

User's Guide for the Fragile Families and Child Wellbeing Study Public Data, Year 15

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0. Study Overview

The Fragile Families and Child Wellbeing Study (FFCWS) was initiated to address four questions of great interest to researchers and policy makers:

1. What are the conditions and capabilities of unmarried parents, especially fathers?
2. What is the nature of the relationships between unmarried parents?
3. How do children born into these families fare?
4. How do policies and environmental conditions affect families and children?

The FFCWS follows a cohort of 4,898 children born in the U.S. between 1998 and 2000 and includes an over-sample of non-marital births. The sample includes children born in twenty large, U.S. cities (defined as populations of 200,000 or more). Sixteen of the twenty cities were selected using a stratified random sample of U.S. cities with populations of 200,000 or more grouped according to their policy environments and labor market conditions. These cities comprise the nationally-representative sample. See the sample design paper¹ for details on the selection of cities, hospitals, and births.

0.1. The Core Study

The Core Study consists of interviews with both mothers and fathers at the child's birth and again when children are ages one, three, five, and nine. A child interview and in-home observations and assessments are also included at age nine. The Core follow-up at age fifteen includes interviews with the teen and primary caregiver (PCG) as well as in-home observations and assessments.

The parent/PCG interviews collect information on attitudes, relationships, parenting behavior, demographic characteristics, health (mental and physical), economic and employment status, neighborhood characteristics, and program participation. Many measures overlap with those used in other large-scale studies such as the Infant Health and Development Program (IHDP), Early Head Start, the Teenage Parent Demonstration, and the Early Childhood Longitudinal Study—Birth Cohort 2000 (ECLS-B).

See [the FFCWS metadata website](#) to browse or search the full list of FFCWS variables. Table 1 below shows the dates of each wave of data collection.

For the remainder of this Guide, we will refer to the follow-up waves of data collection in reference to the child's age. For example we will refer to the wave focused upon in this guide as "Year 15" (which is wave 6 in the data file).

¹ Reichman et al, "The Fragile Families and Child Wellbeing Study: Sample and Design" Children and Youth Services Review, 2001, Vol. 23, No. 4/5

Table 1: Timeline of the FFCWS Core Study

Wave	Age	Years
1 - Baseline	Birth	1998 - 2000
2	Age 1	1999 - 2001
3	Age 3	2001 - 2003
4	Age 5	2003 - 2006
5	Age 9	2007 - 2010
6	Age 15	2014 - 2017

0.2. Collaborative Studies

In addition to the core survey components, five collaborative studies also ran alongside the Year 15 wave. These collaborative studies are listed below in Table 2. The remainder of this User Guide, however, focuses on the core survey components of the PCG interview, Teen interview, and In-Home Activity.

Table 2: Year 15 Collaborative Studies

Project Name	Short Description	Primary Investigator(s)	Funder
Adolescent Wellbeing and Brain Development	Brain, physiological, behavioral, and self/parent report measures focused on poverty-related stress and mental health. (Three-city subsample)	Colter Mitchell, Christopher Monk, and Luke Hyde	National Institutes of Health (5R01MH103761)
Beating the Odds: Identifying Characteristics of Cities Associated with Achievement by Disadvantaged Adolescents to Improve Youths' Upward Mobility	Funds data collection and analyses aimed at identifying the trajectories for children, based on their exposure to positive and adverse events and on the characteristics of their home cities, neighborhoods, and schools.	Sara McLanahan	Robert Wood Johnson Foundation
Biopsychosocial Determinants of Sleep and Wellbeing for Teens in FFCWS	Actigraphy and diary study of teen sleep and physical activity. (In-Home Activity participant subsample)	Lauren Hale and Orfeu Buxton	National Institutes of Health (5R01HD073352)
mDiary Study of Adolescent Romantic Relationships	App-based teen follow-up focused on peer and romantic relationships, collected in 26 surveys over a 1-year period.	Marta Tienda and Rachel Goldberg	The Center for Health and Wellbeing, Princeton University

Project Name	Short Description	Primary Investigator(s)	Funder
Reciprocal Genetic-Environmental Interactions	Saliva samples for telomere length, methylation, and other genetic markers. (Moms and kids at Year 9 wave, teens at Year 15)	Daniel Notterman	National Institutes of Health (5R01HD076592)

For more details on the collaborative studies at each wave, see that wave's User Guide or find a [list of all current and completed collaborative studies](#) on our website.

0.3. National Sample versus Full Sample

There are 20 cities in the full Fragile Families sample. Sixteen of these cities were selected via a stratified random sample and comprise the "national" sample. For each wave of data and for each unit of analysis (mother, father, couple), users can weight the data up to two different populations – the national level² or the city level. Applying the national weights makes the data from the 16 randomly selected cities representative of births occurring in large U.S. cities (the 77 U.S. cities with populations over 200,000 in 1994) between 1998 and 2000. Applying the city-level weights makes the data from all 20 cities in the sample³ representative of births in their particular city in 1998, 1999, or 2000, depending on the year in which the baseline data collection took place for that city.

The public use data do not contain the geographic identifiers needed to construct the stratum and primary sampling unit (PSU) variables necessary for using a Taylor Series methodology to estimate variances (except through a restricted use contract)⁴. Therefore, the public use data files contain a basic weight and a set of replicate weights. The replicate weights are used in place of the stratum and PSU variables. The replicate weights mask the locations of respondents, while still allowing for estimation of variance. If you are using the public use datasets, you will need to use the replicate weights to get estimates of variance for the sample. Applying the basic weight without the replicate weights will give you comparable point estimates, but will yield incorrect variance estimates. A brief introduction to the weights available for the public data files is available in the documentation memo "[Fragile Families & Child Wellbeing Study: A Brief Guide to Using the Weights for Waves 1 - 6.](#)" For detailed information on the

² In this memo, the term national refers to all 77 U.S. cities with 1994 populations of 200,000 or more

³ There are 109 cases in the data file that were not randomly selected for the core sample (some were randomly selected to be part of a separate study – the TLC3 study) and do not have national sample or city sample weights. Data users can identify and remove these cases using the weights sample flags (cm1citsm=0 for Baseline and cm2citsm=0 for Year 1).

⁴ Please note that data users who have access to the geographic identifiers may still want to use the replicate weights for their estimates. Using the replicate weights will likely yield similar standard errors (at least for cross-sectional estimates) as the alternative method.

construction of the weights for the Year 15 wave, see "[Year 15 Fragile Families Survey Weight Adjustment](#)".

0.4. Data Availability

There are two types of data available to data users.

0.4.1. *Public data*

Currently, Baseline, Year 1, Year 3, Year 5, Year 9 and Year 15 public data are available through the Princeton University [Office of Population Research \(OPR\) data archive](#). To access these data, researchers must complete a brief application and a 25-word abstract about their research project. These files are available in Stata, SPSS, or SAS format and can be downloaded as one combined file (ff_allwaves_2018) or in six separate files by wave, such as "ff_wave6_2018" for Year 15.

0.4.2. *Contract data*

Contract data require a more formal application due to the sensitive nature of the items available. Contract data available includes files, such as a **geographic file** with variables for the focal child's birth city, mother's and father's state of residence at each interview, and stratum and PSU (note: replicate weights are available on the public file in lieu of these), a set of **contextual characteristics** of the census tract at each wave, **medical records data** for mothers and children from the birth hospitalization record, a **school characteristics file** based on National Center for Educational Statistics data, a **labor market and macroeconomic file** with data on local employment and national consumer confidence at each wave, and a **genetic data file** with candidate genes and telomere length.

For further detail regarding the content of the contract data and the application process for its access, please [see our website](#).

0.5. Documentation

The remainder of this guide will provide a detailed overview of the **Year 15 Wave of the public FFCWS data**.

For questionnaires and codebooks for the primary caregiver, teen and in-home surveys, as well as documentation from other waves, see the [Documentation page](#) on our website.

1. Year 15 Components

The FFCWS began its sixth wave of data collection, in February 2014, around the focal child's fifteenth birthday. Data collection and interviews continued through March 2017.

The Year 15 Wave of the FFCWS included a Primary Caregiver (PCG) Interview, Teen Interview, In-Home Activity Workbook, and In-Home Observations. The Year 15 public data file (ff_wave6_2018) includes data from all of these components.

This wave of data collection enables researchers to answer the following questions: How does a teen's family, school, peers, and community influence their health, learning, and wellbeing during adolescence and into adulthood? How do genetic traits interact with social environments to influence child and adolescent wellbeing? How do cognitive, social, and emotional skills in early childhood influence outcomes and behaviors in adolescence? How do family resources and parenting practices in infancy, early, and middle childhood influence outcomes and behavior in adolescence?

1.1. Funders and Study Administration

Funding for Year 15 data collection was provided through grants from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) and the Robert Wood Johnson Foundation. Since the Fragile Families and Child Wellbeing Study began in 1998, a consortium of private foundations, non-profit organizations, and government agencies has provided additional support. Since the Fragile Families and Child Wellbeing Study began in 1998, a consortium of private foundations, non-profit organizations, and government agencies has provided additional support. Please see [our website for the full list](#) of these partners. Data collection was administered by Westat and the Columbia Population Research Center (CPRC).

The FFCWS Core Study was a joint effort by Princeton University's Center for Research on Child Wellbeing (CRCW) and Center for Health and Wellbeing (CHW), CPRC and the National Center for Children and Families (NCCF) at Columbia University.

1.2. Surveys and Instruments

Year 15 includes interviews with the teen and their primary caregivers (PCGs), as well as saliva samples for genetic analysis and In-Home Activity assessments. In-Home Activity assessments were conducted among a random sub-sample of eligible families fielded by Westat and include interviewer observations of the home environment and anthropometric measurements of the teen. Saliva samples for genetic analysis were collected by mail from teens.

Table 3 describes the number and percent of completed surveys by each survey component. Note: the minimal number of partially completed surveys (N=6 in PCG

survey, N=13 in Teen survey) “breakoff” interviewers that ended before the survey was complete) are counted as complete in the chart below.⁵

Table 3: Year 15 Components and their Sample Sizes

Survey component	Number of cases		Percent Completion	
	Complete	Eligible	Among Eligible	Among Baseline
PCG Survey	3,580	4,663	77%	73%
Teen Survey	3,444	4,663	74%	70%
In-Home Assessment	1,090	1,535	71%	22%

Note: The percent completion among eligible sample is calculated as the number of complete cases divided by the number of eligible cases; the percent completion among baseline sample is calculated as the number of complete cases divided by 4,898 cases at baseline.

⁵ Refer to variables cp6drop and ck6drop for whether the PCG Survey and Teen Survey were fully or partially completed, respectively.

2. Eligibility

Families who participated in prior waves of data collection were not eligible to participate in the Year 15 Follow-Up Wave if the focal child was deceased or legally adopted. In total, 4,663 families (95% of the baseline sample) were eligible to participate in the Year 15 Follow-Up Wave. A random sub-sample of families who participated in the Year 9 Follow-Up Wave was also selected to participate in the In-Home Activity assessments. The Year 15 In-Home Activity budget allowed us to complete approximately 1,000 assessments. At the beginning of data collection, 1,535 families (31% of the baseline sample) were randomly sampled and deemed eligible to participate in the Year 15 In-Home Activity assessments; in total, 1,090 In-Home Activity assessments were completed from amongst this larger subsample.

Families who participated in the Year 9 Primary Caregiver Survey (N=3,630) were fielded by Westat, Inc., a survey research firm in Rockville, MD from February, 2014 to October, 2016. Initially, only families who participated in the Year 9 Primary Caregiver Survey were considered eligible to participate in the Year 15 Follow-Up Wave. However, after securing additional funding from the Robert Wood Johnson Foundation, eligibility was expanded to the entire baseline sample of families, excluding focal children who were deceased or legally adopted. Eligible families who did not participate in the Year 9 Primary Caregiver Survey were fielded by CPRC from August 2015 to March 2017.⁶

2.1. Determination of Primary Caregiver (PCG)

Before administering any surveys or assessments, interviewers determined which parent or other adult was the primary caregiver of the teen.⁷ The PCG Survey was subsequently administered to the individual selected as the teen's primary caregiver. Among those surveyed, the PCG was either the teen's biological mother, biological father, or a non-parental caregiver. Like past waves of data collection, the biological mother of the teen was selected as the PCG if the biological mother lived with the teen for "half the time" or more. The biological father of the teen was selected as the PCG if the teen lived with the biological father for half the time or more and lived with the biological mother for less than half the time. If the teen neither lived with the biological mother nor biological father for half the time or more, the teen's non-parental caregiver was selected as the PCG. Please refer to the chart below for PCG selection criteria and the number and percent of PCG respondents at the Year 15 Follow-Up Wave.

Table 4: Primary Caregivers by Relationship

Primary caregiver	Child lives with biological mother > half the time	Child lives with biological father > half the time	N (%)
Biological mother	Yes	-	3,146 (88%)
Biological father	No	Yes	257 (7%)
Other relative	No	No	132 (4%)
Other non-relative	No	No	45 (1%)

⁶ Refer to variable cp5pint for whether the case participated in the Year 9 Primary Caregiver Survey.

⁷ Refer to variable cp6pcgrel for determination of the PCG.

3. Data Collection Procedures

Unlike all prior follow-up waves of data collection, the Year 15 Follow-up wave did not include “Core” interviews with both the biological mother and biological father of the teen. Instead, only the teen and the teen’s PCG (biological mother, father, or other non-parental caregiver) were interviewed. Questions previously asked in “Core” biological parent interviews and PCG surveys were combined into one survey.

Survey components were typically administered with the PCG survey completed first, and followed by the Teen survey. Families were provided with small monetary appreciation for their participation in the Year 15 wave of data collection: \$100 for PCG surveys and \$50 for Teen surveys.

3.1. Data collection Procedures - PCG

The PCG Survey was administered to the primary caregiver of the teen using either CAPI software if administered by Westat or Qualtrics if administered by CPRC. On average, the survey was completed in 70 minutes. Primarily, interviews were administered by phone; however, some families who were randomly selected to participate in the In-Home Activity, elected to complete the PCG Survey in-person during In-Home Activity (N=165). Additionally, CPRC staff offered the option to complete the survey as a self-administered online survey only in cases of severe scheduling challenges (N=11). In most cases, the PCG Survey was completed before the Teen Survey; however, the ordering of survey administration was modified for some families to accommodate their preferences and schedules.

The PCG Survey consists of 12 sections described as follows.

Table 5: PCG Survey Sections

Section	Description	Variable Prefixes
	<i>INTRODUCTION</i>	p6z
A	NON-PARENTAL CAREGIVER	p6a
B	TEEN HEALTH AND BEHAVIOR	p6b
C	TEEN EDUCATION	p6c
D	FAMILY LIFE AND PARENTING	p6d
E	HOUSEHOLD STRUCTURE AND FAMILY RELATIONSHIPS	p6e
F	NONRESIDENTIAL BIOLOGICAL PARENT	p6f
G	CORESIDENTIAL BIOLOGICAL FATHER OR CORESIDENTIAL/NONRESIDENTIAL PARTNER	p6g
H	PCG HEALTH AND BEHAVIOR	p6h
I	SOCIAL ENVIRONMENT AND INFORMAL SUPPORT	p6i
J	HOUSING AND PROGRAMS	p6j
K	EDUCATION, EMPLOMENT, AND INCOME	p6k

3.2. Data collection Procedures - Teen

The Teen Survey was administered to focal child using either CAPI software if administered by Westat or Qualtrics if administered by CPRC. On average, the survey was completed in 65 minutes. Primarily, interviews were administered by phone; however, some families who were randomly selected to participate in the In-Home Activity elected to complete the Teen Survey in-person during the In-Home Activity (N=211). Additionally, CPRC staff offered the option to complete the survey as a self-administered online survey only in cases of severe scheduling challenges (N=8). In most cases, the Teen Survey was completed after the PCG Survey; however, the ordering of survey administration was modified for some families to accommodate their preferences and schedules.

The Teen Survey consists of 6 sections described as follows.

Table 6: Teen Survey Sections

Section	Description	Variable Prefixes
	INTRODUCTION	k6z
B	EDUCATION	k6b
C	FAMILY RELATIONSHIPS	k6c
D	HEALTH AND HEALTH BEHAVIORS	k6d
E	NEIGHBORHOOD	k6e
F	RISKY BEHAVIORS – SEXUAL ACTIVITY AND ILLEGAL DRUGS	k6f

3.3. Data collection Procedures - In-Home Components

For families fielded by Westat, In-Home visits were scheduled for a random sub-sample of families and occurred after the PCG and Teen surveys. For some of these families, PCG and Teen surveys were conducted by interviewers during the Home Visit. For families fielded by CPRC, no Home Visits were completed. For more details regarding differences between Westat and CPRC procedures, please see the appendix.

Families were provided with a small monetary appreciation for their participation of \$50 for In-Home Activity assessments.

Immediately following the completion of the in-Home Activity, the interviewer completed a series of questions based on their observations of the respondent's home and neighborhood and their experiences with the family and focal child during the In-Home Activity. Information collected includes the following sections:

- Observations of the neighborhood and areas immediately outside the home [o6a1-o6a9]
- Interior common areas (for apartments only) [o6b1-o6b4]
- Interior of the home/apartment [o6c1-06c14]
- Teen's appearance [o6d1-o6d5]
- HOME Scale measures regarding PCG's affect and demeanor during the In-Home Survey [detail below]

- Ratings of the emotion and cooperation of the teen [o6f1-o6f5]
- Closing observations on the teen's demeanor and who else was present [o6g1-o6g7]

The source variables for this observations begin with the prefix "o6" and those for the In-Home Survey with the prefix "h6." Further information about the HOME Scale and teen skin tone scale is detailed below.

4. File Contents and Structure

4.1. Variable Structure

In the Year 15 data, each variable name is unique and uses certain characters, as well as a specific order that will help identify to whom and in which survey the question was asked. All variable names from Year 15 begin with an alphabetic character. If the variable name begins with the letter "c", the variable is constructed (see section 4.2 for more on constructed variables). If not, the variable corresponds to a question asked in a Year 15 survey and the first character in the variable name indicates to which instrument the variable corresponds. See Table 7a for a list of Year 15 survey instruments and their prefix letters. Table 7b shows the variable name structure for the In-Home Activity Workbook components.

In Year 15 variable names, what follows the instrument is the number "6" to indicate the wave of data collection. Furthermore, when the variable name has an instrument as its prefix and is a variable directly associated with the questionnaire (is not constructed), the leaf or the end of the variable will indicate the section letter and the question number to which to variable corresponds to. Below is a deconstructed list of the variable names in Year 15:

Table 7a: Variable name structure (survey variables and weights)

Variable Name			Survey
Prefix	Wave	Leaf	
k	6	[b-f z] 1-9	Teen Survey
k	6	natwt citywt *	National/City Weights (for teen)
p	6	[a-k z] 1-9	Primary Caregiver (PCG) Interview
p	6	natwt citywt *	National/City Weights (for PCG)
o	6	[a-g] 1-9	Interviewer Observations (In-Home)
h	6	natwt citywt *	National/City Weights (for In-Home)

Table 7b: Variable name structure (workbook variables)

Variable Name			Survey
Prefix	Wave	Leaf	
ch	6	*bmi lb kg h w	In-Home Study, Activity Workbook (height and weight)
ch	6	[a w]	In-Home Study, Activity Workbook (height, weight, waist, skin tone)

Note. An asterisk (*) is used to indicate the existence of other characters in the variable name. To provide summaries of the variable names, we used asterisk instead of listing each individual case.

4.2. Constructed Variables

A number of variables were constructed and added to the data set by staff. Variables under this group begin with the letter "c". Some represent data not otherwise available to the public, and some are merely aggregations of existing data that we provided as a "shortcut" for researchers. Researchers may find these variables useful, but are also free to construct their own in other ways.

Note: Raw yes/no questions are typically coded as 1=Yes and 2=No. Constructed yes/no variables are typically coded as 1=Yes and 0=No.

4.3. Survey Instruments

Survey variables contain responses to questions asked during a survey and their variable names begin with a letter indicating to which survey they correspond. For a list of survey instruments and their corresponding prefixes in Year 15, please refer to Table 8. The survey instrument is named for either the person answering questions or the place being surveyed. Following the prefix and wave, survey variables were named as the item in the instrument. For example, variable p6b1 in the data set contains responses provided to item B1 (*In general, would you say youth's health is ...*) in the PCG survey questionnaire.

Table 8: Survey Instruments in Year 15

instrument	instrument description
p	Primary Caregiver (PCG) Survey
k	Teen Survey
h	In-Home Activity Workbook
o	Interviewer Observations (In-Home)

4.4. Key Identifier

The Family ID (idnum) is the key identifier on the file for merging and sorting. idnum is the random family case ID that links the biological parents of the child at baseline, and in each subsequent wave, links all survey components for each family sampled at baseline. idnum is a string variable consisting of 4 characters. Because, the idnum identifier remains fixed throughout the waves, it can be used to merge data from any wave of the study.

4.5. Variable Label

Variable labels in the data and codebook correspond as closely as possible to the questions in the questionnaire; however, for formatting reasons some of the questions have been modified or abbreviated in the labels. Please see the questionnaire for official question wording and response categories.

4.6. Variable Response and Missing Data Codes

All variables also have value labels describing valid and missing responses. In addition to the listed response categories in the questionnaire, each variable (including continuous variables) can have any of the following nine negative values that indicate missing data:

Table 9: Missing Data Codes

Code	Label
-1	Refuse
-2	Don't know
-3	Missing (due to technical error)
-4	Multiple answers
-5	Not asked (not in survey version)
-6	Logical Skip
-7	Not applicable
-8	Out-of-range
-9	Not in wave

Occasionally other codes were used (-10 to -16) to indicate the question did not apply to the respondent or the respondent had effectively provided a response via an earlier question. In some cases, the negative codes are valid responses (ex: z scores).

4.7. Open-Ended Response Codes

Free response questions (open-ended questions) were coded by staff. Whenever possible, an open-ended response was coded as a previously existing response category to the question. If an open-ended response did not correspond to any previously existing response categories, a new category was created (variables of this kind were numerically coded as 100, 101, 102, etc.) if there were 10 or more similar responses. Otherwise, the open-ended response was categorized as "Other (not specified)."

5. Data Cleaning

Limited data cleaning was performed on the files. Known inconsistencies across variables remain in the data for users to consider in their analysis.

6. Weights

The Fragile Families sample was selected using a complex sample design, where the sample members were not selected independently and were not selected with equal probabilities. For instance, non-marital births were oversampled. Therefore, Columbia Population Research Center has created a set of Year 15 weights to adjust for the sample design (probability of selection), non-response at baseline, and attrition based on observed characteristics over the waves.

Public users, who do not have access to the stratum and PSU variables, can use a set of replicate weights to properly estimate variance for the sample. Contract data users can employ the replicate weights or Taylor Series method which incorporates strata and PSU.

A brief introduction to the weights available for the public data files is available in the documentation memo "[Fragile Families & Child Wellbeing Study: A Brief Guide to Using the Weights for Waves 1-6](#)" For detailed information on the construction of the sample weights for Year 15, please read "[Year 15 Fragile Families Survey Weight Adjustment](#)."

7. Introduction to Topics from the Data

Year 15 data covers a range of topics throughout surveys administered to the teen and their primary caregiver, as well as through in-home observations. This user guide provides supplemental documentation on variables in Year 15 derived from scales, concepts and those constructed by staff. Table 10 provides an overview of the topics covered in Year 15 by survey instrument (for a full list of survey instruments, please refer to Table 8).

Table 10: Major topics in Year 15 by survey instrument

Topics	p	k	h	o
Attitudes and Expectations	X	X		
Cognitive and Behavioral Development	X	X		X
Health and Health Behavior	X	X	X	X
Housing and Neighborhood	X	X		X
Family and Social Ties	X	X		
Demographics	X	X	X	
Finances	X			
Education and School	X	X		
Employment	X	X		
Legal System	X	X		
Romantic Relationships	X	X		
Paradata and Weights	X	X	X	X
Parenting	X	X		X

The next sections of this User Guide are organized by these topic categories. Within each section, we will list **constructed variables** (created by staff to add shortcuts for data users), followed by **scales** and **concepts** that relate to each topic. We define a scale as a composite measure that is composed of variables within the same construct. By constructing a scale, researchers can indicate the degree or intensity to which respondents adhere to the given construct. Scales are typically derived from an established source or existing study. Information on scoring a scale can be found within each section. Concepts are also aggregations of similar variables; however, we do not provide information on scoring, nor do we treat concepts as validated scales.

Researchers are also encouraged to interrogate the data further and to refer to the questionnaires provided in the [Documentation](#) for more information on the survey content.

8. Paradata

Every survey at Year 15 includes variables with information about the interview, also known as paradata. Within the available Year 15 paradata is the date (month and year) the interview was administered, the language it was administered in (English or Spanish) and the way in which it was delivered to the respondent (in person or by phone). **Sample flag variables** were also constructed by staff to help users sort the data by (1) respondent participation in a given survey and if applicable, their reason for non-response, or (2) whether the respondent belongs to the nationally-representative or city-representative sample. The rest of this chapter will highlight specific constructed paradata variables which are provided in the Year 5 data. For a full list of constructed variables see Table 8.

8.1. Constructed Variables - Age

Ages of teens and primary caregivers are recorded during the time of survey and can be retrieved through the constructed variables. Variables from primary caregivers, teen and in-home questionnaires indicate either their age or the age of the teen at certain events (separation, relationship, menstruation, arrest) as well as the age of members of the household. For those variables, please review the data.

- **cp6age** PCG's age at the interview
- **ck6yagem** teen's age at the teen interview (months)
- **ck6yagey** teen's age at the teen interview (years)
- **cp6yagem** teen's age at the PCG interview (months)
- **cp6yagey** teen's age at the PCG interview (years)
- **ch6yagem** teen's age at the In-Home interview (months)
- **ch6yagey** teen's age at the In-Home interview (years)

8.2. Constructed Variables - Sample Flags

There are two types of sample flags – **interview flags** and **status flags**. Interview flags denote whether a person was interviewed in a particular wave. Status flags provide other important information about a case at a particular period (non-response reason, in a particular subsample, etc).

8.2.1. *Interview completion flags*

- **ch6hint** participation in the In-Home Survey
- **ck6kint** whether teen completed interview
- **cp6pint** whether PCG completed PCG survey

Cases in which one or more respondents in a family were not interviewed in the current wave are included on the files but are coded “Not in wave” (-9) for all variables from the survey(s) that were not completed. Therefore, you will need to use these interview flags to subset out appropriate samples.

8.2.2. *Status flags*

- **ck6fcrel** teen's biological father status (1: resident father; 2: non-resident father; 3: father deceased/unknown/not father)

- **ck6mcrel** teen's biological mother status (1: resident mother; 2: non-resident mother; 3: mother deceased)
- **ck6source** teen interviewed by Westat or CPRC
- **cp6source** PCG interviewed by Westat or CPRC
- **cp6samp** provides information on the primary caregiver's disposition status (whether eligible and reasons for non-response, such as mother/father/child died since previous wave).
- **cp6natism** and **cp6citsm** indicate whether the primary caregiver is in the national sample and/or the 20-cities sample and was interviewed in the wave.
- **c*1innatism** and **c*1incitysm** (from the baseline file) indicate whether the respondent was part of the national/city sample regardless of whether they were interviewed at any given wave.

Table 11: Constructed variables with administrative information

Constructed Variable	Description of Constructed Variable
ch6hint	Participated in the In-Home Survey
ck6kint	Participated in Youth interview
cp6pint	Participated in PCG interview
c[k p h]6intmon	Youth/PCG/In-Home interview(month)
c[k p h]6intyr	Youth/PCG/In-Home interview (year)
ch6tdiff	Number of days between youth interview and In-Home
c[k p]6drop	Youth/PCG drop-off during interview
c[k p]6source	Youth/PCG interviewed by Westat or CPRC
c[k p]6tele	Youth/PCG interviewed by telephone
c[k p]6yagem	Youth age at time of youth/PCG interview (month)
c[k p]6yagey	Youth age at time of youth/PCG interview (years)
chkagem	Youth age at time of In-Home assessments (month)
chkagem	Youth age at time of In-Home assessments (years)
cp6age	PCG at time of PCG interview
cp6span	PCG interview in Spanish
cp6w9intmon	Time period for last interview (month)
cp6w9intyr	Time period for last interview (year)

9. Finances

At Year 15, the PCG was asked questions regarding their household finances at Year 15. Table 12 details subtopics within “finances” and in which survey these topics are included. Child support questions include questions regarding the amount of money the PCG receives or pays in child support, as well as the frequency of the transaction. The respondent’s earnings (cash, housing, meals, clothes) are derived from traditional employment, non-traditional employment (includes illegal activity). Expenses are based on the PCG’s expenses on housing and credit card debt. For questions related to the respondent’s financial assets, the interviewer asks the respondent about home and vehicle ownership, and savings accounts. The PCG’s household income is their total household income from all sources in the last year. Within the income tax subtopic, the respondent was asked whether they’d filed a federal tax return for the previous tax year. Material hardship is the extent to which the respondent experienced hunger, homelessness, utility shut-off and forgone medical care due to a lack of financial resources. Private transfers involve financial help the respondent receives from or provides to family and friends, whereas public transfers/social services relate to financial help the respondent receives that is government-issued.

Table 12: Subtopics in Finances in Year 15 by survey instrument

Subtopics	p	k	h	o
Child support	X			
Earnings	X			
Expenses	X			
Financial assets	X			
Household income/poverty	X			
Income tax	X			
Material hardship	X			
Private transfers	X			
Public transfers and social services	X			

9.1. Constructed Variables - Household Income

Household income measures were constructed for PCGs, but users should carefully review the following information regarding the imputation and construction process carefully before deciding how and whether to use these variables.

- **cp6hhinc** is PCG's household income at Year 15

Income was reported by PCGs in two forms – as an actual amount (p6k57) or as a reported range (p6k58) (i.e. \$10,000-\$15,000). To construct a more complete measure of household income, we first imputed dollar amounts for those who reported a range of income in p6k58 (including those who reported an actual amount of income in an appropriate bracketed range). If the PCG did not report income as either an amount or a bracketed range, household income was imputed using Stata's regression-based impute command. The following covariates were used in both sets of imputations: original sample city, age (cp6age), years of education (cp6edu), race/ethnicity, earnings, immigrant, employed last year, hours worked, total adults in the household (cp6adult), welfare receipt, and marital status. For PCGs who were not a biological parent, data on race/ethnicity, immigrant status, and marital status were not reported, and those cases were set to missing for those covariates.

9.2. Constructed Variables - Household income Imputation Flag

- **cp6hhimp** indicates cases with reported income and those with an imputed income (in reference to cp6hhinc). If the PCG reported an income in brackets, for example, they are flagged as "imputed, with income range reported."

9.3. Constructed Variables - Poverty Measures

- **cp6povco** is the poverty ratio. The poverty ratio is the ratio of total household income, as defined in cp6hhinc, to the official poverty thresholds, designated by the U.S. Census Bureau.
- **cp6povca** indicate poverty categories by transforming the poverty ratios into categorical variables. cp6povca represents the percentage of the poverty line the ratio represents.

The poverty measure, cp6povco, is the ratio of total household income to the official poverty thresholds established by the U.S. Census Bureau. The poverty thresholds vary by year and household composition (number of adult and children in the household). For each year that interviews were conducted, we used the prior year thresholds from the Census Bureau. The poverty measure cp6povca transforms the

Please visit <http://www.census.gov/cps/data/povthresholds.html> for detailed information about poverty thresholds.

9.4. Scale – Material Hardship

At Year 15, 11 questions were asked to the primary caregiver to determine material hardship. These questions are taken from the “Basic Needs – Ability to Meet Expenses” section of the survey on Income and Program Participation (SIPP) 1996 Panel Wave 8 Adult Well-Being Topical Module Questionnaire,⁸ the 1997 & 1999 New York City Social Indicators Survey (SIS)⁹ and the 1999 Study of Work, Welfare, and Family Well-Being of Iowa families on FIP (Iowa’s assistance program).¹⁰

9.4.1. *Variables*

PCG questions about the past year: **p6j37 - p6j47** (11 variables)

PCG questions about the past six years (if not in the past year): **p6j48 - p6j58** (11 variables)

The FFCWS Year 15 Survey includes several material hardship measures that are taken from the Survey of Income and Program Participation (SIPP)¹¹ (Bauman, 1998). These questions are also similar to Mayer and Jencks¹² Chicago study of hardship and poverty.^{13,14}

Some of the hardship questions are also derived from the 1997 and 1999 Social Indicators Survey (SIS).¹⁵ This study looks at families and individuals in New York City and monitors changes over time. Some of the material hardship questions found in the SIS are similar to those found in the SIPP, such as items referring to not paying bills on time and loss of utilities. Other questions concern the respondent (p6j38) going hungry, access to free food (p6j37), and places he/she has lived (p6j40; p6j44), all within the past 12 months and all due to financial difficulties.¹⁴

9.4.2. *Modifications*

These “YES/NO” questions are similar to the original questions taken from other surveys, with a few exceptions. In the SIPP, respondents are asked whether “you/anyone in your household” had encountered the specified hardship. In the SIS, questions refer to “you [or your partner].” In W164 of the 1997 SIS, the question is asked of “you [or your

⁸Survey on Income and Program Participation: 1996 Panel Wave 8 Adult Well-Being Topical Module Questionnaire. (1998). Retrieved March 27, 2003, from http://www.sipp.census.gov/sipp/top_mod/1996/quests/wave8/awbook.html

⁹Social Indicators Survey Center, Columbia University School of Social Work. (1999). 1999 New York City Social Indicators Survey: Documentation and Codebook, Revised Version. Retrieved March 27, 2003, from <http://www.siscenter.org/>

¹⁰Sing, M., Hill, H., & Mendenko, L. (2001). Work, Welfare, and Family Well-Being: Summary Report. Mathematica Policy Research.

¹¹Survey on Income and Program Participation: 1996 Panel Wave 8 Adult Well-Being Topical Module Questionnaire. (1998). Retrieved March 27, 2003, from http://www.sipp.census.gov/sipp/top_mod/1996/quests/wave8/awbook.html

¹²Mayer, S.E., & Jencks, C. (1989). Poverty and the distribution of material hardship. *Journal of Human Resources*, 24 (1): 88-114.

¹³Bauman, K. J. (1998). Direct measures of poverty as indicators of economic need: Evidence from the survey income and program participation. U.S. Census Bureau Poverty Measurement Papers. Retrieved March 27, 2003, from <http://www.census.gov/population/www/documentation/twps0030/twps0030.html>

¹⁴Bauman, K. J. (1999). Shifting family definitions: The effect of cohabitation and other nonfamily household relationships on measures of poverty. *Demography* 36(3):315-325.

¹⁵Social Indicators Survey Center, Columbia University School of Social Work. (1999). 1999 New York City Social Indicators Survey: Documentation and Codebook, Revised Version. Retrieved March 27, 2003, from <http://www.siscenter.org/>

spouse/partner] [or your child] [or your children]." The corresponding FFCWS survey questions refer only to the respondent and not to his/her partner or children.

Note: The FFCWS Year 15 Survey includes only a subset of the hardship questions used in the SIPP and SIS studies. Similar to the Year 9 Survey, the Year 15 Survey does not contain items from the IOWA study or separate questions on hunger (ever hungry but didn't eat because you couldn't afford enough food) for self and child/children, as in the Year 5 Survey.

Particular to the Year 15 PCG Survey – each material hardship item that refers to the past year is also asked in reference to the past six years (the time passed since the Year 9 survey), but only of respondents who do not report that they had experienced the particular type of hardship in the past year. Another new feature with Year 15 – the item about cancelled telephone service includes the phrase "mobile or land line."

10. Health and Health Behavior

At Year 15, questions on health and health behavior were asked to the PCG and teen. Within the subtopic of accidents and injuries are questions to the PCG about whether and how many times their teen saw the doctor for an accident or injury in the last year. The disabilities topic, likewise, are questions to the PCG about their teen – questions in disabilities include whether the teen was diagnosed with ADHD, ADD, autism, or another learning disability (speech problems, developmental delays, dyslexia, or reading/math difficulty). Questions about fertility history were directed to both the PCG and their teen. The teen was asked about whether they or their partner was currently pregnant. Also, the teen was asked whether they or their partner had ever been pregnant and if so/when/how their pregnancy ended. The PCG was also asked about their fertility history but emphasis was placed on their or their partner's other biological children. In the health behavior, teens and PCGs were asked about their sleep habits. Teens were asked about their approximate screen time and type of screen used (computer, television, smartphone, video game), as well as their eating (breakfast, vegetable, fruit, soda intake) and exercise habits and drug/alcohol/cigarette consumption. Within health behavior is also interviewer observations on the teen's hygiene. In health care access and insurance are questions to the PCG about the frequency of health care visits and the type of insurance they are covered by and through whom they obtained insurance. Height and weight were both self-reported in the Core Surveys and collected within the activity workbook of the In-Home Study. Questions in medication ask the PCG if the teen takes medication for depression/anxiety, asthma, a heart condition, diabetes, eczema, diarrhea/colitis, seizures, headaches/migraines, ear infections or another condition. Physical and mental health questions are directed at both the PCG and the teen about the teen's health, while sexual health (sexual activity, preferences, condom-use, number of partners, age and with whom teen had first sexual activity) are asked to the teen only. Lastly, teens and PCGs were asked about their substance use and in what way it interferes with their life. Teens were asked whether they'd tried marijuana, hallucinogens, cocaine/crack, heroin, methamphetamine, non-prescription cough/cold medicine, ecstasy/MDMA, glue/aerosol sprays/gases, fumes or other illegal drugs.

Table 13: Subtopics in Health and Health Behavior in Year 15 by survey instrument

Subtopics	p	k	h	o
Accidents and Injuries	X	X		
Disabilities	X			
Fertility History	X	X		
Health behavior	X	X		X
Health care access and insurance	X			
Height and weight		X	X	
Medication	X			
Mental health	X	X		
Physical health	X	X		
Sexual health and behavior	X	X		
Substance use and abuse	X	X		X

10.1. Constructed Variables - Height and Weight Measurements

In the Year 15 Teen Survey, the teen self-reported their height and weight. Measurements were also recorded for height and weight of the teen during the In-Home Survey, within the activity workbook. Below is a description of the data cleaning process:

10.1.1. *Measuring height and weight: Teens*

Height and weight were assessed in two ways. First, during the teen interview, all teens were asked to report their height in feet/inches and their weight in pounds. Second, the subset of teens who also participated in the In-Home Activity had their height and weight measured by an interviewer. Thus, there are two sets of constructed variables based on self-report and observation, with some teens having data for both.

During the In-Home Activity, height, weight, and waist circumference were measured by the interviewer. Height measurements were taken in centimeters using a large plastic standing ruler called a stadiometer. Weight measurements were taken in pounds using a scale. Waist circumference was also measured in centimeters if the PCG or another adult was present. Each measurement was taken two to three times. When taking height measurements of the teen, the interviewer took two measurements. A third measurement was taken if the first two measurements differed. The same was done for weight measurements

10.1.1.1. Teen's height and weight variables Survey Variables (In-Home activity workbook):

- **ch6ht1- ch6ht3** (teen height)

- **ch6wt1- ch6ht4** (teen weight)
- **ch6wst1- ch6wst4** (teen waist circumference)

Survey variables (Teen self-report):

- **k6d5, k6d6** (teen height)
- **k6d7** (teen weight)

Constructed variables for teen's height:

- **c[h | k]6chtcm** combined teen height (cm) from In-Home activity or Teen self-report
- **c[h | k]6haz** teen's z-score height-for age from In-Home activity or Teen self-report
- **c[h | k]6hap** teen's percentile for height-for-age from In-Home activity or Teen self-report

Constructed variables for teen's weight:

- **c[h | k]6cwtkg** combined teen weight (kg) from In-Home activity or Teen self-report
- **c[h | k]6cwtlb** combined teen weight (lbs.) from In-Home activity or Teen self-report
- **c[h | k]6waz** teen's z-score weight-for age from In-Home activity or Teen self-report
- **c[h | k]6wap** teen's percentile for weight-for-age from In-Home activity or Teen self-report

10.1.2. *Measuring Body Mass Index (BMI) and BMI Z-Scores: Teens*

There are two sets of teen BMI variables, one constructed from the teen self-reports of anthropometric measurements in the Teen survey and the other from actual anthropometric measurements done in the In-Home Study, within the activity workbook.

The BMI, z-score and percentile variables were constructed for both the In-Home Activity and survey data using the Centers for Disease Control and Prevention's (CDC) SAS program, which calculates the percentiles and z-scores for a child's sex and age for BMI, weight, height, based on the 2000 CDC growth charts. Based on CDC instructions, we used the following variables which SAS used to produce the BMI variables: teen's exact age (from administrative records of teen's birth date), teen's gender (cm1bsex), teen's height in centimeters (ch6chtcm or ck6chtcm), and teen's weight in kilograms (ch6cwtkg or ck6cwtkg). The CDC also calls for an optional variable for head circumference, which was set to missing per CDC instruction.

10.1.2.1. Teen's BMI variables

Constructed variables for teen's BMI:

- **c[h | k]6cbmi** teen's Body Mass Index (BMI) from In-Home activity or Teen self-report
- **c[h | k]6bmiz** teen's BMI z-score from In-Home activity or Teen self-report

- **c[h | k]6bmip** teen's BMI percentile from In-Home activity or Teen self-report
- **c[h | k]6cflag** flag of possible issue with anthropomorphic or BMI measures from In-Home activity or Teen self-report

10.2. Scale – Pubertal Development

The Pubertal Development Scale was developed by Anne Peterson (Petersen et al., 1988) to provide an instrument for self-assessment of pubertal development by adolescents that could be used in school. It consists of a series of questions about physical development that ask the respondent to evaluate the degree to which a specific physical change has occurred.

10.2.1. *Variables*

Teen questions: **k6d8 - k6d11** (4 variables)

10.2.2. *Modifications*

At this wave one question was asked for boys and a selection of four questions from this series were included for girls, including a general question about the teen's development relative to their peers (boys and girls), and three questions about menstruation (girls only). Scale scoring is not provided due to the use of only a subset of the scale at this wave.

10.3. Concept – Substance Use

The substance use measures for Year 15 are divided into three major sections: tobacco, alcohol, and drug use. All questions for the teen and PCGs were modeled on the National Survey on Drug Use and Health (NSDUH),¹⁶ the National Longitudinal Study of Adolescent Health (Add Health)¹⁷ and Monitoring the Future surveys.¹⁸ Given that two of these studies are specifically focused on substance use, they include a higher level of detail on these topics than was possible for the FFCWS. The most essential and relevant questions for the FFCWS surveys were selected from these three sources and then modified for consistency and brevity.

Dependence and abuse are based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; APA 1994). Questions to establish Substance Dependence were not asked in the FFCWS Year 15 surveys.

10.3.1. *Tobacco Use*

10.3.1.1. Variables

Teen's tobacco use: **k6d40 - k6d45** (6 variables)

PCG's tobacco use: **k6d46, k6d47, k6d47a1, k6d47a2, p6h74 - p6h77** (8 variables)

Teens are asked if they have ever smoked a whole cigarette and, if so, 1) how old they were the first time they smoked, 2) frequency of smoking in the past 30 days, 3) quantity of smoking in past 30 days, 4) if cigarettes are easily available to them in the home, and 5) if a parent has ever given them cigarettes.

In addition, teens are asked the following questions about their parental figures: 1) how often, if ever, their PCG smokes, 2) how often, if ever, their father or their mother's current partner smokes, 3) how often, if ever, their mother smokes.

PCGs are asked if they have ever smoked regularly and, if so, 1) how old they were the first time they smoked, 2) frequency of smoking in the past 30 days, and 3) quantity of smoking in past 30 days.

10.3.2. *Alcohol Use*

10.3.2.1. Variables

Teen's alcohol use: **k6d48 - k6d55, k6d56a, k6d56b, k6d56c, k6d56d, k6d59, k6d60** (14 variables)

PCG's alcohol use: **k6d57, k6d58, k6d58a1, k6d58a2, p6h79a, p6h79 - p6h85** (11 variables)

¹⁶ Substance Abuse and Mental Health Services Administration (SAMHSA). (2010). Results from the 2009 National Survey on Drug Use and Health: Volume I. Summary of National Findings. (Office of Applied Studies, NSDUH Series H-38A, HHS Publication No. SMA 10-4586Findings). Rockville, MD.

¹⁷ Harris, K.M., Halpern, C.T., Whitsel E., Hussey, J., Tabor, J., Entzel, P. & Udry, J.R. (2009). The National Longitudinal Study of Adolescent to Adult Health: Research Design. <http://www.cpc.unc.edu/projects/addhealth/design>.

¹⁸ Johnston, L. D., Bachman, J. G., & O'Malley, P. M. (2009). Monitoring the Future: Questionnaire responses from the nation's high school seniors, 2007. Ann Arbor, MI: Institute for Social Research, 382 pp.

Teens are asked if they have ever had an alcoholic drink more than two or three times when they were not with their parents. If so, they are asked 1) age at first drinking without parent, 2) frequency of drinking in past 30 days, 3) quantity of drinking in past 30 days, 4) frequency of drinking in past year. If they report any drinking in the past year, teens are also asked 1) quantity of drinking in past year, 2) frequency of drinking 5 or more drinks in a row, 3) frequency of getting drunk, and 4) a series of four substance abuse items about whether alcohol has interfered with responsibilities, social interactions, or legal issues. Teens are asked two questions about their accessibility of alcohol 1) if alcohol is easily available to them in the home and 2) if a parent has ever given the teen more than one or two sips of alcohol to drink.

In addition, teens are asked the following questions about their parental figures: 1) how often, if ever, their PCG drinks, 2) how often, if ever, their father or their mother's current partner drinks, 3) how often, if ever, their mother drinks.

PCGs are asked for their age at first alcoholic drink and the following questions about drinking in the past year 1) frequency of drinking, 2) quantity of drinking, and 3) a series of four substance abuse items about whether alcohol interfered with responsibilities, social interactions, or legal issues.

10.3.3. Drug Use

10.3.3.1. Variables

Teen's drug use: **k6f63, k6f63a, k6f63b, k6f64, k6f65, k6f66, k6f67a, k6f67b, k6f67c, k6f67d, k6f68, k6f69a, k6f69b, k6f69c, k6f69d, k6f69e, k6f69f, k6f69f1, k6f69g, k6f70a, k6f70b, k6f70, k6f71, k6f72, k6f73a, k6f73b, k6f73c, k6f73d, k6f74, k6f75a, k6f75b, k6f75c, k6f75d, k6f76a, k6f76b, k6f76, k6f77, k6f78, k6f79a, k6f79b, k6f79c, k6f79d, k6f82, k6f83** (46 variables)

PCG's drug use: **k6f80, k6f81, k6f81a1, k6f81a2, p6h86, p6h87a, p6h87b, p6h87c, p6h87d, p6h87e, p6h87f, p6h87g, p6h87h, p6h87os, p6h88, p6h89, p6h90, p6h91, p6h92, p6h93, p6h94, p6h95a, p6h95b, p6h95c, p6h95d, p6h95e, p6h95os, p6h96, p6h97, p6h98, p6h99, p6h100, p6h101** (33 variables)

Teens are first asked whether or not they have ever tried marijuana. If so, they are asked 1) age at first use, 2) frequency of use in past year, 3) frequency of use in past month, and 4) a series of four substance abuse items about whether marijuana interfered with responsibilities, social interactions, or legal issues.

Teens are then asked if they have ever tried any other type of illicit drug. If so, they are asked to identify which drugs they have tried, based on the following list of drug categories: 1) hallucinogens, 2) cocaine, 3) heroin, 4) methamphetamine, 5) non-prescription cough or cold medicines, 6) inhalants, 7) ecstasy, MDMA, or "molly", or 8) other types of illicit drugs. They are then asked the following series of questions if they have tried any drugs: 1) age at first use, 2) frequency of use in past year, 3) frequency of use in past month, and 4) a series of four substance abuse items about whether illicit drugs have interfered with responsibilities, social interactions, or legal issues.

Teens are then asked if they have ever taken any prescription drugs that were not prescribed for them or were taken only for the feeling they caused. If so, they are asked to identify which prescription drugs they have tried, based on the following list of drug categories, 1) amphetamines, 2) painkillers, 3) sedatives or tranquilizers, or 4) other types of prescription drugs. They are then asked the following series of questions if they have tried any prescription drugs: 1) age at first use, 2) frequency of use in past year, 3) frequency of use in past month, and 4) a series of four substance abuse items about whether prescription drugs have interfered with responsibilities, social interactions, or legal issues.

Teens are asked two questions about their accessibility of drugs: 1) if drugs are easily available to them in the home and 2) if a parent has ever given the teen illegal drugs or prescription drugs that were not prescribed by a doctor.

In addition, teens are asked the following questions about their parental figures: 1) if their PCG uses illegal or prescription drugs that are not prescribed by a doctor, 2) if their father or their mother's current partner uses illegal or prescription drugs that are not prescribed by a doctor, 3) if their mother uses illegal or prescription drugs that are not prescribed by a doctor.

PCGs are asked if they have used any type of illicit drug in the past year. If so, they are asked to identify which drugs they have tried, based on the following list of drug categories: 1) marijuana, 2) hallucinogens, 3) cocaine, 4) heroin, 5) methamphetamine, 6) ecstasy, MDMA, or "molly", 7) inhalants, or 8) other type of illicit drugs. They are then asked the following series of questions if they have used any drugs in the past year: 1) age at first use, 2) frequency of use in past year, and 3) a series of four substance abuse items about whether illicit drugs have interfered with responsibilities, social interactions, or legal issues.

PCGs are also asked if they have used any prescription drugs that were not prescribed for them or were taken only for the feeling they caused within the past year. If so, they are asked to identify which prescription drugs they have used, based on the following list of drug categories: 1) painkillers, 2) amphetamines, 3) sedatives or barbiturates, 4) tranquilizers, or 5) other types of prescription drugs. They are then asked the following series of questions if they have tried any prescription drugs: 1) age at first use, 2) frequency of use in past year, and 3) a series of four substance abuse items about whether prescription drugs have interfered with responsibilities, social interactions, or legal issues.

10.4. Scale – Mental Health Depression

10.4.1. *PCG's Depression*

10.4.1.1. Variables

In reference to past year:

- *PCG Questions* **p6h7 - p6h21** (15 variables)
- *Constructed questions* (liberal and CIDI-SF diagnostic): **cp6md_case_lib, cp6md_case_con**

In reference to past six years:

- *PCG Questions:* **p6h22 - p6h36** (15 variables)
- *Constructed questions* (liberal and CIDI-SF diagnostic): **cp6md_case_lib_9y, cp6md_case_con_9y**

At Year 15, The Major Depressive Episode PCG questions are derived from the Composite International Diagnostic Interview - Short Form (CIDI-SF), Section A.¹⁹ The short form of the CIDI interview takes a portion of the full set of CIDI questions and generates the probability that the respondent would be a “case” (i.e., a positively diagnosed respondent) if given a full CIDI interview. The CIDI questions are consistent with the Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition (DSM-IV).²⁰ The CIDI is a standardized instrument for assessment of mental disorders intended for use in epidemiological, cross-cultural, and other research studies. Respondents are asked whether they have had feelings of dysphoria (depression) or anhedonia (inability to enjoy what is usually pleasurable) in the past year that lasted for two weeks or more and, if so, whether the symptoms lasted most of the day and occurred every day of the two week period. If so, they were asked more specific questions about 1) losing interest, 2) feeling tired, 3) change in weight, 4) trouble sleeping, 5) trouble concentrating, 6) feeling worthless, and 7) thinking about death.

10.4.1.2. Modifications

All of the essential CIDI-SF questions to score a major depressive episode are included in the Year 15 PCG Survey. A few questions are omitted. These omitted questions deal with persistence, recency, and impairments associated with major depression and the subject's contact with a health care provider or other professional. The omitted questions play no part in generating predicted probabilities for the presence of disorders.²¹

The same CIDI-SF items that refer to the past year are also asked in reference to the past six years (since the Year 9 survey), but only of respondents who do not report that they experienced symptoms almost every day in a two-week period in the previous

¹⁹ Kessler, R.C., Andrews, G., Mroczek, D., Ustun, T.B., & Wittchen, H.U. (1998). The world health organization composite international diagnostic interview short-form (CIDI-SF). *International Journal of Methods in Psychiatric Research*, 7, 171-185.

²⁰ American Psychiatric Association (1994). *Diagnostic And Statistical Manual Of Mental Disorders, Fourth Edition*. Washington, DC: American Psychiatric Association.

²¹ Walters, E.E., Kessler, R.C., Nelson, R.C., & Mroczek, D. (2002). Scoring the World Health Organization's Composite International Diagnostic Interview Short Form (CIDI-SF; Dec 2002).

year. For the conservative depression since year 9, there are 179 missing; 177 of those are respondents who skipped over the questions regarding symptoms since the Year 9 survey, and so a score could not be computed.

10.4.1.3. Scoring

Section A of the CIDI-SF is used to classify respondents according to the criteria for a DSM-IV major depressive episode. No distinction is made between respondents with major depressive disorder, major depressive episodes that occur as part of a bipolar disorder, or major depressive episodes that occur in the course of psychotic disorders. There are two ways to meet the diagnostic stem requirement for a major depressive episode: (1) endorse all questions about having two weeks of dysphoric mood (p6h7-p6h8- p6h9 or p6h22- p6h23- p6h24); or (2) endorse all questions about having two weeks of anhedonia (p6h11- p6h12- p6h13 or p6h26- p6h27- p6h28). Consistent with the procedures described by Kessler and Mroczek in 1994 and 1997, each series requires the respondent to report two weeks of symptoms lasting at least about half of the day (p6h8, p6h12 or p6h23, p6h27) and almost every day (p6h9, p6h13 or p6h24, p6h28). When the respondent denied the existence of the symptom or denied persistence, they skipped-out, and the probability that a respondent would be a “case” equaled to zero. If the respondent endorsed the dysphoric stem, they were not asked the anhedonia stem questions. Note that the scoring instructions issued by Walters et al. (2002) created more stringent conditions for endorsing the stem; respondents must report two weeks of symptoms lasting at least “most of the day” (p6h8, p6h12 and p6h23, p6h27).²² As a consequence, the approach used here results in more respondents endorsing the stem than would endorse if the 2002 revisions were employed. If the respondent endorsed the diagnostic stem series, seven additional symptom questions were asked: losing interest (p6h10=1 (or p6h25=1)), only if the stem involves dysphoria; the anhedonia stem question p6h11=1 (or p6h26=1) should be counted when the anhedonia stem is endorsed), feeling tired (p6h14=1 (or p6h29=1)), change in weight greater than or equal to 10 pounds (p6h15=1, 2, or 3 (or p6h30=1, 2, or 3) and p6h16>=10 (or p6h31>=10)), trouble with sleep (p6h17=1 and p6h18=1 or 2 (or p6h32=1 and p6h33=1 or 2)), trouble concentrating (p6h19=1 (or p6h34=1)), feeling down (p6h20=1 (or p6h35=1)), and thoughts about death (p6h21=1 (or h36=1)). The respondent's Major Depressive (MD) score (range 0-8) is then calculated as the sum of positive responses to each of these seven symptom questions and the first dysphoric stem question (p6h7 (or p6h22)). Note that the scoring scheme proposed by Walters et al. excludes p6h7 or p6h22 from the symptom count, leading to an MD score range of 0-7.

The data file contains four constructed dichotomous variables: a conservative and liberal version of diagnosis for major depression over the past year and past six years (since Year 9). The conservative scale uses the adjustments advocated by Walters et al., requiring depressive symptoms be present “most of the day” to be counted and omitting the first stem question when calculating MD score. The liberal scale follows Kessler and Mroczek's criteria, requiring the respondent report two-week depressive

²² Walters, E.E., Kessler, R.C., Nelson, R.C., & Mroczek, D. (2002). Scoring the World Health Organization's Composite International Diagnostic Interview Short Form (CIDI-SF; Dec 2002).

symptoms over at least half the day and including the first stem question (p6h7 or p6h22) in the MD score. Respondents are classified as either probable cases or probable non-cases based on whether or not they have a MD score of three or more. Note that respondents who denied the MD stem questions or otherwise skipped out of the section prior to assessing the symptoms in the MD score receive a probability of caseness equal to zero.

A Memo Edit issued by Kessler in December 2002 indicates that subjects that volunteer they are taking medication for depression (p6h7 or p6h11=-14 (or p6h22 or p6h26=-14)) should be counted as depressed. Note that while they receive a positive score for caseness, they are not asked any of the seven symptom questions. Note that participants may indicate that they are taking medication for depression in variable p6h7 or p6h11.

10.4.2. Teen's Depression

10.4.2.1. Variables

Teen questions: **k6d2c, k6d2n, k6d2s*, k6d2x, k6d2ac** (5 variables)

Items k6d2c, k6d2n, k6d2s, k6d2x, and k6d2ac are drawn from the Center for Epidemiologic Studies Depression Scale (CES-D),²³ as used in the National Longitudinal Study of Adolescent Health (Add Health), Wave I. Perreira and colleagues²⁴ found these five items to be an improvement over the full 20-item CES-D in cross-cultural comparability.

10.4.2.2. Modifications

The CES-D items in Add Health describe the respondent's feelings in the past week and include values on a four-point scale ranging from "never or rarely" to "most of the time or all of the time." In the version included in the Year 15 Teen survey, items refer to the past four weeks and include a four-point scale ranging from 1 = strongly agree to 4 = strongly disagree. In contrast, Add Health Modifications are illustrated in Table 14.

Table 14: CES-D Item Modifications

Add Health CES-D Survey Item <i>4-point scale (0-3)</i>	Y15 Teen survey Item <i>4-point scale (1-4)</i>	Variable
You felt that you could not shake off the blues, even with help from your family and your friends.	I feel I cannot shake off the blues, even with help from my family and my friends.	k6d2c
You felt sad.	I feel sad.	k6d2n
You were happy.	I feel happy.	k6d2s
You felt life was not worth living.	I feel life is not worth living.	k6d2x
You felt depressed.	I feel depressed.	k6d2ac

10.4.2.3. Scoring

CES-D items might be recoded as follows: strongly disagree (4=0), somewhat disagree (3=1), somewhat agree (2=2), and strongly agree (1=3). k6d2s is a positively worded item and should be recoded differently to conform with the other items: (4=3), (3=2) (2=1), and (1=0). Researchers can then generate a raw sum or a mean score of the items.

²³ Radloff, L. S. (1977). The CES-D Scale: A Self-Report Depression Scale for Research in the General Population. *Applied Psychological Measurement*, 1(3): 385-401.

²⁴ Perreira, K. M., Deeb-Sossa, N., Harris, K. M., & Bollen, K. (2005). What Are We Measuring? An Evaluation of the CES-D Across Race/Ethnicity and Immigrant Generation. *Social Forces*, 83(4): 1567-1601.

* k6d2s is also a part of the EPOCH scale on page 46.

10.5. Scale – Mental Health for Generalized Anxiety Disorder

10.5.1. PCG's Anxiety

10.5.1.1. Variables

In reference to past year:

PCG Questions: **p6h37 - p6h55** (19 variables)

In reference to past six years:

PCG Questions: **p6h56 - p6h73** (19 variables)

Constructed variables: **cp6gad**: (meets anxious criteria in last year), **cp6gad_9y** (meets anxious criteria since last interview)

The mental health questions dealing with Generalized Anxiety Disorder (GAD) are derived from the Composite International Diagnostic Interview - Short Form (CIDI-SF).²⁵ The short form of the CIDI interview asks a portion of questions from the full CIDI and generates from the responses the probability that the respondent would be a "case," or positively diagnosed respondent if given a full CIDI interview.

The CIDI GAD questions are based on the Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition (DSM-IV).²⁶ The CIDI is a standardized instrument for assessment of mental disorders intended for use in epidemiological, cross-cultural, and other research studies.

GAD is indicated by a period of six months or more when an individual feels excessively worried or anxious about more than one thing, more days than not, and has difficulty controlling their worries. Other symptoms include: 1) being keyed up or on edge, 2) irritability, 3) restlessness, 4) having trouble falling asleep, 5) tiring easily, 6) difficulty concentrating, and 7) tense or aching muscles.

10.5.1.2. Modifications

The Year 15 PCG Survey includes all GAD questions essential to scoring the CIDI-SF. A few questions dealing with types of worry reported by the subject and the subject's contact with a health care provider or other professional are omitted from the FFCWS. These omitted questions are not needed to score the CIDI and play no part in generating predicted probabilities for the presence of the disorders. One less item is included at Year 15 than was included at Year 3 because two items were combined for simplification. At Year 15 the items "How many months or years has it been going on?" and "How many months or years did it go on before it ended?" are combined in the new item "How many months or years {did it go on before it ended/has it been going on}?"

²⁵ Kessler, R.C., Andrews, G., Mroczek, D., Ustun, T.B., & Wittchen, H.U. (1998). The world health organization composite international diagnostic interview short-form (CIDI-SF). *International Journal of Methods in Psychiatric Research*, 7, 171-185.

²⁶ American Psychiatric Association (1994). *Diagnostic And Statistical Manual Of Mental Disorders, Fourth Edition*. Washington, DC: American Psychiatric Association.

New with the Year 15 PCG Survey, the same CIDI-SF items that refer to the past year are also asked in reference to the past six years (time since the Year 9 survey), but only of respondents who do not report that they experienced symptoms for a period of at least six months.

10.5.1.3. Scoring

Section B of the CIDI-SF is designed to classify respondents according to the criteria of DSM-IV generalized anxiety disorder. If the diagnostic requirements are fulfilled, the respondent receives a probability of caseness equal to one.

The diagnostic stem requirement of GAD is met when the respondent reports a period of feeling worried, tense, or anxious (p6h37 or p6h38=1 (or p6h56 or p6h57=1)) that lasted at least six months (p6h40=1 and p6h41>=6 months (or p6h58=1 and p6h59>=6 months)). Respondents who do not report an anxious period lasting at least six months are skipped out of the section and receive a probability of caseness equal to zero.

If an anxious period of sufficient duration is endorsed, further qualifiers are asked to determine whether the worry was excessive (p6h42=1 (or p6h60=1)), lasted more days than not (p6h43=1 (or p6h61=1)), and involved worrying about more than one thing (p6h44=1 or p6h46=1 (or p6h62=2 or p6h64=1)), all of which are necessary qualifiers for DSM-IV GAD criterion A. Lack of control over these worries (criterion B) is then assessed in a series of three questions (p6h45=1 or p6h47=1 or p6h48=1 (or p6h63=1 or p6h65=1 or p6h66=1)). The types of physiological symptoms that characterize the worried, tense, or anxious period (criterion C) are then assessed in questions p6h49-55 (or p6h67-73).

If respondents endorse an anxious period that lasted at least 6 months, the above mentioned qualifiers are satisfied (p6h42=1 and p6h43=1 (p6h60=1 and p6h61=1) and either p6h44=2 or p6h46=1 (p6h62=2 or p6h64=1)), lack of control over this anxious period was endorsed (p6h45=1 or p6h47=1 or p6h48=1 (or p6h63=1 or p6h65=1 or p6h66=1) and at least three of the physiological symptoms are endorsed (p6h49-55 (or p6h67-73))), a probability of caseness equal to one is assigned.

10.5.2. Teen's Anxiety

10.5.2.1. Variables

Teen questions: **k6d2d, k6d2j, k6d2t, k6d2ag, k6d2ai, k6d2ak** (6 variables)

These items are drawn from the Brief Symptom Inventory 18 (BSI 18), an 18-item assessment designed to measure psychological distress and psychiatric disorders in medical and community populations.²⁷ These six items are a modified version of the BSI 18 anxiety subscale.

10.5.2.2. Modifications

The original BSI 18 anxiety subscale asked "During the past seven days, how much were you distressed by..." and included a range of values from 0 = "Not at all" to 4 = "Extremely." The Year 15 Teen survey includes the same set of items but asks "Thinking about the past four weeks, do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with this?" Thus, the items are changed from phrases (e.g., "nervousness or shakiness inside") describing the past week to statements ("I feel nervous or shaky inside") describing the past four weeks. These changes are illustrated in Table 15.

Table 15: BSI 18 Anxiety Item Modifications

BSI 18 Anxiety Subscale Item <i>5-point scale (0-4)</i>	Y15 Teen survey Item <i>4-point scale (1-4)</i>	Variable
Spells of terror or panic	I have spells of terror or panic.	k6d2d
Feeling tense or keyed up	I feel tense or keyed up.	k6d2j
Suddenly scared for no reason	I get suddenly scared for no reason.	k6d2t
Nervousness or shakiness inside	I feel nervous or shaky inside.	k6d2ag
Feeling fearful	I feel fearful.	k6d2ai
Feeling so restless you couldn't sit still	I feel so restless I can't sit still.	k6d2ak

10.5.2.3. Scoring

Cases can be scored by either summing or computing the mean of the 6 items. If a case is missing on no more than 1 or 2 items, mean substitution can be used to account for the missing data on those items.

²⁷ Derogatis, L. R. & Savitz, K. L. (2000) The SCL-90-R and Brief Symptom Inventory (BSI) in primary care. In Maruish, M. E. (Ed), (2000). Handbook of psychological assessment in primary care settings. , (pp. 297-334). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers, xiv, 848 pp.

11. Cognitive and Behavioral Assessments

In Year 15, questions were administered to primary caregiver and teen in order to describe their behavior. Questions asked related to behavior assess the focal person's positive adult functioning, impulsivity, internalizing behavior, externalizing behavior and delinquency. The following table displays in which survey one might find items from cognitive and behavioral assessments. Cognitive skills assessments can be found in surveys from Year 3, Year 5 and Year 9.

Table 16: Subtopics in Cognitive and Behavioral Assessments in Year 15 by survey instrument

Subtopic	p	k	h	o
Behavior	X	X		X

11.1. Scale – Positive Adolescent Functioning (EPOCH)

11.1.1. *Variables*

Teen questions: **k6d2b, k6d2e, k6d2f, k6d2g, k6d2h, k6d2i, k6d2k, k6d2l, k6d2m, k6d2o, k6d2s*, k6d2u, k6d2v, k6d2w, k6d2y, k6d2aa, k6d2ad, k6d2ae, k6d2af, k6d2ah** (20 variables)

These 20 items are an adaptation of the EPOCH Measure of Adolescent Wellbeing.²⁸ The EPOCH measure extends models of positive adult functioning such as the PERMA model²⁹ to adolescence. It is comprised on five factors: engagement, perseverance, optimism, connectedness, and happiness. Kern and colleagues define these five dimensions as follows:

- (1) Engagement refers to the capacity to become absorbed in and focused on what one is doing, as well as involvement and interest in life activities and tasks.
- (2) Perseverance refers to the ability to pursue one's goals to completion, even in the face of obstacles.
- (3) Optimism is characterized by hopefulness and confidence about the future, a tendency to take a favorable view of things, and an explanatory style marked by seeing negative events as temporary, external, and specific to situation.
- (4) Connectedness refers to the sense that one has satisfying relationships with others, believing that one is cared for, loved, esteemed, and valued, and providing friendship or support to others.
- (5) Happiness is consistent with the conventional use of the word, and includes positive emotions, positive mood, and a general feeling of being content with one's life.

11.1.2. *Modifications*

Similar to the original EPOCH, the Year 15 Teen survey items refer to the past four weeks. However, the EPOCH measure asks respondents to indicate how much each item describes how they have felt, from 1 = "Almost never" to 5 = "Almost always," while the FFCWS questionnaire asks respondents how much they agree with each item in thinking about the past four weeks. Values range from 1 = "Strongly agree" to 4 = "Strongly disagree." This modification was made to make the questions better formatted for a teen telephone survey.

11.1.3. *Scoring*

Given the modifications to the original EPOCH in the FFCWS, all items should be reverse coded as follows: (4=1), (3=2), (2=3), and (1=4). Then each subscale score can be computed by using the mean score of its respective items.

²⁸Kern, M. L., Benson, L., Steinberg, E., & Steinberg, L. (2014). The EPOCH measure of adolescent well-being. Unpublished manuscript.

²⁹Seligman, M. E. P. (2011). Flourish. New York, NY: Simon & Schuster.

* k6d2s is also a part of the CES-D scale on page 41.

Table 17: EPOCH Subscales

EPOCH Subscale	Y15 Teen Survey Item	Y15 Variable
Engagement	1. When I do an activity, I enjoy it so much that I lose track of time.	k6d2u
	2. I get completely absorbed in what I am doing.	k6d2h
	3. I get so involved in activities that I forget about everything else.	k6d2e
	4. When I am learning something new, I lose track of how much time has passed.	k6d2ad
Perseverance	1. I finish whatever I begin.	k6d2m
	2. I keep at my schoolwork until I am done with it.	k6d2i
	3. Once I make a plan to get something done, I stick to it.	k6d2k
	4. I am a hard worker.	k6d2v
Optimism	1. I am optimistic about my future.	k6d2ah
	2. In uncertain times, I expect the best.	k6d2ae
	3. I think good things are going to happen to me.	k6d2o
	4. I believe that things will work out, no matter how difficult they seem.	k6d2w
Connectedness	1. When something good happens to me, I have people who I like to share the good news with.	k6d2af
	2. When I have a problem, I have someone who will be there for me.	k6d2y
	3. There are people in my life who really care about me.	k6d2l
	4. I have friends that I really care about.	k6d2g
Happiness	1. I feel happy.	k6d2s
	2. I have a lot of fun.	k6d2aa
	3. I love life.	k6d2b
	4. I am a cheerful person.	k6d2f

11.2. Scale – Child Behavior Problems (CBCL)

11.2.1. *Variables*

PCG question: **p6b35 - p6b68** (34 variables)

Data about the teen's behavior were collected using questions taken from the behavioral, emotional and social problems scales of the Child Behavior Checklist (CBCL)/6-18.³⁰ The Year 15 PCG Survey contains 34 items of the CBCL/6-18 where the PCG is asked to rate their child's behavior from 1 (*Not true*) to 3 (*Often true*). A list of the CBCL subscales administered at Year 15 can be found in Table 18.

11.2.2. *Scoring*

Selected items in the CBCL comprise the following seven constructs or syndromes: aggressive behavior, withdrawn/ depressed, anxious/ depressed, attention problems, social problems, rule-breaking behavior, and thought problems. Variables should be re-coded in the following manner prior to scoring (1=0, 2=1, 3=2). Scores for subscales can be calculated either by adding scores for each item or by averaging item scores. It should be noted that scale scores are only calculated for participants with responses to each item in the scale. When a participant responds with don't know, refuse, or missing, to any item on a given scale, their scale score will be missing.

³⁰ Achenbach, T. M., & Rescorla, L. A. (2001). Manual for the ASEBA School-Age Forms & Profiles: Burlington, VT: University of Vermont, Research Center for Children, Youth & Families.

Table 18. Child Behavior Checklist (CBCL) Subscales

CBCL Subscale	Y15 PCG Survey Item	Y15 Variable
<i>Aggressive behavior</i>	1. Child is cruel, bullies, or shows meanness to others	p6b35
	2. Child destroys things belonging to the family or others	p6b37
	3. Child is disobedient at home	p6b38
	4. Child is disobedient at school	p6b39
	5. Child gets in many fights	p6b41
	6. Child physically attacks people	p6b42
	7. Child is stubborn, sullen, or irritable	p6b43
	8. Child has temper tantrums or a hot temper	p6b44
	9. Child threatens people	p6b45
	10. Child is unusually loud	p6b57
	11. Child argues a lot	p6b59
<i>Anxious/depressed behavior</i>	1. Child cries a lot	p6b36
	2. Child feels worthless or inferior	p6b40
	3. Child is nervous, high-strung, or tense	p6b52
	4. Child is too fearful or anxious	p6b53
	5. Child feels too guilty	p6b54
	6. Child worries	p6b68
<i>Attention problems</i>	1. Child can't concentrate, or can't pay attention for long	p6b46
	2. Child can't sit still; is restless or hyperactive	p6b47
	3. Child is impulsive or acts without thinking	p6b48
<i>Rule-breaking behavior</i>	1. Child doesn't seem to feel guilty after misbehaving	p6b49
	2. Child hangs around with others who get in trouble	p6b50
	3. Child lies or cheats	p6b51
	4. Child runs away from home	p6b60
	5. Child sets fires	p6b61
	6. Child steals at home	p6b62
	7. Child steals outside the home	p6b63
	8. Child swears or uses obscene language	p6b64
	9. Child vandalizes	p6b67
<i>Social problems</i>	1. Child clings to adults or is too dependent	p6b56
<i>Thought problems</i>	1. Child has trouble sleeping	p6b55
<i>Withdrawn</i>	1. Child is underactive, slow moving, or lacks energy	p6b65
	2. Child is unhappy, sad or depressed	p6b66
<i>Internalizing Behaviors</i>	All variables from anxious/depressed and withdrawn subscales	
<i>Externalizing Behaviors</i>	All variables from aggressive and rule-breaking subscales	

Note: p6b58 – “Youth talks too much” is part of the total CBCL, but is not contained in any subscales.

11.3. Scale – Adolescent Social Skills (ASBI and SSRS)

11.3.1. *Variables*

Teen questions: **k6d1a - k6d1l** (12 variables)

The Year 15 Teen survey questions were adapted from both the Express Subscale of the Adaptive Social Behavior Inventory (ASBI)³¹ and the Assertion scale of the secondary-level parent and teacher forms of the Social Skills Rating System (SSRS).³²

11.3.2. *Modifications*

Items k6d1a, k6d1b, and k6d1c in the Year 15 Teen survey were adapted from the ASBI. The ASBI is designed to be an educator's report of child social skills; however in the Year 15 Teen survey, these questions were adapted to be appropriate for a teen self-report.

Items k6d1d, k6d1e, k6d1f, k6d1g, k6d1h, k6d1i, k6d1j, k6d1k, k6d1l were adapted from the SSRS. Firstly, the questions were adapted to be administered to the teen by rephrasing the items as first-person statements. The answer options were also adjusted. The original SSRS questions ask both how often the child exhibits each behavior and how important the respondent thinks this behavior is to the child's development, both on a scale of 0-2 (never-very often or not important-critical). The Year 15 Teen survey does not ask for the importance score and instead of asking for frequency, asks the teen to rate how true they think each statement is for them from 1-3 (not true, sometimes true, often true). The changes in survey questions are illustrated in Table 19.

11.3.3. *Scoring*

An overall score for adolescent social skills can be calculated by recoding all items from 1-3 to 0-2 and summing all items.

³¹ Hogan, A. E., Scott, K. G., & Bauer, C. R. (1992). The Adaptive Social Behavior Inventory (ASBI): A new assessment of social competence in high-risk three-year-olds. *Journal of Psychoeducational Assessment*, 10, 230-239.

³² Gresham, F. M., & Elliott, S. N. (2007). *Social Skills Rating System*. Toronto: Pearson Publishing.

Table 19: ASBI and SSRS Modifications

ASBI Express Subscale Item	SSRS Parent or Teacher Survey Item	Y15 Teen Survey Item	Variable
Understands feelings		I understand others' feelings like when they are happy, sad, or mad	k6d1a
Sympathetic		I try to comfort others when they are upset	k6d1b
Open and direct		I am open and direct about what I want	k6d1c
	Joins group activities without being told to	I join group activities without being told to	k6d1d
	Makes friends easily	I make friends easily	k6d1e
	Is self-confident in social situations such as parties or group outings	I am self-confident in social situations such as parties or group outings	k6d1f
	Easily makes transition from one classroom activity to another	I easily change from one activity to another	k6d1g
	Shows interest in a variety of things	I show interest in a variety of things	k6d1h
	Starts conversations rather than waiting for others to talk first	I start conversations rather than waiting for others to talk first	k6d1i
	Is liked by others	I am liked by others	k6d1j
	Invites others to your home	I invite others to my home	k6d1k
	Reports accidents to appropriate persons	I report accidents to appropriate persons	k6d1l

11.4. Scale – Delinquent Behavior

11.4.1. *Variables*

Teen self-report questions: **k6d61a - k6d61m** (13 variables)

Teen-report peer questions: **k6d62a - k6d62k** (11 variables)

In the Year 15 Teen survey delinquent behavior questions are adopted from measures in the National Longitudinal Study of Adolescent Health (Add Health) Wave I and Wave II Home Visit interviews. Both surveys ask a series of questions about delinquency behaviors and ask if the teen did these things never, 1 or 2 times, 3 or 4 times, or 5 or more times.

11.4.2. *Modifications*

The only modification in the delinquency questions is that Add Health coded this 0-3 and FFCWS codes 1-4. Additionally, two items from the Add Health measure were not included in the Year 15 Teen survey, one about lying to parents or guardians about where they had been or who they were with and another about running away from home.

The Year 15 Teen survey also includes a series of 11 original questions adapted from the self-report delinquent behavior scale and substance use measures which are used to measure delinquent behavior amongst the focal teen's group of friends. Each question asks frequency of each behavior on a scale of 1-3 (often, sometimes, never). The first four questions ask about use of cigarettes, alcohol, marijuana, and other illegal or prescription drugs. The middle two ask if the teen's friends asked them to go drinking or gave or sold marijuana to them. The last four are items adapted from the self-report delinquency items and ask about vandalism, stealing, weapon use, and selling drugs.

11.4.3. *Scoring*

To score the teen self-reported delinquent behavior, all items can be recoded never=0, sometimes=1, often=2 and summed for a total score, with higher values representing higher levels of delinquent behavior.

The same can be achieved for the peer questions by recoding never=0, sometimes=1, often=2 and summing for a total score.

11.5. Scale – Impulsivity

11.5.1. *Variables*

Teen questions: **k6d2a, k6d2p, k6d2r, k6d2z, k6d2ab, k6d2aj** (6 variables)

The impulsivity questions included in the Year 15 Teen survey are an abbreviated form of Dickman's impulsivity scale.³³

11.5.2. *Modifications*

Scott J. Dickman designed a scale to identify two types of impulsivity: functional and dysfunctional. The FFCWS Survey includes questions pertaining only to dysfunctional impulsivity, which is associated with the tendency to deliberate less than most people of equal ability before taking action when this is not optimal. The measure of dysfunctional impulsivity provides a useful summary measure of the capacity for self-control.

With cognitive ability, impulsivity is a major individual predictor of violent offending.³⁴ This finding from psychological research is consistent with sociological theory that shows that capacity for self-control is a key determinant of crime.³⁵ Impulsivity can be dysfunctional when an individual is unable to use a slower, more methodical approach to information processing. The dysfunctional impulsivity scale correlates highly with alternative scales of impulsiveness.

A study done by H. Caci et al. translated the Dickman questionnaire into French and asked male and female students to answer the items, to test the scale's validity.³⁶ They find that males tend to score higher in functional impulsivity than females. However, the study shows that FI and DI scores are independent of gender, probably independent of age, and that the distribution shapes are similar between genders.

The full impulsivity scale developed by Dickman consists of 23 items. Twelve items loaded primarily for dysfunctional impulsivity and these items are listed in Table 20. The 12 items had an alpha of .86. The Year 15 Survey includes 6 of these items (the items with positive weights), as indicated in Table 20. The alpha for these items using the FFCWS teen sample is .78.

FFCWS has used this measure to collect fathers' impulsivity at Year 1, mothers' impulsivity at Year 3.

11.5.3. *Scoring*

The items are coded on a 4-point Likert scale (1=strongly agree and 4=strongly disagree). Dickman scored by calculating a weighted sum, weighting responses by the

³³Dickman, S.J. (1990) Functional and Dysfunctional Impulsivity: Personality and Cognitive Correlates. *Journal of Personality and Social Psychology*, 58, 95-102.

³⁴Farrington, D.P. (1998). Predictors, Causes, and Correlates of Male Youth Violence. *Crime and Justice* 24, 421-475.

³⁵Gottfredson, M.R., & Hirschi, T. (1990). *A General Theory of Crime*. Stanford, CA: Stanford University Press.

³⁶Caci, H. et al. (2003) Functional and Dysfunctional Impulsivity: contribution to the construct validity. *Acta Psychiatrica Scandinavica*, 107, 34-40.

factor loadings. Given that the FFCWS Survey did not implement the full scale, we suggest summing the items and dividing by the top value of the Likert-scale.

Table 20. Dickman and Corresponding FFCWS Variables

Variable	Source Item
k6d2ab	I will often say whatever comes into my head without thinking first.
	I enjoy working out problems slowly and carefully.
	I frequently make appointments without thinking about whether I will be able to keep them.
	I frequently buy things without thinking about whether or not I can really afford them.
k6d2z	I often make up my mind without taking the time to consider the situation from all angles.
k6d2a	Often, I don't spend enough time thinking over a situation before I act.
k6d2aj	I often get into trouble because I don't think before I act.
k6d2r	Many times, the plans I make don't work out because I haven't gone over them carefully enough in advance.
	I rarely get involved in projects without first considering the potential problems.
	Before making any important decisions, I carefully weigh the pros and cons.
	I am good at careful reasoning.
k6d2p	I often say and do things without considering the consequences.

12. Education and School

At Year 15, the PCG and teens were asked questions about the teen's education and school. Within educational attainment/achievement subtopic are the teen's grades by subject (English, History/Social Science, Science, and Math) and the PCG's highest level of educational attainment (*cp6edu*). Parent school involvement questions asked PCG who in the family and in what capacity is the teen aided on school assignments, as well as PCG's attendance to open-house/back-to-school night, parent-teacher conferences and PTA/PTO meetings. Within the peer characteristics subtopic, teens answer questions related to the age of their friends, their frequency of skipping school, drug/alcohol use and other delinquent behavior. In school characteristics, PCG describes the type of school the teen attends and the grade the teen is enrolled in. The teen was asked about their student experiences, meaning their high school graduation expectations, college aspirations, their time spent at school (whether and how often they skip classes, the types of after-school activities they're involved in, etc.), their relationships to teacher/mentors/guidance counselors, how attached they are to their school and how much time/effort they put into their school work, as well as their school suspensions and expulsions (reported by the teen and PCG).

Table 21: Subtopics in Education and School in Year 15 by survey instrument

<u>Subtopics</u>	<u>p</u>	<u>k</u>	<u>h</u>	<u>o</u>
Educational attainment/achievement	X	X		
Parent school involvement	X	X		
Peer characteristics		X		
School characteristics	X			
Student experiences	X	X		

12.1. Constructed Variables – PCG's Education

- **cp6edu** PCG's education at Year 15

In constructing these variables, PCG's report of new education, training and schooling since the previous wave was used. PCG's reports from previous waves were used as needed when PCGs did not report attaining any new, additional education at the time of the interview.

12.2. Scale – Peer Bullying

12.2.1. *Variables*

Teen questions: **k6b32a**, **k6b32b**, **k6b32e**, **k6b32f** (4 variables)

These four items are modeled after the peer bullying assessment from the Panel Study of Income Dynamics Child Development Supplement (PSID-CDS-III).³⁷ These items were adapted from the PSID-CDS-III and confirmed for use in the PSID confirmatory factor analysis, which loaded onto one factor.

12.2.2. *Modifications*

Two additional items in this section are k6b32c (“Help you with a problem”) and k6b32d (“Take your side of an argument”). These two items, written by staff, are not officially part of the Peer Bullying Scale and have not previously been used in the FFCWS.

The PSID-CDS-III asked children how often in the last month kids in their school or elsewhere did each item, and values ranged from 1 = “Not in the last month” to 6 = “Every day.” The Year 15 Teen survey asks about school only, and for ease in a teen telephone survey, the Year 15 Teen Survey includes a smaller numeric range, from 0 = “Never” to 4 = “About every day.” In addition, the item “Hit you?” was changed to “Hit you or threaten to hurt you physically?” at Year 15.

12.2.3. *Scoring*

Cases can be scored by taking the mean of all four items for cases without missing data.

³⁷The Panel Study of Income Dynamics Child Development Supplement: User Guide for CDS-III. (2010). Retrieved February 17, 2010, from <http://psidonline.isr.umich.edu/CDS/questionnaires/cds-iii/child.pdf>

12.3. Scale – Connectedness at School

12.3.1. Variables

Teen questions: **k6b1a - k6b1d** (4 variables)

These items were compiled by Jacquelyn Eccles for the Panel Study of Income Dynamics Child Development Supplement (PSID-CDS-III)³⁸ to measure the degree of inclusiveness, closeness, happiness, and safety a teen experiences at school.

12.3.2. Modifications

In the PSID-CDS-III, each item is rated on a five-point scale ranging from 0 = “Not once in the past month” to 4 = “Every day.” Earlier use of this scale in the Year 9 Child Survey also included this five-point scale. At the Year 15 Teen survey, however, items were modified for convenience in a teen telephone survey. Rather than asking respondents how often they have felt a certain way in the past month, teens at Year 15 are asked how much they agree or disagree with each item currently. This is similar to how these items are worded in the National Longitudinal Study of Adolescent Health (Add Health) Wave I In-School Questionnaire, but response options in the FFCWS are rated on a scale of 1 = “Strongly agree” to 4 = “Strongly disagree.” Changes are illustrated in Table 22.

Table 22: School Connectedness Survey Variables

PSID-CDS-III <i>5-point scale</i>	Add Health <i>5-point scale</i>	Y9 variable <i>5-point scale</i>	Y15 variable <i>4-point scale</i>	Survey Item
Q33E22B	S62B	k5ea1b	k6b1a	Feel close to people at school
Q33E22A	S62E	k5ea1a	k6b1b	Feel like part of school
Q33E22C	S62I	k5ea1c	k6b1c	Happy to be at school
Q33E22D	S62R	k5ea1d	k6b1d	Feel safe at school

12.3.3. Scoring

Items can be averaged to create a scale for school connectedness.

³⁸ The Panel Study of Income Dynamics Child Development Supplement: User Guide for CDS-III. (2010). Retrieved February 17, 2010, from <http://psidonline.isr.umich.edu/CDS/questionnaires/cds-iii/child.pdf>

12.4. Scale – Trouble at School

12.4.1. Variables

Teen questions: **k6b21a - k6b21d** (4 variables)

These items were modeled after questions in the National Longitudinal Study of Adolescent Health (Add Health) Wave I In-School Questionnaire. Children were asked how often they had had trouble since the beginning of the school year in each of four areas: getting along with teachers, paying attention in school, getting homework done, and getting along with other students. Examples of studies that have used these measures from the Add Health data include Manning and Lamb³⁹ and McNeely, Nonnemaker, and Blum.⁴⁰

12.4.2. Modifications

In the Add Health In-School Questionnaire, responses to these items are rated on a scale of 0 = “Never” to 4 = “Every day.” For convenience in a teen telephone survey, the FFCWS Year 15 Teen Survey rates these items on a scale of 1 = “Never” to 3 = “Often.” Items in both surveys are presented in Table 23.

Table 23: School Trouble, Source, FFCWS Variable Names and Survey Items

Add Health 5-point scale (0-4)	Y15 variable 3-point scale (1-3)	Survey Item
S46B	k6b21a	Paying attention in school
S46A	k6b21b	Getting along with your teachers
S46C	k6b21c	Getting your homework done
S46D	k6b21d	Getting along with other students

12.4.3. Scoring

Items can be averaged to create a scale for trouble in school.

³⁹ Manning, W. D. and Lamb, K. A. (2003), Adolescent Well-Being in Cohabiting, Married, and Single-Parent Families. *Journal of Marriage and Family*, 65: 876–893.

⁴⁰ McNeely, C.A., Nonnemaker, J.M., Blum, R.W. (2002). Promoting School Connectedness: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health*, 72(4): 138-146.

12.5. Scale – School Climate

12.5.1. *Variables*

Teen questions: **k6b4a - k6b4g, k6b5a - k6b5c** (10 variables)

12.5.2. *Modifications*

These items were written by staff, but modeled after items in the Measures of Effective Teaching (MET) Project.⁴¹ They are included in the Year 15 Teen Survey in two sets. The first seven items measure teaching quality and the last three items measure student behavior.

The teaching quality items were taken from the MET Project and adapted to ask about the school as a whole rather than an individual classroom. The MET Project questions are divided into seven constructs and the FFCWS questions were selected from each, but one, of these categories: Care (B4a), Control (B4g), Clarify (B4e), Challenge (B4c & B4f), Captivate (B4d), Confer (B4b), and Consolidate (none). The last three items in the FFCWS school climate measure are focused on student behavior in the school as a whole.

12.5.3. *Scoring*

Items can be averaged to create a scale for school climate.

⁴¹ Measures of Effective Teaching (MET) Project. (2010) Learning about Teaching: Initial Findings from the Measure of Effective Teaching Project. http://www.metproject.org/downloads/Preliminary_Findings-Research_Paper.pdf

13. Employment

At Year 15, PCGs and teens were asked about their employment. In the traditional work subtopic, PCGs were asked about their place of work and work schedule. Within the same subtopic, teens were asked whether they worked and if so how many hours they spent working either after school or during the summer. In the non-traditional work subtopic, PCGs were asked about their non-traditional work (including working for self, “hustles”, and other work) in the last year, their work schedule and whether their spouse or the teen’s non-resident biological parent engages in other activities for income. In the unemployment subtopic, PCGs were asked if they were laid off since the last interview, whether they’re looking for a job – if so, for how long and if not, why not.

Table 24: Subtopics in Employment in Year 15 by survey instrument

Subtopics	p	k	h	o
Traditional work	X	X		
Non-traditional work	X			
Unemployment		X		

13.1 Open-ended Responses Codes – Occupation

Occupation variables for PCGs were constructed based on the 3-digit codes from the U.S. Bureau of Labor Statistics (BLS) May 2016 Occupation Profile Major Groups. (https://www.bls.gov/oes/current/oes_stru.htm). The occupation variables for PCGs are **p6k19_code, p6k36_code, p6k50_code**.

The BLS categories are summarized below:

- 101 Management
- 102 Business, Finance
- 103 Computer, Mathematical
- 104 Architecture, Engineering
- 105 Life, Physical, Social Sciences
- 106 Community, Social Services
- 107 Legal
- 108 Education, Training, Library
- 109 Arts, Design, Entertainment, Sports, Media
- 110 Healthcare Practitioners, Technical Occupations
- 111 Healthcare Support
- 112 Protective Service
- 113 Food Preparation and Service
- 114 Building, Grounds Cleaning, Maintenance
- 115 Personal Care and Service
- 116 Sales and Related
- 117 Office and Admin Support
- 118 Farming, Fishing, Forestry

- 119 Construction and Extraction
- 120 Installation, Maintenance, Repair
- 121 Production
- 122 Transportation, Material Moving
- 123 Military

If a category contained fewer than ten cases for a particular variable, these were recoded as "Other" to protect participant anonymity. Missing codes were applied if a response was not provided and/or a response was unclear.

14. Romantic Relationships

A number of questions were asked during the Year 15 PCG and teen's romantic life. Questions were asked regarding to the teens about the current state of their relationships, including their relationship quality with their partner (i.e. communication, supportiveness, cooperation, intimate partner violence). In relationship status, teens and PCGs asked if and what kind of romantic relationship they are currently in. If the PCG is the teen's biological parent then the PCG is asked about their current relationship with the teen's other biological parent. Constructed variables regarding their relationship status was made by staff.

Table 25: Subtopics in Romantic Relationships in Year 15 by survey instrument

Subtopics	p	k	h	o
Relationship Quality	X	X		
Relationship Status	X	X		

14.1. Constructed Variable - PCG's relationship with other biological parent

- **cp6mrelf** mother's reported romantic relationship with child's father at Year 15

In Year 15, PCG's relationship with status with the teen's other biological parent was recorded based on the information provided by the PCG. If the teen's PCG is their biological parent, constructed variables were created to indicate the relationship between the PCG and the other biological parent at the time of the survey.

The constructed variables, "biological mother PCG relationship with father" (cp6mrelf) is based on the PCG-reported relationship with the other bio-parent (p6e1) and the identity of the PCG (cp6pcgrel).

This constructed variables was then used to create three additional constructed variables: a simple combination for both mothers and fathers (cp6prelb), "biological PCG married to biological parent" (cp6pmarb) and "biological PCG cohabiting with biological parent" (cp6pcohb). One constructed variable indicates whether biological PCG is married to a new partner (cp6pmarp) and another indicates whether biological PCG is cohabitating with a new partner (cp6pcohp). Both of these variables are constructed based on their self-reported relationship with their new partner (p6e10).

Table 26: Constructed variables about PCG's romantic relationships

Constructed Variable	Description of Constructed Variable
cp6prelb	Biological PCG relationship with biological parent at Year 15
cp6parp	Biological PCG married to new partner at Year 15
cp6parb	Biological PCG married to biological parent at Year 15
cp6cohp	Biological PCG cohabiting with new partner (unmarried) at Year 15
cp6cohb	Biological PCG cohabiting with biological parent (unmarried) at Year 15
cp6mrelf	Mother relationship with father at Year 15

14.2. Scale – Adolescent Partner Abuse

14.2.1. *Variables*

Teen questions: **k6f18a - k6f18d** (4 items)

At Year 15, teens were asked questions related to partner abuse that were derived from Toledo Adolescent Relationship Study (TARS)⁴² and the Relationship Dynamics and Social Life Study (RDSL).⁴³

14.2.2. *Modifications*

Variables k6f18a and k6f18c ("put down in front of other people") are modified from two items in the TARS. The questions were slightly modified in two ways. The TARS questions ask "how many times" this had occurred and the Year 15 Teen survey was adjusted to ask "how often", in order to fit better with the answer options. Secondly, TARS used a 5-point scale (Never-Very often) and the Year 15 Teen survey uses a 3 point scale (often, sometimes, never) for ease of administration via phone.

Variables k6f18b and k6f18d (physical victimization) were adapted from the RDSL. The only adaptation made was to match the answer options to the three point scale used in variables k6f18a and k6f18c rather than the yes or no answers available in the RDSL.

⁴²Giordano, Peggy C., Monica A. Longmore, and Wendy D. Manning. Toledo Adolescent Relationships Study (TARS): Wave 1. (2001). ICPSR04679-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2008-01-09. <http://doi.org/10.3886/ICPSR04679.v1>

⁴³Barber, Jennifer S., Yasamin Kusunoki, and Heather H. Gatny. (2008). Relationship Dynamics and Social Life (RDSL) Study [Michigan], 2008-2012. ICPSR34626-v2. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2015-02-05. <http://doi.org/10.3886/ICPSR34626.v2>

15. Parenting

At Year 15, questions were asked to derive the relationship between PCG and teen – from the teen, PCG and the interviewer. PCGs were asked whether they'd been contacted by child protective services (CPS) and if so, why and when. Questions regarding parent-child contact focuses primarily on the teen's contact and visitations from their non-resident biological parent. In parenting abilities, the PCG answered questions on their perception of their own ability as a parent well as that of their partner or teen's other biological parent. In parenting behavior, teens were asked how close they feel to each biological parent as well, if applicable, their parent's current partner. In addition, in the category of parenting behavior, teens were asked of the communication, rules, routines, disciplinary actions espoused by their parent. Also included in parenting behavior are the interviewer's observations the PCG-teen relationship and the PCG's account of their actions around the teen (for example: whether their spouse has ever hurt them in front of their child).

Table 27: Subtopics in Parenting in Year 15 by survey instrument

Subtopics	p	k	h	o
Child Welfare Services	X			
Parent-Child Contact	X	X		
Parenting Abilities	X			
Parenting Behavior	X	X		X

15.1. Constructed variable - PCG's relationship with child

The PCG is the biological mother in situations where she or she and the biological father had custody of the "focal child" for half or more of the time. If the biological mother did not have primary custody of the child, the PCG was the father, relative, or friend who had custody of the child half or more of the time.

- **cp6pcgrel** PCG-reported relationship with teen

The PCG-reported variable (cp6pcgrel) is based on the confirmation variable for PCG relationship (cp6conf1) and an internal-use variable with details of non-parental PCG identity (not included in the data file). This variable provides more detailed information than the survey variable alone and describes whether the PCG is the teen's biological mother, biological father, grandmother, aunt, sister, grandfather, uncle, brother, other specified adult or other non-specified adult.

Table 28: Distribution of PCG's Relationship with Teen at Year 15

	Frequency
Biological mother	3,146
Biological father	257
Grandmother	82
Aunt	29
Sister	11
Grandfather	6
Brother	4
Other adult (specified)	25
Other adult (not specified)	20

- **ck6pcgrel** teen-reported relationship to PCG

The teen-reported variable (ck6pcgrel) contains less detail and is based only on the confirmation variable for PCG relationship (ck6conf1d). The purpose of this constructed variable is mainly for ease of location rather than providing additional information and describes whether the PCG is the teen's biological mother, biological father or non-parental caregiver.

15.2. Scale – Parental Monitoring

15.2.1. *Variables*

PCG Questions: **p6d18 - p6d20** (3 variables)

Teen Questions: **k6c7a - k6c7c** (3 variables)

These items are adapted from the National Longitudinal Survey of Youth 1997 (NLSY97), Round One Parent Questionnaire – Child Family Background (PC12) and Youth Self-Administered Questionnaire (YSAQ). PCGs and teens were asked about who sets rules or limits for the child regarding (1) how late the child can stay out at night, (2) what kinds of TV shows and movies the child can watch, and (3) who the child can hang out with. Each item included three response options: (a) parent or parents set limits, (b) child decides for self, and (c) parents and child decide jointly.

15.2.2. *Modifications*

The items in the FFCWS were changed only slightly from their original versions in the NLSY97 PC12 and YSAQ. Differences have to do with the consistency of question tense and the inclusion of the word “can.” While the YSAQ questions are in the past tense, asking about who set the limits, the language in the FFCWS is in the present tense, asking who decides. For example, the YSAQ asks, “Who set the limits on how late you stay out at night?” while the Year 15 Teen survey asks, “Who decides how late you can stay out at night?” The PC12 asks about rules for “what kinds of TV shows and movies teen can watch” while the PCG survey asks about “what kinds of TV shows and movies teen watches.”

15.3. Scale – Aggravation in Parenting

15.3.1. *Variables*

PCG questions: **p6d32 - p6d35** (4 variables)

These items are taken from the Job Opportunities and Basic Skills Training Program (JOBS)⁴⁴ Child Outcomes Study, and also are found in the Child Development Supplement of the Panel Study of Income Dynamics (PSID).⁴⁵

The Aggravation in Parenting questions are derived from PSID. The scale measures the amount of parenting stress brought on by changes in employment, income or other factors in the parent's life. It was originally developed from the JOBS child outcome survey by Child Trends, Inc. and from the Parent Stress Inventory.⁴⁶ Items Q2A29a-d are found in the PCG survey. Research has shown that high levels of aggravation in parenting are related to mothers' employment status and to child behavior problems.⁴⁷

The PCG survey does not use all 9 of the items mentioned above. Instead, the four questions from Q2A29a-d are used. The PCG survey questions are also scored on a 4-point scale, where 1 = "strongly agree," 2 = "somewhat agree," 3 = "somewhat disagree," and 4 = "strongly disagree," whereas the original questions used a 5-point Likert scale that ranged from "not at all true" to "completely true."

15.3.2. *Scoring*

Items can be averaged to create a scale for aggravation in parenting.

⁴⁴ Now known as the National Evaluation of Welfare-to-Work Strategies (NEWWS).

⁴⁵ PSID. (1997). Primary Caregiver of Target Child Household Questionnaire for the Child Development Supplement to the Family Economics Study, 1997. Retrieved March 27, 2003, from <ftp://ftp.isr.umich.edu/pub/src/psid/questionnaires/97child/PCGhhld.pdf>

⁴⁶ Abidin, R. (1995). Parent Stress Inventory, 3rd Edition. Odessa, FL: Psychological Assessment Resources.

⁴⁷ Hofferth, S., Davis-Kean, P.E., Avis, J., & Finkelstein, J. (1997). The Child Development Supplement to the Panel Study of Income Dynamics: 1997 User Guide. Survey Research Center, The University of Michigan Institute for Social Research. Retrieved March 27, 2003, from <http://www.isr.umich.edu/src/child-development/usergd.html>

15.4. Scale – Caregiver-Child Relationship

15.4.1. *Variables*

PCG question: **p6d37** (1 variable)

Teen questions: **k6c17, k6c18, k6c28, k6c29, k6c33, k6c34, k6c37, k6c38** (8 variables)

These items are taken from the Family Functioning⁴⁸ and the Middle Childhood and Adolescent⁴⁹ sections of the National Survey of Children's Health. These items assess the PCG-teen relationship with respect to closeness between PCG and teen and the degree to which PCG and teen talk and share ideas.

15.4.2. *Modifications*

PCG questions: Closeness between teen and PCG is measured on a Likert scale ranging from 1 (*extremely close*) to 4 (*not very close*).

Teen questions: Closeness between teen and PCG is measured on a Likert scale ranging from 1 (*extremely close*) to 4 (*not very close*). The extent to which the teen and PCG talk and exchange ideas was measured on a similar Likert scale ranging from 1 (*extremely well*) to 4 (*not very well*). Each of these is asked about the teen's mother (k6c17, k6c18), father (k6c28, k6c29), mother's partner (k6c33, k6c34), and father's partner (k6c37, k6c38).

⁴⁸ National Survey of Children's Health. (2003). Family Functioning Section
<http://nschdata.org/Content/Guide.aspx#S8>

⁴⁹ National Survey of Children's Health. (2003). Middle Childhood and Adolescence Section
<http://nschdata.org/Content/Guide.aspx#S7>

15.5. Scale – Conflict Tactics

15.5.1. Variables

PCG questions: **p6d26 - p6d29** (4 variables)

Teen questions: **k6c9a - k6c9d** (4 variables)

The Year 15 PCG and Teen surveys' Conflict Tactics items are drawn from a larger set of 22 items from the Parent-Child Conflict Tactics Scales (CTSPC). The original Conflict Tactic Scale was designed for use with partners in a marital, cohabiting, or dating relationship.⁵⁰ The CTSPC was created in 1996 in response to limitations of the original scale as a measure of child maltreatment.⁵¹

15.5.2. Modifications

The Year 15 PCG and Teen surveys include four of the same CTSPC-modified items that were used in the Year 9 Child survey, with a few changes. First, the four items included at Year 9 referred to the mother, father, and partner of the mother individually, but at Year 15, these items are asked in reference to the PCG only. Second, the Year 9 items were coded on a scale from 0 = "Never" to 4 = "Every day or almost every day," while the items in the Year 15 PCG and Teen surveys are coded from 1 = "Never" to 3 = "Often." Third, two of the four items were modified to be more appropriate for 15-year-olds. The differences are shown in Table 29 below.

Table 29: Conflict Tactics Scale Modifications/Subscales

CTSPC Subscale	Y9 Child Survey Item	Y15 PCG and Teen Survey Item	Y15 Variables
Non-Violent Discipline	Explained why something was wrong	Explained why something was wrong	p6d26/k6c9a
Non-Violent Discipline	Sent you to room, took away privileges or grounded	Took away privileges or grounded	p6d27/k6c9b
Psychological Aggression	Shouted, yelled, screamed, swore or cursed	Shouted, yelled, screamed, swore or cursed	p6d28/k6c9c
Physical Assault	Spanked or hit	Hit or slapped	p6d29/k6c9d

⁵⁰ Straus, M. A. (1979). Measuring intra family conflict and violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and the Family*, 41(1): 75–88. doi:10.2307/351733

⁵¹ Straus, M.A., Hamby, S.L., Finkelhor, D., Moore, D.W., & Runyan, D. (1998). Identification of child maltreatment with the parent-child conflict tactics scales: Development and psychometric data for a national sample of American parents. *Child Abuse & Neglect*, 22, 249 – 270.

16. Legal System

At Year 15, both PCG and teen were asked about any involvement they had had with the criminal justice system and if so, when did the incident occur, whether they were charged with a crime and if so, what were they charged for, as well as if and how long did they spend time in jail or in prison. Unique to Year 15, the Teen survey included questions regarding the teen's perception of police, whether they'd been stopped (or someone they knew has been stopped), where they'd been stopped, for what reason and to what ends. Those who had had police contact were asked about their feelings toward police subsequent to these events.

Table 30: Subtopics in Legal System in Year 15 by survey instrument

Subtopics	p	k	h	o
Criminal Justice Involvement	X	X		
Police Contact and Attitudes	X	X		

16.1. Scale – Legal Cynicism

16.1.1. *Variables*

Teen questions: **k6e7b - k6e7e** (4 variables)

These items are modeled after the questions that appear in the Pathways to Desistance study,⁵² which were adapted from questions developed by Srole⁵³ and later modified by Sampson and Bartusch.⁵⁴

16.1.2. *Modifications*

The Year 15 Teen survey posed four questions on legal cynicism in a 4-point Likert scale, including 1 (*strongly agree*), 2 (*somewhat agree*), 3 (*somewhat disagree*), and 4 (*strongly disagree*). The four statements and response options are identical to the statements and response options used in the Pathways to Desistance.⁵² However, the Pathways to Desistance study includes an additional item, which intended to measure legal cynicism: "A person has to live without thinking about the future." This item was not included in the Year 15 Teen survey.

The items used in the Pathways to Desistance study were adapted from questions developed by Srole and Sampson and Bartusch. Sampson and Bartusch modified Srole's original scale and developed the following five items using a 5-point Likert scale: (1) Laws were made to be broken; (2) It's okay to do anything you want as long as you don't hurt anyone; (3) To make money, there are no right and wrong ways anymore, only easy ways and hard ways; (4) Fighting between friends or within families is nobody else's business; (5) Nowadays a person has to live pretty much for today and let tomorrow take care of itself.

16.1.3. *Scoring*

Items can be summed to yield a total legal cynicism score. More frequent responses of agreement indicate higher levels of legal cynicism.

⁵²Schubert, C. A., Mulvey, E.P., Steinberg, L., Cauffman, E., Losoya, S., Hecker, T., Chassin, L., et al. (2004). Operational Lessons from the Pathways to Desistance Project. *Youth Violence and Juvenile Justice*, 2 (3), 237-255.

⁵³Srole, L. (1956) Social Integration and Certain Corollaries: An Exploratory Study. *American Sociological Review*, 21: 709-16.

⁵⁴Sampson, R. J. & Bartusch, D. J. (1998). Legal Cynicism and (Subcultural?) Tolerance of Deviance: The Neighborhood Context of Racial Differences. *Law & Society Review*, 32(4), 777-804.

17. Housing and Neighborhood

At Year 15, PCGs and teens were asked questions regarding their living arrangements (both the arrangements which pertain to them and those that pertain to the child). To describe their home environment, respondents were asked about the state their housing utilities (heating, electricity and gas) and if their utilities were ever shut off in the last year. In addition, the interviewer noted the items he or she observed in the house, such as broken windows, art work, drug consumption, clutter, peeling paint, etc. For household composition, a housing roster was used to plot the number of people in the home, what relationship the respondent had to each person, how old each person is and whether they were working. In addition, respondents were asked what their current housing situation was like (housing status) and whether they'd moved or been evicted in the last year or since the last interview (residential mobility). If they had been evicted, respondents were asked where they stayed and were asked how much they owed on the house they were evicted from. Regarding the neighborhood conditions, the respondent was asked about the kind of neighborhood they lived in (whether there was graffiti, whether it was safe, whether there was gang activity, times they witnessed a shooting in the last year, etc.), and the interviewer remarked on neighborhood conditions as well.

Table 31: Subtopics in Housing and Neighborhood in Year 15 by survey instrument

Subtopics	p	k	h	o
Child Living Arrangements	X	X		
Home Environment	X	X		X
Household Composition	X	X		
Housing Status	X			
Parents' Living Arrangements	X			
Residential Mobility	X			
Neighborhood Conditions	X	X		X

Table 32: Constructed variables for household composition

Constructed Variable	Description of Constructed Variable
ck6conf3	Mother living with husband/partner
ck6conf7	Father living with wife/partner
cp6adult	Number of adults 18 or over in household (includes respondent)
cp6kids	Number of children under 18 in household (includes focal child)
cp6pcohp	PCG living with (not married) new partner at Year 15

17.1. Constructed Variables - Teen's living arrangements

- **cp6yloth** PCG-report of teen's living arrangements
- **ck6livar** teen-report of living arrangements

The Teen's living arrangements is reported by the PCG (cp6yloth) and by the teen (ck6livar). The PCG report is based on two factors: how much time the teen spends living with the PCG (cp6conf2) and, if applicable, who else the teen lives with other than the PCG (cp6conf3). The Teen self-report of their living arrangement is based on their relationship to the PCG (ck6conf1d) and to the other person they live with – whether that be the other parent or the PCG's new partner (ck6conf2, ck6conf3, ck6conf7).

17.3. Scale – Home Observation for Measurement of the Environment (HOME)

17.3.1. *Variables*

Observation items: **o6e1 - o6e11, o6e12a, o6e12b, o6e13 - o6e17, o6e18a - o6e18i** (27 variables)

The Home Observation for Measurement of the Environment (HOME) provides a means to examine and assess the caring environment in which the child is being reared.⁵⁵ A number of items from the HOME were assessed by the interviewer during the Year 15 In-Home survey. These items were derived from several versions of the HOME for different age groups including the early childhood HOME, middle childhood HOME and early adolescent HOME. Subscale scoring is not provided because of the use of items from all three versions of the HOME.

⁵⁵ Caldwell, M. & Bradley, R H. (1984). The Home Observation for Measurement of the Environment. Little Rock: University of Arkansas.

17.4. Scale – Environmental Confusion (CHAOS)

17.4.1. Variables

PCG questions: **p6d13 - p6d17** (5 variables)

Teen questions: **k6c4a - k6c4e** (5 variables)

These items are adapted from the Confusion, Hubbub, and Order Scale (CHAOS).⁵⁶ The original version of the CHAOS Scale contained 15 items measuring parent-reported environmental confusion in the home, defined as “high levels of noise, crowding, and home traffic pattern.” The FFCWS uses five of the six items included in a shorter version of the CHAOS scale.⁵⁷

17.4.2. Modifications

The full CHAOS scale included 15 true/false items⁵⁷ but a shorter version used by Petrill et al. and others,^{58,59} includes a range of response options from 1 = “Definitely untrue” to 5 = “Definitely true.” Earlier use of this shorter scale in the FFCWS also includes these five-point response options. However, at Year 15, response options were simplified for use in the teen telephone survey. Thus, both the Teen and PCG surveys at Year 15 include a range of values from 1 = “Not true” to 3 = “Often true.” These modifications are shown in Table 33.

Table 33: Environmental Confusion Source and FFCWS Variables

Y9 PCG	Y15 PCG	Y15 Teen	CHAOS Items (Petrill et al. 2004)
<i>5-point scale</i>	<i>3-point scale</i>	<i>3-point scale</i>	<i>5-point scale</i>
p5i22a	p6d13	k6c4a	Can't hear yourself think in your home
p5i22b	p6d14	k6c4b	It's a real zoo in your home
p5i22c	p6d15	k6c4c	Children have a regular bedtime routine
p5i22d	p6d16	k6c4d	Usually able to stay on top of things
p5i22e	p6d17	k6c4e	Atmosphere in your house is calm
---	---	---	Usually a television turned on somewhere in home

⁵⁶ Matheny, A. P., Wachs, T. D., Ludwig, J. L., Phillips K. (1995). Bringing order out of chaos: Psychometric characteristics of the confusion, hubbub, and order scale. *Journal of Applied Developmental Psychology*, 16(3): 429-444.

⁵⁷ Petrill, S. A., Pike, A., Price, T., & Plomin, R. (2004). Chaos in the home and socioeconomic status are associated with cognitive development in early childhood: Environmental mediators identified in a genetic design. *Intelligence*, 32: 445-460.

⁵⁸ Hart, S. A., Petrill, S. A., Deckard, K. D., Thompson, L. A. (2007). SES and CHAOS as environmental mediators of cognitive ability: A longitudinal genetic analysis. *Intelligence*, 35(3): 233-242.

⁵⁹ Johnson, A. D., Martin, A., Brooks-Gunn, J., Petrill, S. A. (2008) Order in the House! Associations among Household Chaos, the Home Literacy Environment, Maternal Reading Ability, and Children's Early Reading. *Merrill-Palmer Quarterly*, 54(4): 445-472.

17.4.3. Scoring

A total chaos score can be generated by summing the items following reverse scoring so that high values=high chaos (i.e. reverse score "bedtime routine", "on top of things", and "calm atmosphere" items)

17.5. Scale – Neighborhood Collective Efficacy

17.5.1. Variables

PCG questions: **p6i2 - p6i10** (9 variables)

Teen questions: **k6e2a - k6e2d, k6e3a - k6e3d** (8 variables)

The Year 15 PCG and Teen surveys each include two sets of items that together measure neighborhood collective efficacy. The first set is related to informal social control and the second measures the level of cohesion and trust. These are modeled after measures developed by Sampson, Raudenbush, and Earls⁶⁰ and used in the Project on Human Development in Chicago Neighborhoods (PHDCN): Community Involvement and Collective Efficacy, Wave 3 Primary Caregiver (PC) and Young Adult (SP) Questionnaires.

17.5.2. Modifications

The cohesion/trust measure differs somewhat between the PHDCN and the FFCWS. The item “people in this neighborhood generally don’t get along with each other” by Sampson et al. was not included in the PHDCN PC or SP questionnaires, but is included in the FFCWS at Year 15. Also, the item “people in this neighborhood can be trusted” is not included in previous waves of the FFCWS, including Year 15.

In addition, response options have been modified to all collective efficacy items. The PHDCN items include response options on a five-point scale (1 = “Strongly agree” to 5 = “Strongly disagree” and 1 = “Very likely” to 5 = “Very unlikely”), but the FFCWS items at Year 15 are coded on a four-point scale, as they have been in most of the earlier waves of the FFCWS. The changes are illustrated in Table 34 below.

Table 34: Collective Efficacy Survey Items

PHDCN PC	PHDCN SP	Y3 Variable	Y5 Variable	Y9 Variable	Y15 Variable	Survey Items
5-pt scale	5-pt scale	5-pt scale	4-pt scale	4-pt scale	4-pt scale	
CICE7	CIYA7	p3k2a	m4i0n1 f4i0n1	p5m3a	p6i7 k6e2a	People around here are willing to help their neighbors
CICE6	CIYA6	p3k2b	m4i0n2 f4i0n2	p5m3b	p6i8 k6e2b	This is a close-knit neighborhood
		p3k2d	m4i0n3 f4i0n3	p5m3c	p6i9 k6e2c	People in this neighborhood generally don't get along with each other
CICE8	CIYA8	p3k2e	m4i0n4 f4i0n4	p5m3d	p6i10 k6e2d	People in this neighborhood do not share the same values
CICE9	CIYA9	p3k2c				People in this neighborhood can be trusted

⁶⁰Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy. *Science*, 211(5328): 918-924.

PHDCN PC	PHDCN SP	Y3 Variable	Y5 Variable	Y9 Variable	Y15 Variable	Survey Items
CICE10	CIYA10	p3k1a	m4i0m1 f4i0m1	p5m2a	p6i2 k6e3a	If children were skipping school and hanging out on the street
CICE11	CIYA11	p3k1b	m4i0m2 f4i0m2	p5m2b	p6i3 k6e3b	If children were spray-painting buildings with graffiti
CICE12	CIYA12	p3k1c	m4i0m3 f4i0m3	p5m2c	p6i4 k6e3c	If children were showing disrespect to an adult
CICE13	CIYA13	p3k1d	m4i0m4 f4i0m4	p5m2d	p6i5 k6e3d	If a fight broke out in front of the house or building
CICE14	CIYA14	p3k1e	m4i0m5 f4i0m5	p5m2e	p6i6	If the fire station closest to the neighborhood was threatened

17.5.3. Scoring

Before scoring this scale, p6i9/k6e2c and p6i10/k6e2d should be reverse coded (1-4 to 4-1). Then items can be summed to yield a total collective efficacy score. More frequent responses of agreement (lower scores) indicate higher levels of collective efficacy.

18. Family and social ties

Questions were asked to the PCG and teens at Year 15 about the teen's grandparents (ex: whether they're living, how close are they, how often they see each other, whether they contribute financially). Both PCGs and teens are asked about the degree to which they receive social support (ex: adults with whom to talk about college applications with, friends/family who encourage healthy diet, someone from whom PCG can ask a \$1000 loan, someone to depend on). Teens were asked about community participation (ex: sports, religious services, volunteering activities). PCGs and teens were asked about their religious faith (ex: the importance of religion to them, frequency of religious service attendance, transformative religious experience since last interview).

Table 35: Subtopics in Family and social ties in Year 15 by survey instrument

Subtopics	p	k	h	o
Grandparents	X	X		
Social support	X	X		
Community participation		X		
Religion	X	X		

18.1. Scale – Adolescent Extracurricular and Community Involvement

18.1.1. *Variables*

Teen questions: **k6b22a - k6b22f** (6 variables)

These items were written by staff but largely influenced by similar items in surveys such as the National Longitudinal Study of Adolescent Health (Add Health) Wave III⁶¹ and the Panel Study of Income Dynamics Child Development Supplement (PSID-CDS-III).⁶²

18.1.2. *Modifications*

Teens are asked how often they have participated in extracurricular activities since the beginning of the current school year or during the previous school year. Responses are rated on a scale of 0 = "Never" to 4 = "Several times a week."

18.1.3. *Scoring*

Items can be averaged to create a scale for extracurricular and community involvement.

⁶¹ Harris, K. M., & Udry, J. R. National Longitudinal Study of Adolescent to Adult Health (Add Health), 1994-2008 [Public Use]. ICPSR21600-v15. Chapel Hill, NC: Carolina Population Center, University of North Carolina-Chapel Hill/Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributors], 2014-05-14. <http://doi.org/10.3886/ICPSR21600.v15>

⁶²The Panel Study of Income Dynamics Child Development Supplement: User Guide for CDS-III. (2010). Retrieved February 17, 2010, from <http://psidonline.isr.umich.edu/CDS/questionnaires/cds-iii/child.pdf>

19. Demographics

At Year 15, demographic questions such as age, mortality (whether a biological parent is dead), sex or gender of their romantic partners were asked to both PCG and teen. Specifically, the teens were asked to self-report their race or ethnicity without being given specific categories to opt into, their responses ranged from ethnicities to nationalities or religious affiliations – those responses are described in this section. Furthermore, the interviewer was asked to note the skin tone of the teen from a skin tone scale that is also described in this section.

Table 36: Subtopics in Demographics in Year 15 by survey instrument

Subtopics	p	k	h	o
Age	X	X	X	
Language	X			
Mortality	X	X		
Race/ethnicity	X	X	X	
Sex/gender	X	X		

19.1. Concept – Teen Self-Report of Race/Ethnicity

19.1.1. *Variables*

Teen question: k6c00a (not included in data release) → recoded to **k6c00aa- k6c00an**

- **ck6ethrace** teen's self-description of race/ethnicity

In the Year 15 survey, teens were asked to self-identify their race and ethnicity for the first time in the FFCWS (k6c00a).

Interviewers asked teens the open-ended question “What is your race and ethnicity?” and entered verbatim responses, up to 80 characters.

k6c00aa-an

In order to provide researchers with as much information as possible without releasing identifiable information, the responses were coded into a series of dummy variables by staff. The dummy variables were created and coded by a committee of four staff members.

Many teen respondents provided multi-faceted representations of their racial and ethnic identities and so each respondent was coded positively for as many of the variables as were relevant to their verbatim response.

19.1.2. *Scoring*

The following section describes how staff members recoded the teen's open-ended responses into aggregate racial and ethnic groups.

Use of census categories for race and ethnicity (k6c00aa-k6c00af)

The teen's verbatim responses were first coded into the six established U.S. Census categories for race and ethnicity (k6c00aa-k6c00af). These are based on the 1997 Office of Management and Budget (OMB) standard categories, to which the Census adheres, plus Hispanic ethnicity. It was apparent, however, that much of the information provided in the verbatim responses would be lost if only these categories were used. In order to capture as much detail as possible, additional variables were added.

Nationality-based responses (k6c00ag-k6c00aj)

Many respondents self-identified with nationalities rather than census-recognized categories of race or ethnicity, so we created a series of nationality-based variables by continent or region (k6c00ag-k6c00aj) to report these responses.

“Mixed” and Multi-racial responses (k6c00ak)

Many respondents reported more than one racial/ethnic category, but some of them also specifically described themselves as “mixed,” “multi-racial,” or “bi-racial”. If they specifically used these terms to describe themselves, they were also coded positive for variable k6c00ak. Respondents that reported more than one category, but did not

specifically refer to themselves as “mixed,” “multi-racial,” or “bi-racial” were not coded for this variable.

American only responses (k6c00al)

A few respondents reported themselves only as “American” (k6c00al) with no other race, ethnicity, and/or nationality information. Respondents who included that they were American along with other race, ethnicity, and/or nationality information were not coded for this variable.

Religious category responses (k6c00am)

Several respondents mentioned religious groups as part of their response. Anyone who responded in whole or in part with the name of a religious group was coded positive for k6c00am.

Other or unspecified responses (k6c00an)

Lastly, a few respondents provided answers that did not contain any usable information for these codes or fell into groups of fewer than ten respondents, and were therefore coded as “Other or unspecified” to protect the anonymity of the participants (k6c00an).

Table 37: Variable Names and Labels for k6c00aa- k6c00an

	Teen identified/described self as...
k6c00aa	White or Caucasian.
k6c00ab	Black or African American.
k6c00ac	American Indian or Alaska Native.
k6c00ad	Asian or with an Asian nationality or ethnic group.
k6c00ae	Native Hawaiian or Pacific Islander or with a relevant nationality.
k6c00af	Hispanic/Latino or with a relevant nationality.
k6c00ag	European nationality.
k6c00ah	Central American or Caribbean nationality.
k6c00ai	Mexican nationality.
k6c00aj	South American nationality.
k6c00ak	Term ‘mixed,’ ‘multi-racial,’ or ‘bi-racial’.
k6c00al	American only.
k6c00am	Religious category.
k6c00an	Did not identify a race/ethnicity.

In addition to the dummy variables (k6c00aa-an), there is also a constructed variable for teen race and ethnicity (ck6ethrace) which is modeled after the constructed variables for parents' race and ethnicity (cm1ethrace; cf1ethrace).

The teen variable was constructed based on the previously established dummy variables for Census-recognized racial and ethnic categories and is coded as follows:

1 White only, non-Hispanic

This code includes all responses that self-identify as white or Caucasian, but not Hispanic or of multiple racial identities.

2 Black/African American only, non-Hispanic

This code includes all responses that self-identify as black or African American, but not Hispanic or of multiple racial identities.

3 Hispanic/Latino

This code includes all responses that self-identify as Hispanic, Latino/a, or with a relevant nationality. They may be of any or multiple racial identities.

4 Other only, non-Hispanic

This code includes all responses that self-identify as another racial identity group, but not Hispanic or of multiple racial identities. These "other" groups were constructed from the Census-based dummy variables for American Indian or Alaska Native, Asian, and Native Hawaiian or Pacific Islander. Note that if a participant identified with more than one of these three groupings (ex. American Indian and Asian), they were coded as Multi-racial (5).

5 Multi-racial, non-Hispanic

This code includes all responses that identified with more than one racial category, but not as Hispanic.

Results for the teen constructed variable ck6ethrace alone can be seen in Table 37 below.

Note on nationalities: All response components that were coded into a nationality-based code in the dummy variables, but that did not fit within a Census-based code without making racial assumptions were disregarded in the constructed variable. For example a response of "Irish and black" would be coded 2 for Black/African American only or a response only of "Irish" would be coded as missing.

Table 38: Teen Constructed Race/Ethnicity (ck6ethrace)

Re-coded categories for ck6ethrace	N
1 White only, non-Hispanic	590
2 Black/African American only, non-Hispanic	1,601
3 Hispanic/Latino	813
4 Other only, non-Hispanic	86
5 Multi-racial, non-Hispanic	175

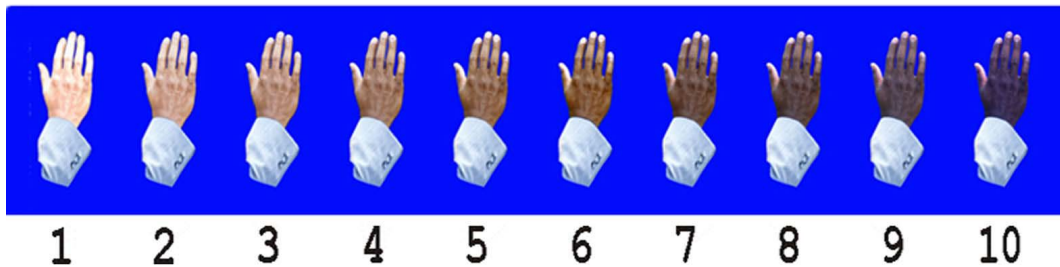
19.2. Concept - Skin Tone

19.2.1. *Variable*

Teen skin tone item: **h6a8** (1 variable)

In-Home Study interviewers measured teen skin tone using a scale originally developed by Massey and Martin for the New Immigrant Survey (see Massey 2003).⁶³ The scale is an 11-point scale, ranging from zero to 10, with zero representing albinism, or the total absence of color, and 10 representing the darkest possible skin. The ten shades of skin color corresponding to the points 1 to 10 on the Massey and Martin Skin Color Scale are depicted in a chart, with each point represented by a hand, of identical form, but differing in color. The Scale was used by interviewers, who memorized the scale, so that the respondent never sees the chart. A facsimile of the NIS Skin Color Scale appears below.

Scale of Skin Color Darkness



⁶³Massey, D. S., & Martin, J. A. (2003). The NIS Skin Color Scale.

20. Other Topics in Year 15

The following table includes subtopics within topics that are not explicitly written about in this user guide. For more on these topics, please refer to the survey instruments/questionnaires and [the FFCWS metadata website](#).

Table 39: Other topics and subtopics in Year 15 by survey instrument

Topics and Subtopics	p	k	h	o
<i>Attitudes and Expectations</i>				
Attitudes/Expectations/Happiness	X	X		

Appendix: Memo regarding differences between surveys for Westat and CPRC samples

0. Overview

In the Year 15 Wave, survey administration was split between Westat and the Columbia Population Research Center (CPRC). Westat managed interviews with all families who had participated in the PCG survey in the Year 9 Wave, while CPRC managed families who did not complete the PCG interview at Year 9. While they are all families from the baseline sample, we will refer to them in this memo as the “Westat Sample” and “CPRC Sample” for ease of communication.

Both Westat and CPRC collaborated with study staff at the Center for Research on Child Wellbeing (CRCW) at Princeton University. CRCW attempted to keep the interview scripts for both samples as similar as possible. Small differences, however, were inevitable due to differences in the method of survey administration and differences in the time reference of when the family was last interviewed. The purpose of this memo is to clarify and disclose all differences between the surveys and their administration, comparing the Westat and CPRC samples.

1. Survey administration method (cp6tele; ck6tele)

All Westat surveys were completed either by phone (CAPI software) or in person. All CPRC surveys were completed through Qualtrics, either by phone or self-administered online.

Self-administered surveys were only used when interviews were particularly difficult to schedule for completion by telephone. Given that the CPRC sample included some of our most difficult to contact cases, this option was pursued in order to accommodate participants who may have otherwise been unable to complete. The electronic survey was available through Qualtrics, using the same system as the telephone interviews in the CPRC sample.

2. In Home Visit

No Home Visit activities and observations were completed in the CPRC sample due to staffing limitations. All Year 15 Home Visit interviews were completed by Westat, within their sample.

3. Range checks

Some variables within the PCG and teen interviews use range check follow-up questions when respondents provide a response that is outside of a pre-established, expected, range. These questions and the ranges used can be seen in the questionnaire documents. Westat interviewers completed these checks verbally during the interview and only recorded the participant's final response. CPRC interviewers, however, used a separate “check” variable which appeared in the raw data. Staff checked any responses within the range check variables for consistency with the first response before collapsing the raw data responses into one variable to match Westat data. The ranges used for both Westat and CPRC were the same for each question.

4. Decimals

During early CPRC data collection, interviewers allowed for decimal responses to numeric variables, while Westat used a rounding convention. This was caught by staff during preliminary cleaning and corrected in the CPRC protocol for all remaining interviews. Data collected before this correction was made were cleaned by staff according to the same rounding protocol.

5. Teen INTRO sections

There were three small differences between Westat and CPRC for the Teen "Section A: Introduction" section of the questionnaire; 1) no CPRC interviews were audio recorded due to technological limitations so questions INTRO 1, INTRO 3, and CONF1B were not asked, 2) in the CPRC interview, two additional questions about the identity of non-parental PCGs was included, however this information was provided for Westat cases prior to the start of the interview, and 3) due to programming reasons in Qualtrics, the INTRO and CONF (k6z*) questions were asked in a different order for CPRC participants. The questionnaire documents show the Westat order. CPRC cases use the same variable names as Westat for these variables.

6. Relationship to bioparent

Parental PCGs were asked about changes to their relationship status with the other bioparent since the last interview. PCGs were first asked about their current relationship with the other bioparent, and if that differed from their last reported change (at last interview, rather than at the Year 9 wave), they were further probed about when changes in relationship status occurred. For CPRC interviewees, this previous report of relationship status was given at an earlier wave than the Westat cases, meaning more time passed where these changes could have occurred.

7. Time References in Questionnaires

Due to the fact that the Westat sample was interviewed at Year 9, but the CPRC sample was not, survey questions which use a time reference of a previous interview often vary between the two samples. The table below details which variables used a time reference and what reference was used for each question. Note that these time reference differences are only relevant for the PCG interview. All time references in the teen interview are consistent because they are not based on interview wave, but are based on more recent time frames such as the past month or year.

Table A1: Time reference questions that differ from Westat: PCG Interview

Variable	Westat Survey	CPRC Survey
p6c25	Since (Yr 9 mo/yr), has teen repeated any grades?	Has teen ever repeated any grades?
p6c26	How many times has teen repeated a grade since (Yr 9 mo/yr)?	How many times has teen repeated a grade?
p6e34	Since (Yr 9 mo/yr), how many romantic relationships have you had that lasted for at least one month?	Since {last_survey_date} how many romantic relationships have you had that lasted for at least one month?
p6e35	I just need to have a range. Can you tell me if it was...	I just need to have a range. Can you tell me if it was...
p6e36	Since (Yr 9 mo/yr), have you lived together with {this partner/any of your partners} for one month or more?	Since {last_survey_date}, have you lived together with {this partner/any of your partners} for one month or more?
p6e37	Since (Yr 9 mo/yr), how many different partners have you lived with for one month or more?	Since {last_survey_date}, how many different partners have you lived with for one month or more?
p6e38	Since (Yr 9 mo/yr), have you had another baby, or adopted a child, or are you now {expecting/pregnant}?	Since {last_survey_date}, have you had another baby, or adopted a child, or are you now {expecting_pregnant}?
p6e39	How many children have you had since (Yr 9 mo/yr)?	How many children have you had since {last_survey_date}?
p6e40	Does this child have the same {BIOPARENT} as any of your other children?	Does this child have the same {BIOPARENT} as any of your other children?
p6e41	Do these children have the same {BIOPARENT}?	Do these children have the same {BIOPARENT}?
p6f33	Has {BIOFATHER/MOTHER} had any children with another partner since (Yr 9 mo/yr)?	Has {OTHER_BIOPARENT} had any children with another partner since {last_survey_date}?

Variable	Westat Survey	CPRC Survey
p6f35	Has {BIOFATHER/BIOMOTHER} spent any time in jail or prison since (Yr 9 mo/yr)?	Has {OTHER_BIOPARENT} spent any time in jail or prison since {last_survey_date}?
p6g24	Has {BIOFATHER/CURRENT PARTNER} spent any time in jail or prison since (Yr 9 mo/yr)?	Has {Your_Partner} spent any time in jail or prison since {last_survey_date}?
p6h102	Since (Yr 9 mo/yr), have you spent any time in an adult correctional institution like a county, state or federal jail or prison?	Since {last_survey_date}, have you spent any time in an adult correctional institution like a county, state or federal jail or prison?
p6h103a	Altogether, how much time did you serve in adult institutions, since (Yr 9 mo/yr)?	Altogether, how much time did you serve in adult institutions, since {last_survey_date}?
p6i33	Since (Yr 9 mo/yr), have you had any religious experiences that transformed your life?	Since {last_survey_date}, have you had any religious experiences that transformed your life?
p6j1	Have you moved since (Yr 9 mo/yr)?	Have you moved since {last_survey_date}?
p6j2	How many times have you moved since (Yr 9 mo/yr)?	How many times have you moved since {last_survey_date}?
p6j59	Since (Yr 9 mo/yr), has Child Protective Services contacted you with concerns that any child or children in this household had been abused or neglected by a family member or someone else?	Since teen {was born}, has Child Protective Services contacted you with concerns that any child or children in this household had been abused or neglected by a family member or someone else?
p6j60a	In what month and year did the most recent contact occur?	In what month and year did the most recent contact occur?
p6j60b	Do you know the year?	Do you know the year?

Variable	Westat Survey	CPRC Survey
p6k2	Have you completed any training programs or any years of schooling since (Yr 9 mo/yr)?	Have you completed any training programs or any years of schooling since {last_survey_date}?
p6k3	What program or schooling have you completed?	What program or schooling have you completed?
p6k4	Since (Yr 9 mo/yr), have you taken any classes to improve your job skills, such as computer training or literacy classes?	Since {last_survey_date}, have you taken any classes to improve your job skills, such as computer training or literacy classes?
p6k5	Since (Yr 9 mo/yr), have you received any kind of employment counseling?	Since {last_survey_date}, have you received any kind of employment counseling?