had been flexible in terms of scheduling the interviews. They reported that this had been beneficial in that it had allowed for the interviews to be carried out around the young person's schedule; including in the evenings and at weekends. When the possibility of conducting interviews on campus was suggested, there was little enthusiasm with respondents expressing a preference for conducting it in the familiar surroundings of their home.

In terms of future participation in the study, the participants noted that they would probably not be as easily contactable in the future. In keeping with the altruistic intent of the group, they expressed an interest in further participation but stated a desire for more flexible ways of participating such as an online-only version of the questionnaire. However, they noted that initial contact in person or over the phone was likely more of an incentive to participate than a more anonymous invitation email/letter from the GUI team.

Parental Involvement

When asked about their parents' involvement in the study, the Young Adult participants did not seem familiar with how their parents' interview was conducted. Some thought that they would both be asked the same set of questions.

Timing / Length of the Interview

The overall impression amongst the group was that the length of the interview, while quite long, was acceptable as they were aware it would take a substantial amount of time. They pointed to the diversity, in terms of questionnaires, tests and measurements, as helping to ensure that it was never too repetitive.

Questionnaire issues

In general, changes to the questionnaire which were influenced by the post-pilot focus group were discussed during that section's piece in the main report. In summary, the issues mentioned in the focus group were:

- The difficulty of placing oneself as 'left' or 'right' in terms of political affiliation
- The desire for a 'vote for person not party' option on the question of which way they would vote in a general election
- An improvement in the wording of the section on issues they were concerned about
- Difficulty of defining 'local' area when they may have more than one address
- Lack of knowledge on the detail of their health insurance cover
- The 'vagueness' of items in the diet inventory (n.b. these were nonetheless retained for longitudinal consistency)
- Participants felt that it was important to be able to record the fact that they worked while they were in college
- More detailed questions were needed for social media use; for example, that one type of account might be 'private' (e.g. Facebook) while the other (e.g. Twitter) was public. It was noted that they spent a considerable part of their day on social media
- It was difficult to 'rank' aspirations for their 30-year-old self as most were of at least some importance
- Self-rating skills was relatively difficult as they did not know what/who to compare themselves to
- Calculating exact amounts of income and expenses was very difficult, especially when dividing it between themselves and their parents
- Street names for drugs were outdated
- The mental health section was too long and overly negative

Physical measurements

The group did not report any issues with the physical measurements. They noted that having their blood pressure taken, coupled with receiving the information sheet on that, was very informative.

Tests

Overall, the group was relatively happy to conduct both tests (fruit-naming and Shipley abstraction test). The tests were seen as an enjoyable break from a longer questionnaire and their brevity meant that they were not viewed as a burden.

Prize draw

When asked about their thoughts on a gift/entry into a raffle for participating in the study, the group felt they should have known about the prize draw before the interview as that may have acted as an incentive for those otherwise not inclined to take part. They also felt many prizes would be needed if

there were 5,000+ people involved in the sample; participants want to know they have a chance of winning. They did not see the incentive of gifts/raffle as cheapening their participation in the study.

Technical Appendix 3

LEISURE ACTIVITIES

14 TECHNICAL APPENDIX 3 – LEISURE ACTIVITIES

A brief factor analysis of Section A1 covering the hobbies/past-times of the 20-year-olds was conducted using Principal Components Analysis (PCA). This style of analysis was chosen as it best suited the binary data type. The exploratory factor analysis was conducted with a view to potentially reducing the overall number items on this set of items Therefore item redundancy was a prime consideration at various points.

The factor analysis explained 57 per cent of the variance in the data in the sample with six dimensions identified. The factor analysis had difficulty in achieving a stable structure given the high ratio of questions to participants in the pilot so these findings should be taken with caution. The "other" category was also not included in the analysis.

A brief exploration of the factors outlined by the PCA will be outlined below, along with a rationale for inclusion or removal or replacement of some of the items. Table 13.1 lists simple item content under the PCA cluster it loads onto. Cross-loading among these items is shown by repetition of the item across several clusters. To ease interpretation, all displayed items have at least a moderate loading with a correlation of .3 or greater with their respective factor. This highlights item content rather than the factors themselves as the goal of the analysis is to reduce item redundancy.

Table 14.1: (A1) Activity item content loading on PCA clusters

	PCA clusters					
	Cluster 1.	Cluster 2.	Cluster 3.	Cluster 4.	Cluster 5.	Cluster 6.
Cluster name	Socialising through structured activities	Socialising through unstructured activities	Individual Activities in the home	Media consumption	Individually oriented activities	Beauty and fitness activities
Item content	Attending sports events	Hanging out with friends	Reading for pleasure	Watching TV	Surfing the internet	
	Playing sport (with others)	Going to parties or social events	Spending time with pets	Going to the cinema	Beauty, hair or spa treatments	Beauty, hair or spa treatments
	Playing individual sport		Singing or playing an instrument		Listening to music	Listening to music
	Craftwork/hobbies					Gardening or farming (negative)
	Going to clubs, pubs	Going to clubs, pubs				
	Going to the gym, running			Going to the gym, running		Going to the gym, running

Cluster One was interpreted as 'Socialising through structured activities'; here the activities all have structured goals or take place in a structured environment. The main recommendation here was to reduce the item number of items required to measure this kind of activity. This can be done by collapsing the questions on sport down to fewer items. The items A1j "Playing sport with others" and A1kR "Playing individual sport" could be replaced with: "Play sport (whether with people or individually)".

Cluster Two was interpreted as 'Socialising through unstructured activities' where the items mostly related to simply meeting people in social environments. There is some cross-loading evident around socialising in pubs, but overall there does seem to be value in retaining items that relate to meeting people in pubs versus in the home.

Cluster Three was interpreted as 'Individual Activities in the home'. The item content appears to show a pattern of leisure activities in the home. Cluster three stands alone and the items does not have strong cross loadings with any other clusters.

Cluster Four was interpreted as 'Media consumption'. The activities revolved around watching television and attending the cinema and there was a weak cross loading for going to the gym here which co-occurs across several factors.

Cluster Five was interpreted as 'Individually oriented activities'. Here the item content was related to activities that can typically be done in private such as surfing the internet and listening to music. The item content here does apparently heavily overlap with cluster six (beauty and fitness), but this is largely due to a strong negative loading from the gardening for pleasure item on factor six.

Cluster Six is largely determined by this gardening factor alone.

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