The Fragile Families and Child Wellbeing Study changed its name to The Future of Families and Child Wellbeing Study (FFCWS). Due to the issue date of this document, FFCWS will be referenced by its former name. Any further reference to FFCWS should kindly observe this name change.

User's Guide for the Fragile Families and Child Wellbeing Study Public Data, Year 3

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Bendheim-Thoman
Center for Research on Child Wellbeing
Wallace Hall
Princeton University
Princeton, NJ 08544
https://crcw.princeton.edu/

Columbia Population Research Center
1255 Amsterdam Avenue, Room 715
Columbia University
New York, NY 10027
http://cupop.columbia.edu/

Prepared by the staff at the Bendheim-Thoman Center for Research on Child Wellbeing (CRCW), Princeton University. For more information about FFCWS, please visit our website at https://fragilefamilies.princeton.edu/ or email ffdata@princeton.edu.

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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 paper (Reichman et al, "The Fragile Families and Child Wellbeing Study: Sample and Design" Children and Youth Services Review, 2001, Vol. 23, No. 4/5) 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 were also included at age nine. The Core follow-up at age fifteen included interviews with the teen and primary caregiver (PCG) as well as In-Home observations and assessments.

The parent/PCG interviews collected 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 3" (which is also wave 3 in the data file).

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

The In-Home Longitudinal Study of Pre-School Aged Children (In-Home Study) was a collaborative work of the researchers at the Princeton University Center for Health and Wellbeing (CHW), Columbia University, and Teachers College. The study placed particular emphasis on how parental resources in the form of parental presence or absence, time, and money influence children under the age of five. The In-Home Study collected information on a variety of domains of the child's environment, including: (1) physical environment: through quality of housing, nutrition and food security, health care, adequacy of clothing and supervision and (2) parenting: through parental discipline, parental attachment, and cognitive stimulation.

The In-Home Study included all of the following components at Years 3 and 5: Primary Caregiver interview, interviewer observations, and activity workbook. Note that the In-Home components at Years 9 and 15 were collected as part of the Core Study.

For further 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 twenty 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 level[1] 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 sample[2] representative of births in their particular city in

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

[2] 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 or cm3citsm=0 for Year 3).

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)[3]. 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 construction of the weights, see "Fragile Families & Child Wellbeing Study: Methodology for Constructing Mother, Father, and Couple Weights for Core Telephone Surveys".

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_wave3_2018" for Year 3.

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.

[3] 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.

For further detail regarding the content of the contract data and the application process for its access, please visit our website.

0.5. Documentation

The remainder of this guide will provide a detailed overview of the **Year 3 Wave of the public FFCWS data**.

For User Guides for other waves of the FFCWS and further documentation including questionnaires and codebooks for each interview or weights documentation, see the Documentation page on our website.

1. Year 3 Components

The Year 3 Wave of the FFCWS contains components from three sub-studies:

1. The FFCWS Core Study [a.k.a. "Core Study"] (includes mother and father interviews)
2. The In-Home Longitudinal Study of Pre-School Aged Children [a.k.a. "In-Home Study"]
3. The Year 3 Fragile Families Child Care Study [a.k.a. "Child Care Study"]

The Year 3 public data file (ff_wave3_2018) includes data from all three sub-studies.

1.1. Funders and Study Administration

Funding for all three sub-studies at Year 3 was provided through grants from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD).[4] 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 for these studies was administered by Mathematica Policy Research, Inc. (MPR) in Princeton, NJ.

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), the Columbia Population Research Center (CPRC) and the National Center for Children and Families (NCCF) at Columbia University. The In-Home Longitudinal Study of Pre-School Aged Children was a collaboration of the researchers at the CHW of Princeton University, Columbia University, and Teachers College.

1.2. Surveys and Instruments

Each of these three sub-studies contains multiple surveys or instruments as listed in Table 2. This table also includes the sample sizes for each survey or instrument. For explanations of the variation in sample size, see the sections below on Eligibility and Data Collection Procedures.

Table 2: Year 3 Components and their Sample Sizes

Study	Surveys and Instruments	N
Core Study	Mother Survey	4,231
	Father Survey	3,299
In-Home Study	Primary Caregiver (PCG) Survey	3,288
	In-Home Activity Workbook	3,283*
	In-Home Observations	2,139
Child Care Study	Child Care Provider	371
	Child Care Center Observations	367
	Family Care Provider	427
	Family Care Provider Observations	424
	Post Observation Form	769

[4] award numbers R01HD36916 (Core); R01HD039135 (In-Home); R01HD40421(Child Care)

* N = participation in any In-Home Workbook Activities

2. Eligibility

2.1. Eligibility - Core Study (Mother and Father)

All respondents who completed a Baseline interview were contacted for the Year 3 Core Study, as were non-respondent at Baseline fathers whose partner (mother) had completed a Baseline interview. A small portion of the original respondents were found to be ineligible at the time of the follow-up interviews. See the sample flags (c*3samp) for counts at the Year 3 Wave. Reasons for considering a family ineligible for further interview include: child deceased, child adopted. Reasons for considering a parent ineligible include: a parent deceased and for fathers DNA confirmation that the original respondent is not the child's father.

2.2. Eligibility - In-Home Study

Respondents of the Year 3 Core Study were invited to participate in the Year 3 In-Home Study. The PCG questionnaire was conducted by phone with 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 primary caregiver interview was conducted with the father, relative, or friend who had custody of the child half or more of the time. An additional set of questions were administered to non-parental caregivers at the beginning of the PCG interview in situations where both biological parents were not the PCG.

2.3. Eligibility - Child Care Study

The Year 3 Child Care Study includes families in the FFCWS who had either center-based or family-based child care. Child care providers were recruited for the Child Care Study after the Year 3 In-Home Study. Families in 15 of the 20 cities in the FFCWS sample were included in this study.

First, families were invited to participate in the Child Care Study only if the parent used some type of non-maternal child care (including care by the biological father) for at least 7 hours a week, and one child care arrangement for at least 5 hours a week at the time of the Year 3 In-Home Study. Second, parents were asked for consent to contact the child care provider with whom the child spent the most time. If consent was given, the child care provider was invited to join the Child Care Study. Only the focus child's primary child care provider – the provider with whom he/she spent the most hours per week – was interviewed and observed, thus no families have more than one child care interview or observation. Ultimately, data for 810 families were obtained for some segment of the Year 3 Child Care Study.

See the Year 3 In-Home Workbook for details of the filter questions used.

3. Data Collection Procedure

3.1. Data collection Procedures - Core Study

The Year 3 Wave of Core data collection took place from 2001 to 2003. These interviews were designed to be conducted by telephone using a Computer Assisted Telephone Instrument (CATI). All mothers who remained eligible were contacted for the Year 3 follow-up interview. All Year 3 mother interviews were first attempted by telephone using CATI. In cases in which we could not contact the mother by telephone, local field interviewers were assigned cases requiring field locating. The field interviewers were encouraged to have respondents call a 24-hour toll-free number at the Mathematica Policy Research (MPR) survey operations center to complete the interview on the CATI system. Field interviewers were also trained in administration of the survey instrument. Respondents completing the Year 3 interviews by telephone were provided with $30 incentive payment. Those requiring a field visit to complete the Core Survey were provided with $50 incentive payment.

Father follow-up interviews followed the same protocols and incentives as for mothers. Some fathers were incarcerated at the time of data collection in their location. In these cases, MPR staff worked to obtain special clearance, including permission from the Federal Bureau of Prisons, to conduct interviews with incarcerated respondents. When possible for cost containment purposes, interviews with incarcerated respondents were attempted by telephone. However, some prisons do not permit telephone interviews. In those cases MPR field interviewers arranged for in-person visits.

About 86 percent of mothers and 67 percent of fathers from the original Baseline sample were interviewed by phone at the Year 3 Survey.

3.2. Data collection Procedures - In-Home Study

The Year 3 In-Home Study included a (1) survey administered to the focal child's Primary Caregiver (PCG), (2) observations of the home, the child's interactions with the PCG, and surrounding environment, and (3) a workbook of activities for anthropometric and cognitive measures of the PCG and child – all to be completed in the family's home. Table 3 shows a complete list of the components included in the Year 3 In-Home Study Workbook.

Table 3: Workbook components at Year 3

Component	PCG	Child
Height and weight measurements	X	X
Peabody Picture Vocabulary Test/Test de Vocabulario en Imagenes Peabody (PPVT/TVIP)	X	X
Motor Control Task (Walk-a-Line)		X
Attachment Q-Sort	X	
Child Care and Employment Calendars	X	

Flow charts detailing the sequence of In-Home Study component administration are available in the In-Home Study Appendix. Changes made to the In-Home questionnaires during data collection are also included in the In-Home Study Appendix.

3.3. Data collection Procedures - Child Care Study

In the FFCWS Child Care Study, we assessed child care observations and interviews with providers and parents when the children were 33-months of age. The Child Care Study also added assessments of child cognitive, social and emotional development, as well as parental practices and behaviors to the home visits which were conducted as part of the In-Home Study.

The Child Care Center Survey was administered only to center-based child care providers. The Family Care Provider Survey was administered only to family day care providers or relatives or friends who provided care to the child. The Observations (Child Care Center or Family Care Provider) were completed based the same criteria by interviewers. These Observation forms contained questions from the Early Childhood Environment Rating Scale – Revised Edition (ECERS-R)[5] and the Family Day Care Scale (FDCRS)[6]. The Post Observation Form was administered for all types of care. This instrument was completed by interviewers for all but approximately 40 of the families who completed the Center Provider Interview or the Family Child Care Interview.

These data are contained in the following five components:

Table 4: Child Care Study Components

Prefix	Survey	Who completes	N
u	Post Observation Form	This instrument was administered for all types of care and completed for all but approximately 40 of the families who completed the Center Provider Interview or the Family Child Care/Kit & Kin Interview. For a small number of cases in this file, there are values for some identification variables; however, there is missing (-9) data in most of the observation questions.	769
d	Center-based Care Interview	Administered only to center-based child care providers.	371
e	Center Scale	Observations of child care center environment completed by interviewers. Contains questions from the Early Childhood Environment Rating Scale – Revised Editions (ECERS-R). Only completed for families with center-based child care arrangements.	367
r	Family Child Care/Kith & Kin Interview	Administered only to family day care providers or relatives or friends who provided to the child.	427
s	Family Provider Scale	Observations of the family child care environment completed by interviewers. Contains questions from the Family Day Care Scale (FDCRS). Only completed for families with home-based child care arrangements.	424

[5] Harmes, T., Clifford, R., & Cryer, D. (1998). Early childhood environment rating scale-revised.
[6] Harms, T., Cryer, D., & Clifford, R. M. (2007). Family Child Care Environment Rating Scale, Revised Edition (FCCERS-R). New York, NY: Teachers College Press. https://ers.fpg.unc.edu/family-child-care-environment-rating-scale-revised-edition-fccers-r

4. Known Issues

This section highlights known issues and errors in the Year 3 data that could not be cleaned or where data could not be recovered. Users should review this information to plan their analysis accordingly.

Non-custodial Fathers and Child Support (father survey): Question f3c1c, which asks if mother has primary custody of child, should have asked if father has primary custody. This resulted in non-custodial fathers skipping the child support question in Section C which they should have answered.

Smoking and Drinking (mother and father surveys)*:* In both the mother and father surveys, a large number of cases skipped questions about smoking and drinking (m3j31-m3j34; f3j31-f3j34) due to an error in the CATI program. Information for these cases could not be recovered.

Focal Child Body Mass Index Z-Score: There is a known error in the data file for ch3bmiz where the variable label incorrectly identifies this variable as being about the PCG's BMI z-score. This variable is for the child.

5. File Contents and Structure

5.1. Variable Structure

In the Year 3 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 3 begin with an alphabetic character. If the variable name begins with the letter "**c**", the variable is constructed (see section 5.2 for more on constructed variables). If not, the variable corresponds to a question asked in a Year 3 Survey and the first character in the variable name indicates to which instrument the variable corresponds. See Table 5 for a full list of Year 3 Survey instruments and their prefix letters.

In Year 3 variable names, what follows the instrument is the number "3" 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 3:

Table 5a: Variable name structure (survey variables and weights)

Variable Name			**Survey**
Prefix	**Wave**	**Leaf**	
m	3	[a-j|r|k|l]1-9	Mother Survey
m	3	natwt|citywt *	*National/City Weights (for mother)*
f	3	[a-j|r|k|l]1-9	Father Survey
f	3	natwt|citywt*	*National/City Weights (for father)*
q	3	natwt|citywt*	*National/City Weights (for couple)*
k	3	natwt|citywt*	*National/City Weights (for child)*
d	3	[a-g]1-9	Child Care Center Survey
e	3	[i|f|l]1-9	Observations (child care center scale)
r	3	[a-g]1-9	Family Care Provider Survey
s	3	[i|f|l]1-9	Observations (family care provider scale)
u	3	[a-e]1-9	Observations (post family & child care)
p	3	[a-n]1-9	Primary Caregiver (PCG) Interview (Sections A-N)
p	3	natwt|citywt*	*National/City Weights (for PCG)*
o	3	[p-v]1-9	Interviewer Observations (In-Home) (Sections P-V)

Table 5b: Variable name structure (workbook variables)

Variable Name			**Survey**
Prefix	**Wave**	**Leaf**	
ch	3	*bmi|lb|kg|h|w	In-Home Study, Activity Workbook (A)
ch	3	[pv|pp|tv]*	In-Home Study, Activity Workbook (B: PPVT/TVIP – Child)
ch	3	walk*	In-Home Study, Activity Workbook (C: Walk-a-Line)
ch	3	att*	In-Home Study, Activity Workbook (D: Q-Sort)
ch	3	[pv|pp|tv]*_m	In-Home Study, Activity Workbook (E: PPVT/TVIP - PCG)
ch	3	emp*	In-Home Study, Activity Workbook (F: Employment Calendar)
ch	3	cc*	In-Home Study, Activity Workbook (F: Child Care Calendar)

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 asterisks instead of listing each individual case.

5.2. 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 free to construct them in other ways.

When constructing variables such as age, relationship status, and the household roster, the mother's report was generally used. However, there were a few cases in which the father's report was used to fill in missing information or to correct discrepancies in the mother's report.

5.3. Survey Variables

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 3, please refer to Table 6. 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 p3a1 in the data set contains responses provided to item A1 (I*n general, would you say child's health is* …) in the PCG Survey questionnaire.

Table 6: Survey Instruments in Year 3

instrument	instrument description
m	Mother Survey
f	Father Survey
p	Primary Caregiver (PCG) Survey
h	In-Home Activity Workbook
o	Interviewer Observations (In-Home)
d	Child Care Center Survey
e	Observations (child care center scale)
r	Family Care Provider Survey
s	Observations (family care provider scale)
u	Observations (post family & child care)
q	couple (used only as weights)
k	child (used only as weights)

Survey variables were processed as follows:

a. Most categorical variables were created from survey questions with pre-coded response categories and have values corresponding to the codes presented in

the instrument. Occasionally, we recoded one or two pre-coded values of a few categorical variables to make such codes consistent with those used for many other items. For example, many items in the In-Home Study instruments had the responses pre-coded as 1 for "yes" and 0 for "no", but a few items, such as item o3r4 (*does the housing unit contain holes in floor)* or o3r5 (*does the housing unit contain broken plaster or peeling paint over 1 square foot or more?*) had the response pre-coded as "1" for "yes" or "affirmative situation" and "2" for "No" or "negative situation". Value "2" recorded for variables such as o3r4 and o3r5 was recoded to "0".

b. A few survey questions allowed multiple pre-coded responses. Each possible response was coded into an indicator variable whose value was assigned as 1 for affirmative situation and 0, otherwise. For example, all possible responses provided for item S1 (*how would you best describe the child's clothing?)* was coded into a series of 10 indicator variables: o3s1_1 to o3s1_12, with variable o3s1_1 represents if "*dirty, unkempt*" clothing condition, variable o3s1_2 represents if "*dirty due to playing/eating*" and so on … In addition, the responses provided for category "Other (Specify)" for the same item were examined; and if any could be reasonably coded into an existing category, such response(s) was recoded accordingly. For example, "oversized shirt" recorded as "Other"; item S1 was coded as "1" in the variable o3s1_6 (for clothing is too large).

5.4. 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.

5.5. 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.

5.6. 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 7: 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).

5.7. Open-Ended Response Codes

Free response questions (open-ended questions) were coded by staff. Codes were assigned by two staff members working independently and these codes were reconciled by a third staff member.

When appropriate, open-ended responses were recoded into the main response categories of the questions. Open-ended responses that did not fit into the existing response categories were recoded into new categories in the 100 range (101, 102, etc) if there were 10 or more similar responses. Cases that indicate an "other" but were vague or unique remain coded simply as "Other (not specified)."

6. Data Cleaning

For data derived from phone surveys, limited data cleaning was performed on the files. Some values were recoded to –8 "out of range" and minor changes were made to earnings, income, household roster, ages, etc. if the decision was clear cut. If not, data were left for the user to decide how to code. Known inconsistencies across variables remain in the data for users to consider in their analysis.

In general for the data derived from the In-Home Study, we followed the following steps to clean the data:

First, the identifiers were checked for uniqueness. Records having duplicate identifiers were marked for verification against records in the database of the survey firm. To verify linkage status, records with unique identifiers were matched to records in most related data sets such as the FFCWS Core data, the activity workbook data (which was provided in batches of separate data sets), and the disposition data. Unmatched records were separated for further verification, and eventually were either dropped, if invalid, or retained, after correction(s).

Second, frequency distributions of categorical variables were examined to verify whether or not the codes appeared in the data were consistent with the corresponding codes listed in the instruments. In the process, any irregular responses or responses not within the permissible data value ranges were marked for checking. Series of multi-level crosstabulations of related items were generated to verify response consistencies. Obviously inconsistent data values, if could be reasonably edited, were either edited logically or replaced by values imputed from a "more reliable" response provided to one or some other related items.

Third, inconsistent or irregular data values that could not be edited logically were marked and sent to the survey firm for cross-verifying against responses recorded in the original data collection forms or raw files in the computer assisted telephone interview (CATI) system. Resolved data values, if different from the values in the earlier release(s) from the survey firm and also assessed as more reliable, were corrected accordingly.

Fourth, data collected from the pilot cities were combined with data collected from the other eighteen cities. To combine data, items not exactly the same in two versions of the questionnaires were identified and processed as follows: if the question asked was the same in two versions but the codes used for the responses were not identical: values used for the pilot cities were recoded to match the codes used for the eighteen cities.

7. Weights

The FFCWS 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, Mathematica Policy Research created a set of Year 3 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, please read "Fragile Families & Child Wellbeing Study: Methodology for Constructing Mother, Father, and Couple Weights for Core Telephone Surveys" as well as "Methodology for Constructing Primary Caregiver Weights for Wave 3-5 Fragile Families and Child Wellbeing Study" and "Methodology for Constructing Child Weights for Wave 3-5 Fragile Families and Child Wellbeing Study."

8. Introduction to Topics from the Data

Year 3 FFCWS data cover a range of topics throughout surveys administered to the focal child's biological mother, biological father and/or primary caregiver, as well the child's day care or family care provider. This user guide provides supplemental documentation on variables in Year 3 derived from scales, concepts and those constructed by CRCW staff. Below are topics covered in Year 3 by survey instrument (for a full list of survey instruments, please refer to Table 6).

Table 8: Major topics in Year 3 by survey instrument

Topics	m	f	p	h	o	d	e	r	s	u
Attitudes and Expectations	X	X	X			X		X		
Childcare	X	X	X	X		X	X	X	X	X
Cognitive and Behavioral Development	X	X	X	X	X	X	X	X	X	X
Demographics	X	X		X	X	X	X	X	X	
Education and School	X	X				X		X		
Employment	X	X		X		X		X		
Family and Social Ties	X	X	X							
Finances	X	X	X			X		X		
Health and Health Behavior	X	X	X	X	X	X	X	X	X	
Housing and Neighborhood	X	X	X		X	X		X		X
Legal System	X	X								
Paradata and Weights	X	X	X	X	X	X	X	X	X	X
Parenting	X	X	X		X	X		X		
Romantic Relationships	X	X	X			X		X		

Note: There are also weights for the couple (q) and child (k).

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.

9. Paradata

Every survey at Year 3 includes variables with information about the interview, also known as paradata. Within the available Year 3 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 3 data. For a full list of constructed variables see Table 11.

9.1. Constructed Variables - Age

Ages of the child, parents and PCGs are recorded across several different surveys. Age is recorded in the Core Surveys for mother, father and child through the constructed variables: **cm3age** (mother's age at the interview), **cf3age** (father's age at the interview), **cm3b_age** and **cf3b_age** for the child's age at the mother and father interview, respectively. Data users should note that the child constructed age in years variable was rounded up or down to the nearest year, based on the calculated age in months.

Below are the constructed variables for age of child and their PCG at the time of each of the In-Home Activities.

- **ch3agemo1_c** age of child at time of height and weight measurements in months, calculated by the Epi Info software of CDC, using the child's date of birth and the measurement date.
- **ch3agemo2_c** age of child at time of measurements in months, calculated based on the following SPSS statement:

```
compute cagemesd = CTIME.DAYS(mesdate-child_dob)
compute agemo2_c = (cagemesd/365.25) * 12
```

- **ch3ppvtage** age of child at time of PPVT administration, in months
- **ch3ppvtage_m** age of PCG at time of PPVT administration, in months

9.2. 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). The following lists the sample flags from Year 3 (cm3samp, cf3samp, cm3natsm, cf3natsm, cq3natsm, cm3natsmx, cf3natsmx, cm3citsm, cf3citsm, cq3citsm, cm3mint, cf3mint, cm3fint, cf3fint, cm3inhom, cm3inccprov, cm3fdiff).

9.2.1. Interview completion flags

- **cm3mint**/**cm3fint** indicates whether mother/father was interviewed, respectively,

using the mother’s report.

- **cf3mint**/**cf3fint** indicates whether mother/father was interviewed, respectively, using the father's report.

Cases in which one or more respondents in a family were not interviewed in the current wave are included in the data file, 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.

9.2.2. Status flags

- **cm3samp** and **cf3samp** provide information on the mother or father's disposition status (whether eligible and reasons for non-response, such as mother/father/child died since previous wave).
- **c*3natsm** and **c*3citsm** indicate whether the mother, father or couple is in the national sample and/or the 20-cities sample and was interviewed in the wave
- **cm1innatsm** and **cm1citsm** (from the baseline file) indicate whether the respondent was part of the national/city sample at baseline (regardless of whether they were interviewed at any given wave).

Note: There are a small number of cases that do not have weights but have valid survey data and there are a small number of cases that have positive weights, but no survey data because the parent/child was deceased or the child was adopted (for more information see Appendix B in "Using the Fragile Families Weights").

- **cm3inccprov** indicates whether the family participated in any activity component in the In-Home Survey at Year 3.

A handful of mothers provided conflicting information over the waves about who is the biological father of the child.

- **cm3fdiff** specifies cases where mother indicated that the biological father of focal child was a different man than had been indicated at earlier waves and for whom we had no reason to doubt this information. However, we cannot determine the accuracy of these reports.

At the time of the follow-up interviews, we attempted to interview the mother first. This was based on the assumption that, if the parents are not living together, the mother would be easier to locate and would have updated locating information about the father. There were, however, cases in which the mother was interviewed after the father. Mothers and fathers were also interviewed up to 12 months apart at Year 3. However, two-thirds were interviewed within one month of each other. Before comparing mothers' and fathers' reports of time sensitive measures (i.e. relationship status, income), data users should check the time gap between parent interviews using the **cm3tdiff** constructed variable.

9.3. Constructed Variables - Status of survey completion

- **ch3inttype_mod** was constructed to identify the specific component(s) of the In-Home Study that a respondent was able to complete.

The variable ch3inttype_mod was created based on the final disposition status, as well as:

- Information provided to questions in the PCG Survey,
- Observations of the interviewer,
- Anthropometric measurements, and
- PPVT/TVIP test scores in the Activity Workbook.

Table 9: ch3inttype_mod distribution

	Status of Survey Completion	Frequency	%
1	In-Home Survey, with observations	2,119	64.5
2	In-Home Survey, no observations	447	13.6
3	Phone Survey, no observations	685	20.9
4	Phone Survey, with observations	7	0.21
5	Only height/weight measurements, no survey	15	0.46
8	Only PPVT, no survey	15	0.46
	Total	3,288	100

- **ch3inttype_mod2**: Final status of survey completion.

Values of ch3inttype_mod2 are nearly identical to values of the variable ch3inttype_mod, except for a minor reclassification of about 15 cases from category "3" to a new category "7" to clarify that these cases completed the telephone interview and the PPVT component.

Table 10: ch3inttype_mod2 distribution

	Status of Survey Completion	Frequency	%
1	In-Home Survey, with observations	2,119	64.5
2	In-Home Survey, no observations	447	13.6
3	Phone Survey, no observations	670	20.4
4	Phone Survey, with observations	7	0.21
5	Only height/weight measurements, no survey	15	0.46
7	Phone Survey and PPVT/TVIP tests	15	0.46
8	Only PPVT; no height/weight measurements	15	0.46
	Total	3,288	100

Table 11: Constructed variables with administrative information:

Constructed Variable	Description of Constructed Variable
cd3whenint	Version of interview flag
c[e|r|s|u]3datem	Date of observation-month
c[e|r|s|u]3datey	Date of observation-year
c[m|f]3age	Mother's/Father's age (years)
c[m|f]3b_age	Child's age at time of Mother/Father interview (months)
c[m|f|q]3citsm	Year 3 city sample flag
c[m|f|q]3natsm	Year 3 national sample flag
c[m|f|q]3natsmx	Year 3 national sample flag (excluding one city)
c[m|f]3fint	Was father interviewed at Year 3?
c[m|f]3intmon	Mother/Father interview month
c[m|f]3intyr	Mother/Father interview year
c[m|f]3mint	Was mother interviewed at Year 3?
cf3new30	Was father interviewed at Year 3 but not at baseline and Year 1
c[m|f]3samp	Mother/Father non-response reason
c[m|f]3span	Interview conducted in Spanish
c[m|f|p]3tele	Interview conducted by telephone
c[m|f]3twoc	Two cities flag
ch3act	Child/PCG participated in any assessment/activity component
ch3flg_inelig	Ineligible, not selected for the Core Study
ch3inttype_mod	Status of completion of survey
ch3inttype_mod2	Final status of Year 3 In-home completion
ch3mesmo	Month of in-home assessment/activity component
ch3mesyr	Year of in-home assessment/activity component
ch3ppvtage	Child PPVT – age at administration (months)
ch3ppvtage_m	PCG age at PPVT/TVIP administration (months)
cm3inccprov	Mother participated in Child Care Provider Study
cm3inhom	Mother participated in In-Home Study
cr3loi	Language of interview
cr3version	Which version of interview completed
cm3fdiff	Different father was reported at three-year interview
cm3tdiff	Time difference between mother and father interviews
ch3emp_year	Employment Calendar Interview Year
ch3emp_month	Employment Calendar Interview Month
ch3cc_year	Child Care Interview Year
ch3cc_month	Child Care Interview Month
ch3agemo1_c	Child age (months) at measurement calculated by EpiInfo
ch3agemo2_c	Child age (months) at measurement calculated by SPSS

10. Finances

At Year 3, mother and father, in particular, were asked about their household finances. Table 12 details subtopics within "finances" and in which surveys they are included. Child support questions include questions regarding the amount of money the respondent 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, or other activities. Expenses are based on the respondent's expenses on food and housing. For questions related to the respondent's financial assets, the interviewer asks the respondent about home and vehicle ownership, and savings accounts. The respondent's household income is their total household income from all sources in the last 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 3 by survey instrument

Subtopics	**m**	**f**	**p**	**h**	**o**	**d**	**e**	**r**	**s**	**u**
Child support	X	X								
Earnings	X	X				X		X		
Expenses	X	X	X							
Financial assets	X	X								
Household income/poverty	X	X								
Material hardship	X	X	X							
Private transfers	X	X								
Public transfers and social services	X	X	X			X		X		

10.1. Constructed Variables - Household Income

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

- **cm3hhinc** and **cf3hhinc** are mother and father's household income at Year 3, respectively
- **cf3hhincb**, an additional father variable, uses mother reports of household income for married and cohabiting couples

Respondents were asked to provide an exact dollar amount of their household income. If they could not, they were asked to provide a range. This strategy was effective in reducing missing data to about 10 percent, although a portion of parents reported a range rather than an exact dollar amount. In constructing household income (c*3hhinc), we first imputed dollar amounts for those who reported a range of income

(using others who provided income in the same range but provided a detailed amount of income). Next, we imputed dollar amounts for those with no reported income. Both imputations included the following covariates: relationship status (mother report), age, race/ethnicity, nativity, whether employed last year, earnings, total adults in the household, and whether welfare was received. Imputations for those who reported a range were based on parent's own characteristics. Imputations for missing income were based on both parent's characteristics for married and cohabiting couples; otherwise, they were based on parent's own characteristics.

10.2. Constructed Variables - Household Income Imputation Flags

- **cm3hhimp, cf3hhimp** and **cf3hhimpb** indicate which parent reported income and which parents have imputed income (in reference to cm3hhinc, cf3hhinc, and cf3hhincb, respectively).

Please note that if parents reported a range of income in brackets, they are not flagged as having imputed data in these flags. Users can examine the raw variables to determine who had detailed/bracketed data.

10.3. Constructed Variables - Poverty Measures

- **cm3povco** and **cf3povco** indicate the poverty ratio. The poverty ratio is the ratio of total household income, as defined in c*3hhinc, to the official poverty thresholds, designated by the U.S. Census Bureau.
- **cm3povca** and **cf3povca** indicate poverty categories by transforming the poverty ratios into categorical variables.

The thresholds in c*3povca vary by family composition and year. At each wave, we used the poverty thresholds for the year preceding the interview. We calculated separate thresholds based on mother and father reports of household size and composition. However, calculations for married/cohabiting mothers and fathers rely on mother reports of household size and composition. A small number of missing values (don't know, refused) were treated as 0 in household membership counts.

- **cf3povcob** and **cf3povcab** are the poverty ratio and categories for fathers for "b" versions of his household income variables (based on cf3hhincb and cf3hhimpb).

The imputation flags created for the household income variables also refer to the poverty variables.

Please visit https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html for detailed information about poverty thresholds.

10.4. Constructed Variables - Food Expenditure

- **cp3e2_expen** is the amount of money (in dollars) families spend for food used at home per month.

Variable cp3e2_expen was created based on variables p3e2, p3e2_per and p3e2a. The monthly value was generated by adjusting the amount provided (p3e2) in the time period given (p3e2_per) to obtain the expense for the whole month. If only a data range was provided (p3e2a), the midpoint value of that range was used in combination with the corresponding time period in the adjustment. For the computation, a few missing values of p3e2_per were imputed logically for cases with only data for p3e2. Missing value of p3e2_per was often replaced by a common time period given for both p3e4 and p3e5; or the period available only for either e4 or e5 provided that such period appeared reasonable for the amount (p3e2) taking into consideration the number of persons living in the household. Values of p3e2_expen computed based on imputed value of p3e2_per were flagged.

- **cp3e4_expen** is the amount of money (in dollars) families spend for food taken out or food delivered per month.

Variable cp3e4_expen was created based on variables p3e4, p3e4_per and p3e4a. The monthly value was generated by adjusting the amount provided (p3e4) in the time period given for (p3e4_per) to obtain the expense for the whole month. If only a data range was provided (p3e4a), the midpoint value of that range was used in combination with the corresponding time period in the adjustment. For the computation, a few missing values of p3e4_per were imputed logically for cases with only data for p3e4. Missing value of p3e4_per was often replaced by a common time period given for both p3e5 and p3e2; or the only period available for either p3e5 or p3e2 provided that such period appeared as reasonable for the amount (p3e4) taking into consideration the number of persons living in the household. All values of cp3e4_expen computed based on imputed value of p3e4_per were flagged.

- **cp3e5_expen** is amount of money (in dollars) families spend eating out per month.

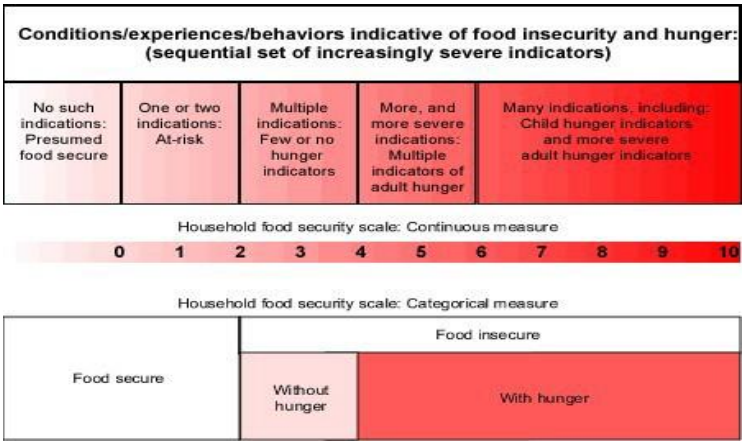
Variable cp3e5_expen was created based on variables p3e5, p3e5_per and p3e5a. The monthly value was generated by adjusting the amount provided (p3e5) in the time period given for (p3e5_per) to obtain the expense for the whole month. If only a data range was provided (p3e5a), the midpoint value of that range was used in combination with the corresponding time period in the adjustment. For the computation, a few missing values of p3e5_per were imputed logically for cases having only data for p3e5. Missing value of p3e5_per was often replaced by a common time period given for both p3e4 and p3e2; or the period available only for either p3e4 or p3e2 provided that such period appeared as reasonable for the amount (p3e5) taking into consideration the number of persons living in the household. All values of cp3e5_expen computed based on imputed value of p3e5_per were flagged.

- **cp3food_exp** is the total amount of money (in dollars) families spend on food per month.

The value of cp3food_exp is the sum of cp3e2_expen, cp3e4_expen, and cp3e5_expen. Data user may consider creating a composite variable to also include the value of the food stamps received (variable p3e1a_1) and the food stamp data from questions in the Core Surveys.

10.5. Scale – Household Food Security

The household food security scale can be constructed based on the data on nutrition gathered in Section D of the PCG questionnaire. This scale may be interpreted using a continuous measure or a categorical measure, as seen below:



Source: http://www.ers.usda.gov/briefing/foodsecurity/measurment/index.htm

On occasion "food insecure with hunger" is further divided into: a) food insecure with hunger – moderate (hunger among adults but not children), and b) food insecure with hunger – severe (hunger among children and more severe hunger among adults).

Some researchers have established a separate set of three categories to measure children's hunger using the eight items on the scale dealing specifically with children. The categories used by these researchers are: a) child hunger, b) reduced-quality diet for children, and c) no child hunger or reduced-quality diet. Specific response rates corresponding with these three categories are not readily available.

10.5.1. Sample Response Rates to Food Security Questions

In Table 13, existing studies are compared to FFCWS data at Year 3. The first column offers nationwide estimates, while the last column shows data representing poor families with children in four large urban counties.

Table 13: Sample Response Rates to Food Security Questions

		1998 ERS/USDA	Year 3	PDUC
Variable	Question	Andrews et al. 2000[7]	PCG Survey	Polit & Martinez 2000[8]
p3d1a	Worried food would run out	12.8	27.2	65.3
p3d1b	Food bought didn't last	10.8	19	56.2
p3d1c	Couldn't afford to eat balanced meals	9.1	10.2	34.8
p3d1d	Relied on few kinds of low-cost food to feed children	13.6	18.2	47.9
p3d1e	Couldn't feed child(ren) balanced meals	8.4	7.9	29.7
p3d3	Child(ren) were not eating enough	4.4	14.8	17.5
p3d4	Adult(s) cut size of meals or skipped meals	6	25	21.4
p3d4a	Adult(s) cut size or skipped meals, 3+ months	4.2	52.6	16.7
p3d5	Adult(s) ate less than felt he/she should	5.7	29.6	25.2
p3d6	Adult(s) hungry but didn't eat because couldn't afford	2.6	13.5	14.1
p3d7	Respondent lost weight	1.6	6.3	8.5
p3d9	Adult did not eat for whole day	1.3	16.9	8.7
p3d9a	Adult did not eat for whole day, 3+ months	0.9	60.3	6.6
p3d10	Cut size of child(ren)'s meals	1.6	19.8	8.2
p3d11	Child(ren) skipped meal	0.8	9.9	5
p3d11a	Child(ren) skipped meals, 3+ months	0.5	55.9	4
p3d12	Child(ren) hungry but couldn't afford more food	1.1	9.9	5.6
p3d13	Child(ren) did not eat food whole day	0.2	17.1	1.6

[7] Andrews, Nord, Bickel, and Carlson. "Household Food Security in the United States, 1999." Food Assistance and Nutrition Research Report No. 8. September 2000.
[8] Polit, London, and Martinez. "Food Security and Hunger in Poor, Mother-Headed Families in Four U.S. Cities." Source: http://www.mdrc.org/Reports2000/UrbanChange/FoodSecurityHunger.htm May, 2000.

10.6. Scale - Material Hardship

At Year 3, 10 questions were asked to both mother and father to determine material hardship. These questions are derived 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[9], the 1997 & 1999 New York City Social Indicators Survey (SIS) (Social Indicators Survey Center, 1997 & 1999), and the 1999 Study of Work, Welfare, and Family Well-Being of Iowa families on FIP (IOWA) (Iowa's assistance program).

10.6.1. Variables

Mother questions: **m3i23a-m3i23j** (10 variables) *Note: I and J asked only in 18-cities*
Father questions: **f3i23a-f3i23j** (10 variables) *Note: I and J asked only in 18-cities*

The FFCWS Year 3 Survey included several material hardship measures that are taken from the Survey of Income and Program Participation.[10] These questions are also similar to Mayer and Jencks (1989) Chicago study of hardship and poverty.[11,12]

Some of the hardship questions are also derived from the 1997 and 1999 SIS. 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 (p3d6) or his/her child (p3d12) going hungry, access to free food ([m|f]3i23a), and places he/she has lived ([m|f]3i23f-g), all within the past 12 months and all due to financial difficulties.[13]

Two additional questions are derived from the IOWA study and ask whether the respondent has cut back on buying clothes ([m|f]3i23i), and whether the respondent has worked overtime or taken a second job ([m|f]3i23j). These questions were only asked in 18-cities. The IOWA study looks at the well-being and financial status of families who were on FIP assistance in 1999 (and who had at least one parent unemployed for the previous three months and received unsubsidized employment within the following three months).

10.6.2. 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

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[9] *Survey 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
[10] Bauman, K. (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
[11] Bauman, K. J. 1999. "Shifting family definitions: The effect of cohabitation and other nonfamily household relationships on measures of poverty." *Demography* 36(3):315-325.
[12] Mayer, S.E., & Jencks, C. (1989). Poverty and the Distribution of Material Hardship. *Journal of Human Resources,* 24 (1), 88-114.
[13] Social Indicators Survey Center, Columbia University School of Social Work. (1999). *1999 New York City Social Indicators Survey: Documentation and Codebook, Revised Version.*

[or your partner]." In W164 of the 1997 SIS, the questions is asked of "you [or your 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 3 Surveys include only a subset of the hardship questions used in the SIPP, SIS and IOWA studies.

10.6.3. Scoring

There is no established scoring for the material hardship questions included in the Year 3 surveys.

Table 14: Variables on material hardship

SIPP	SIS 1997	SIS 1999	IOWA	Item	Source item
AW35_NEED1				m3i23b f3i23b	Was there any time in the past 12 months when (YOU/YOUR HOUSEHOLD) did not pay the full amount of the rent or mortgage?
AW38_NEED2				m3i23c f3i23c	In the past 12 months (WERE/WAS) (YOU/ANYONE IN YOUR HOUSEHOLD) evicted from your home or apartment for not paying the rent or mortgage?
AW41_NEED3				m3i23d f3i23d	How about not paying the full amount of the gas, oil, or electricity bills?
AW50_NEED6				m3i23h f3i23h	In the past 12 months was there a time (YOU/ANYONE IN YOUR HOUSEHOLD) needed to see a doctor or go to the hospital but did not go?
	W164			m3i23a f3i23a	In the past 12 months, have you [or your spouse/partner] [or your child] [or your children] received free food or meals because there wasn't enough money?
		HAR10		m3i23f f3i23f	In the past 12 months, did you ever move in with other people even for a little while because of financial problems?
		HAR12		m3i23g f3i23g	In the past 12 months, did you ever stay at a shelter, in an abandoned building, an automobile or any other place not meant for regular housing even for one night because you didn't have enough money for a place to live?
				m3i23e f3i23e	In the past 12 months, did you borrow money from friends or family to help pay bills?
			IOWA	m3i23i f3i23i	In the past 12 months have you cut back on buying clothes for yourself? (18 cities only- 2 cities not asked)
			IOWA	m3i23j f3i23j	In the past 12 months have you worked overtime or taken a second job? (18 cities only- 2 cities not asked)

11. Health and Health Behavior

At Year 3, questions on health and health behavior were asked primarily to the PCG, mother and father. Questions about the child's accidents and injuries describe the number of times the child's had an accident or injury, when those were and why they occurred. Within disabilities, the PCG is asked whether and which kind of disability the child has (ex: speech problems, Down's syndrome, cerebral palsy) and the mother and father were asked whether they take medication for attention deficit disorder. Within the fertility history topic, respondents were asked whether they've had other children, how many, with whom and the children's ages. The health behavior topic covers observations of the child's hygiene and clothing as well as the child's toileting, eating and sleeping habits. Respondents were asked whether and how frequently they smoke cigarettes. The health care access and insurance topic ranges from questions about their health insurance coverage to the type of ways they use their health care use (emergency visits, therapy). Height and weight of the respondent are both asked within the Core Surveys and collected within the Activity Workbook of the In-Home Study. Respondents were asked whether they take medication and what they take it for (ex: asthma, diabetes, anxiety, pain). Mental health questions were designed to understand the extent to which the respondent was anxious and depressed by asking questions about what they'd been experiencing (ex: trouble concentrating, sleeping, weight loss, thoughts of death). Physical health questions relate both to the respondent and the child – in terms of both general health, hospital visits, health conditions (ex: high blood pressure, asthma, diabetes), and limitations that have arisen because of the health condition. These variables help identify the health limitations within the family, access to healthcare and family size, including siblings and half-siblings of the focal child. Substance use and abuse questions indicate the extent of the respondent's drug or alcohol dependence. Respondents were asked to indicate, if applicable, which drugs they were taking (ex: sedatives, marijuana, cocaine, hallucinogens) and how many times their substance use interfered with child care.

Table 15: Subtopics in Health and Health Behavior in Year 3 by survey instrument

Subtopics	m	f	p	h	o	d	e	r	s	u
Accidents and Injuries	X	X	X							
Disabilities	X	X	X							
Fertility history	X	X	X							
Health behavior	X	X	X		X	X	X	X	X	
Health care access and insurance	X	X	X					X		
Height and weight	X	X		X						
Medication	X	X								
Mental health	X	X	X			X		X		
Physical health	X	X	X							
Substance use and abuse	X	X	X		X					

11.1. Constructed Variables - Height and Weight Measurements

In the Year 3 Core Survey, both mother and father self-reported their height and weight. Measurements were also recorded for height and weight of the child and PCG during the In-Home Survey, within the activity workbook.

11.1.1. Special considerations for PCG measurements

The protocols for PCG's measurements differed slightly between the two "pilot" cities and the other 18 cities. In the pilot cities, the PCG's heights were self-reported and not measured. In the other 18 cities, PCG's heights were measured unless the PCG was unwilling to be measured. He or she then was given the opportunity to report their height. In all cities the PCG was weighed unless they 1) were pregnant 2) refused to be weighed, or 3) exceeded the scale limit of 140 kg (308 pounds). In all three of these situations, the PCG was asked to self-report their current weight (or their pre-pregnant weight if they were pregnant). The body mass index was calculated (kg/m2) in all cases where both height and weight (by measure or self-report) were available and biologically plausible. The file contains indicator variables regarding whether the PCG was pregnant (ch3mompreg), was over the scale limit (ch3ovscale), self-reported their height (ch3selfht), or self-reported their weight (ch3selfwt).

11.1.2. Constructing height and weight incidences: PCGs

PCG weights were considered implausible if over 500 pounds (227.2 kg) or under 50 pounds (22.7 kg). Heights were considered implausible if at or below 4 feet 6 inches (138 cm tall) or above 7 feet (213 cm tall). Shown in the Table 16 are the 4 PCG flag values (ch3mflag):

Table 16: PCG Anthropomorphic Flag Values (ch3mflag)

PCG Flag Values		N	%
0	No indices flagged, measures plausible	2408	93.3
1	Missing weight or height	156	6.0
5	Height implausible (too tall or too short)	17	0.7
		2581	100

11.1.3. Constructing growth indices: Children

The growth indices were derived from the CDC 2000 growth curves[14] using the NutStat module of the CDC's Epi Info Software[15]. These indices standardize children's measures to account for differences in sex and age because all children were not measured at exactly 36 months and because normal growth differs by sex. Five variables (child sex, child birth date, date of measurement, child height [computed in cm.], and child weight [computed in kg.]) were used to compute standardized indices for growth.

Computation of anthropometric indices using the CDC's SAS code[16] or using the NutStat module of the EpiInfo Program produced essentially the same results. There are

[14] see https://www.cdc.gov/nccdphp/dnpao/growthcharts/
[15] see https://www.cdc.gov/epiinfo/index.html
[16] see https://www.cdc.gov/nccdphp/dnpao/growthcharts/resources/sas.htm

very minor (and clinically insignificant) differences between these two methods in the calculated indices. These differences arise from differences between the two methods in how the ages are calculated. If EpiInfo calculates the age from the birth date and measurement date, it produces minor differences from the very same calculation performed by either SAS or SPSS.

Based on Word Health Organization recommendations, biologically implausible values (BIVs) were flagged.[17] Weight-for-age z scores (ch3waz) below -5 or above 5, height-forage z scores (ch3haz) below -5 or above 3, and weight-for-height z scores (ch3whz) below -4 and above 5 were all considered BIVs and were set to missing. Data flags (ch3cflag) were coded as in Table 17. The flagging codes are mutually exclusive. If children met more than one flagging criteria, they were given the code with the lowest value. This allowed cases to be flagged anytime one of the 5 required fields was missing (weight, height, date of birth, date of measurement, and sex).

Table 17: Child Anthropomorphic Flag Values (ch3cflag)

Child Flag Values		N	%
0	No indices flagged, measures plausible	2401	93.0
1	Missing weight or height	99	3.8
5	Height implausible (HAZ <-5 or >3)	48	1.9
6	Weight implausible (WAV <-5 or >5)	16	0.6
7	Weight for height implausible (WHZ <-4 or >5)	17	0.7
		2581	100

There were 180 (7.0%) flagged cases. Of those cases in which both height and weight were measured (n=2,482) there were 81 cases (3.3%) with BIV's. Of the 99 children missing height or weight, 23 were missing both height and weight, despite having had an In-Home Assessment. An additional 45 children had weight but no height, and another 31 had height but no weight.

11.1.4. Constructing z-scores: Children

The z-score variables contain the standardized measurements which were generated based on CDC' SAS programs: *gc-setup.sas* and *gc-calculate.sas*. These programs generate a dataset to contain indices of the anthropometric status of children from birth to 20 years of age based on the 2000 CDC growth charts.[18]

Variables used for the z-score computations in the Year 3 In-Home Study are: age of child in months, child's gender (coded as: 1:boy, 2: girl); height of child (standing height in centimeters); recumbent indicator about child's height measurement (coded as 0 since the standing height was used); child's weight in kilograms; and child's head

[17] WHO Expert Committee. Physical status: the use and interpretation of anthropometry. Geneva: World Health Organization; 1995. page 218.

[18] https://www.cdc.gov/growthcharts/index.htm

circumference in centimeters was set to missing, based on instructions in the CDC's programs, since this was not collected for the survey.

Please note: there is a known error in the data file for ch3bmiz where the variable label incorrectly identifies this variable as being about the PCG's BMI z-score. This variable is for the child.

11.1.5. Constructed Variables - Height and Weight

11.1.5.1. PCGs

- **ch3mhtcm** PCG's height (centimeters). ch3mhtcm is either the actual height measured during interview as recorded in the Activity Workbook (item A/E2) or the self-reported height during interview (recorded for item A/E2A_ft and A/E2A_in).

- **ch3mwtlb** PCG's weight (pounds). ch3mwtlb created based on the variables in the Activity Workbook: A/E3, A/E4, A/E5, A/E5_exc, A/E5a, A/E6a(based on the revised questionnaire used for 18 cities). The weight was measured during the interview for non-pregnant PCGs. For PCGs who were pregnant during the interview or refused to have their weight measured, self-reported weight was recorded.

- **ch3mwtkg** PCG's weight (kilograms). ch3mwtkg created by multiplying the value of ch3mwtlb (PCG's weight in pounds) by 0.45.

- **ch3mombmi** PCG's body mass index (BMI). ch3mombmi computed by dividing the weight of the PCG in kilograms (ch3mwtkg) to the squared value of the height of the PCG in meters (which is, ch3mhtcm/100).

- **ch3mflag** identifies the problem associated with the anthropometric measurements of the PCG.

11.1.5.2. Children

- **ch3chtcm** child's height (centimeters). ch3chtcm provided from item A/E7 from the Activity Workbook, which is the height of the child measured in centimeters.

- **ch3cwtlb** child's weight (pounds). ch3cwtlb created based on the variables in the Activity Workbook: A/E6, A/E6A, and A/E6B (from the revised questionnaire used for 18 cities). ch3cwtlb is the actual weight of the child as measured during interview or the difference between the weight of the mother and child measured together and the weight of the mother.

- **ch3cwtkg** child's weight (kilograms). ch3cwtkg created by multiplying the value of ch3cwtlb (child's weight in pounds) by 0.45.

- **ch3cbmi** child's body mass index (BMI). ch3cbmi computed by dividing the weight of the child in kilograms (ch3cwtkg) to the squared value of child's height in meters (which is, ch3chtcm/100).

- **ch3cflag** identifies the problem associated with the anthropometric measurements of the child.
- **ch3cwtalone** identifies if child was weighed alone.
- **ch3haz** z-score for height-for-age of child.
- **ch3waz** z-score for weight-for-age of child.
- **ch3whz** z-score for weight-for-height of child.
- **ch3bmiz** z-score for body mass index of child.
  There is a known error in the data file for ch3bmiz where the variable label incorrectly identifies this variable as being about the PCG's BMI z-score. This variable is for the child.
- **ch3hap**: child's height for age percentile (based on z-score).
- **ch3wap:** child's weight for age percentile (based on z-score).
- **ch3whp**: child's weight for height percentile (based on z-score).
- **ch3bmip:** child's body mass index percentile (based on z-score).

11.2. Constructed Variables - Accidents occurred to the child

- **cp3accdt** number of accidents occurred to the child

cp3accdt is based on the recollection of the PCG when being asked about the three most-recent accidents that happened to the child. This was created by totaling the affirmative responses provided for a series of questions about the accidents listed under item p3a16 in the instrument used for the PCG Survey.

11.3. Scale – Motor Control (Walk-A-Line Task)

The walk-a-line task measures motor control among preschool aged children.[19,20,21]

11.3.1. Variables

Part of the Child Care and Parental Employment Survey, variables all begin as **ch3walk*** (7 variables)**.**

During the home visit, children were asked to walk along the length of a six-inch-wide, six-foot-long line three times. Before the child began, the data collector demonstrated how to walk along the line keeping their feet on the line as they walked. During the baseline trial, children were asked to walk the line at a normal speed. Children were then asked to walk the line at a very slow speed for the second and third trials. The data collector used a stopwatch to measure the time of each trial, beginning timing as soon as the child began moving and stopping as soon as both feet were off the line.

11.3.2. Scoring

Razza and colleagues (2016) calculated the time difference between the normal speed and each slow trial, then averaged these differences. Higher scores indicated higher motor control.

Table 18: Walk-A-Line Variables

Variable	***Variable Description***
ch3walk	Participated in Walk-a-Line (18 cities only)
ch3walkc1b	Walk-A-Line Baseline
ch3walkc2st	Walk-A-Line Slow Trial 1
ch3walkc3st	Walk-A-Line Slow Trial 2
ch3walkc1bm	Reason for missing in ch3walkc1b
ch3walkc2stm	Reason for missing in ch3walkc2st
ch3walkc3stm	Reason for missing in ch3walkc3st

[19] Kochanska, G., Murray, K. T., & Harlan, E. T. (2000). Effortful control in early childhood: Continuity and change, antecedents, and implications for social development. *Developmental Psychology*, *36*(2), 220-232.
[20] Maccoby, E. E., Dowley, E. M., Hagen, J. W., & Degerman, R. (1965). Activity level and intellectual functioning in normal preschool children. *Child Development*, 761-770.
[21] Razza, R.A., Martin, A. & Brooks-Gunn, J. (2016). Links Between Motor Control and Classroom Behaviors: Moderation by Low Birth Weight. *Journal of Child and Family Studies*, *25*(8), 2423-2434.

11.4. Scale – Alcohol Dependence

11.4.1. Variables

Mother questions: **m3j28**, **m3j28a**, **m3j29, m3j29a, m3j30-m3j34, m3j34a, m3j35** (11 variables) note: m3j28a was only asked in 18 cities.
Father questions: **f3j33- f3j43** (11 variables)

Constructed variables: **cm3alc_case**, **cf3alc_case** for mother and father alcohol dependence, respectively.

Stata code to create these measures is available upon request by emailing ffdata@princeton.edu.

The mental health questions dealing with Alcohol Dependence in the Year 3 Core Survey are derived from the Composite International Diagnostic Interview - Short Form (CIDI-SF)[22]. 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.

Note: The information below is taken directly from the "*Scoring the World Health Organization's Composite International Diagnostic Interview Short Form."*[23]

The CIDI alcohol questions are based on criterion A of the Diagnostic and Statistical Manual of Mental Disorders, 3rd Edition (DSM-III-R)[24] alcohol dependence diagnosis. Alcohol dependence is indicated by an individual having at least four drinks in one day in the last six months and reporting at least three out of the seven following symptoms:

1) role interference as a result of use,
2) use in hazardous situations,
3) emotional or psychological problems as a result of use,
4) a strong desire or urge to drink,
5) a great deal of time using or recovering,
6) drinking more or longer than intended, or
7) drinking more to get the same effect.

The FFCWS Year 3 Survey includes the full CIDI-SF scale for Alcohol Dependence.

11.4.2. Scoring Information

If the respondent reports having less than four drinks during every day in the past twelve months (m3j28/f3j33=0 or 1), or volunteers that they are a "casual/social drinker" at any point in the questions sequence, then they are skipped out of the section and receive a probability of caseness equal to zero.

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[22] 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.
[23] 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).
[24] American Psychiatric Association. & American Psychiatric Association. Work Group to Revise DSM-III. (1987). *Diagnostic and statistical manual of mental disorders : DSM-III-R*. Washington, DC : American Psychiatric Association

If the respondent reports having had at least four drinks during any one day in the past twelve months (m3j28/f3j33=2, 3, or 4) and has not volunteered that they are a "casual/social drinker," then the alcohol dependence score (range 0-7) is equivalent to the number of positive responses to the seven symptom questions. Respondents are classified as either probably cases or probably non-cases based on whether or not they have an alcohol dependence score of three or more. Table 19 shows the dichotomous scores, classifying respondents as either probable cases or probable non-cases based on whether or not they had at least 4 drinks in one day in the last 12 months, and they positively answered at least three of the seven symptom questions.

Table 19: Alcohol Dependence Caseness

Probable Alcohol Dependence Caseness	Year 3 Mothers	Year 3 Fathers
Yes (1)	12	84
No(0)	4200	3193
Totals	4212	3277

11.5. Scale – Drug Dependence

11.5.1. Variables

Mother questions: **m3j36a-m3j36j, m3j37, m3j37a, m3j38-m3j42, m3j42a, m3j43** (19 variables)
Father questions: **f3j44a-f3j44j, f3j45, f3j45a, f3j46-f3j50, f3j50a, f3j451** (19 variables)

Constructed: **cm3drug_case**, **cf3drug_case** for mother and father drug dependence, respectively.

Stata code to create these measures is available upon request by emailing ffdata@princeton.edu.

The mental health questions dealing with Drug Dependence in the Year 3 Core Survey 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.

Note: The information below is taken directly from the "*Scoring the World Health Organization's Composite International Diagnostic Interview Short Form."*[26]

The CIDI Drug abuse questions are based on criterion A and B of the Diagnostic and Statistical Manual of Mental Disorders, 3rd Edition (DSM-III-R)[27] drug dependence criteria. Drug dependence is indicated by usage of at least one of the following nine drugs: sedatives, tranquilizers, amphetamines, analgesics, inhalants, marijuana, cocaine, LSD, and heroin, and the presence of at least three of the following seven symptoms of DSM-III-R dependence: 1) role interference as a result of use, 2) use in hazardous situations, 3) emotional or psychological problems as a result of use, 3) a strong desire or urge to drink, 4) a great deal of time using or recovering, 5) using more or longer than intended, or 7) using more to get the same effect.

The FFCWS Year 3 Survey includes the full CIDI-SF scale for Drug Dependence.

11.5.2. Scoring Information

If the respondent reports no drug use in the in the past twelve months (m3j36a-i/f3j44a-i = 2), then they are skipped out of the section and receive a probability of caseness equal to zero. If the respondent has used one or more of the drugs (m3j36a-i/f3j44a-i; one response=1), then the drug dependence score is equivalent to the number of positive responses to the seven symptom questions.

[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] 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).
[27] American Psychiatric Association. & American Psychiatric Association. Work Group to Revise DSM-III. (1987). *Diagnostic and statistical manual of mental disorders : DSM-III-R*. Washington, DC : American Psychiatric Association

Respondents can be classified as either a probable case or probable non-case based on whether or not they have a drug dependence score of three or more. Table 20 shows the dichotomous scores, classifying respondents as either probable cases or probable non-cases based on whether or not they used at least one of the listed drugs in the last 12 months, and they positively answered at least three of the seven symptom questions.

Table 20: Drug Dependence Caseness

Probable Drug Dependence Caseness	Year 3 Mothers	Year 3 Fathers
Yes (1)	34	63
No(0)	4189	3223
Totals	4223	3286

11.6. Scale – Mental Health Depression (CIDI-SF)

11.6.1. Variables

Mother questions: **m3j5-m3j13, m3j13a, m3j14, m3j14a, m3j15-m3j17** (15 variables)
Father questions: **f3j5-f3j19** (15 variables)

Constructed: **cm3md_case_lib**/**cf3md_case_lib** mother/father meets depression criteria (liberal); **cm3md_case_con** and **cf3md_case_con** mother/father meets depression criteria (conservative)

Stata code to create this measure is available upon request by emailing ffdata@princeton.edu.

The Major Depressive Episode questions from the Year 3 Core Survey are derived from the Composite International Diagnostic Interview - Short Form (CIDI-SF), Section A.[28] The short form of the CIDI interview takes a portion of the full set of CIDI questions and generates from the responses 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.[29] 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.

11.6.2. Modifications

All of the essential CIDI-SF questions to score a major depressive episode are included in the Year 3 Survey. A few questions are omitted.[30] 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.[31]

[28] 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.
[29] American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders, Fourth Edition.* Washington, DC: American Psychiatric Association.
[30] See appendix.
[31] 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).

11.6.3. Scoring Information

The scoring procedures described below rely primarily on memos issued by Kessler and Mroczek in 1994[32] and 1997[33]. In 2002, Walters et al. issued "*Scoring the World Health Organization's Composite International Diagnostic Interview Short Form*"[34] which recommends scoring procedures that differ in two respects. In the following, we note where the procedures used to identify major depression in the FFCWS respondents deviate from the 2002[28] version. When procedures are consistent, language is taken directly from the 2002[28] scoring guide.

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 Major Depression (MD) either:

1) to endorse all questions about having two weeks of dysphoric mood (J5-J6-J7) or
2) to endorse all questions about having two weeks of anhedonia (J9-J10-J11)

Consistent with the procedures described by Kessler and Mroczek in 1994[26] and 1997[27], each series requires the respondent to report two weeks of symptoms lasting at least about half of the day (J6, J10) and almost every day (J7, J11).

Either denying the existence of the symptom or denying persistence leads to a skip, and the respondent receives a probability of caseness equal to zero. If respondents endorsed the dysphoric stem, they were not asked the anhedonia stem questions.

Note that the scoring instructions issued by Walters et al.[25] creates more stringent conditions for endorsing the stem; respondents must report the two weeks of symptoms last at least "most of the day" in questions J6 and J10. As a consequence, the approach used here results in more respondents endorsing the stem than would endorse if the 2002[28] revisions were employed.

If the respondent endorsed the diagnostic stem series, an additional seven symptom questions were asked:

1) losing interest (J8=1, only if the stem involves dysphoria; the anhedonia stem question J9=1 should be counted when the anhedonia stem is endorsed),
2) feeling tired (J12=1),
3) change in weight greater than or equal to 10 pounds (J13=1, 2, or 3 and J13A>=10 for mothers; J13=1, 2, or 3 and J14>=10 for fathers),
4) trouble with sleep (J14=1 and J14A=1 or 2 for mothers; J15=1 and J16=1 or 2 for fathers),

[32] Personal communications from Ron Kessler and Dan Mroczek, "Scoring the UM-CIDI Short Forms," revised 2/22/94, and "UM-CIDI Short Form 03.20/97, Kessler and Mroczek – DSM-IV Version."
[33] Kendler, K.S., Davis, C.G., Kessler, R.C. (1997). The familial aggregation of common psychiatric and substance use disorders in the National Comorbidity Survey: A family history study. British Journal of Psychiatry, 170, 541-548.
[34] 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).

5) trouble concentrating (J15=1 for mothers; J17=1 for fathers),
6) feeling down (J16=1 for mothers; J18=1 for fathers), and
7) thoughts about death (J17=1 for mothers; J19=1 for fathers). The respondent's 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 (J5).

Note that the scoring scheme proposed by Walters et al.[25] excludes J5 from the symptom count, leading to an MD score range of 0-7. Table 21 shows the cross-classification of MD short-form scores with the probability of being a CIDI case.[35] This cross-classification reflects the probability that a respondent with a particular response profile will meet full diagnostic criteria when given the complete CIDI interview.[36] As shown in the table, the probability of being a CIDI case is related to the MD score with the probability of being a case being greater than 0.5 among respondents who endorsed three or more symptoms.

There are two scoring alternatives for the CIDI-SF MD section. The first is to create a dichotomous score, classifying respondents as either probable cases or probable non-cases based on whether or not they have a MD score of three or more. The second is to assign respondents the probability of caseness score. 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 who volunteer they are taking medication for depression (J5 or J9=-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.

[35] For the distributions in Tables 21 and 22, respondents who did not know or refused to answer the initial dysphoria or anhedonia screening questions (J5 and J9= -1 or -2) are considered missing. Respondents who answered the initial screening questions but did not report how much or how often they experienced the state are scored as not meeting the stem.

[36] Please note: Kessler urges caution when interpreting the probability of caseness. The probabilities are derived from a single sample and have not been validated.

Table 21: Major Depression (MD) Liberal Caseness

Short form MD Score	Probability of CIDI Caseness	Year 3 Mothers	Year 3 Fathers
0	0.0001	3,331	2,785
1	0.0568	8	13
2	0.2351	16	23
3	0.5542	46	48
4	0.8125	98	69
5	0.8895	189	106
6	0.8895	256	122
7	0.9083	204	85
8	0.9083	73	40
Totals		4,221	3,291

Table 22: Major Depression (MD) Liberal Caseness

MD Caseness	Year 3 Mothers	Year 3 Fathers
Yes (1)	868	470
No (0)	3,353	2,821
Totals	4,221	3,291

11.7. Scale – Mental Health for Generalized Anxiety Disorder (CIDI-SF)

11.7.1. Variables

Mother questions: **m3j18, m3j18a, m3j18b, m3j18c1, m3j18c2, m3j18c3, m3j18d1, m3j18d2, m3j18d3, m3j19- m3j26, m3j27a, m3j27b, m3j27c, m3j27d, m3j27e, m3j27f, m3j27g** (24 variables)
Father questions: **f3j20, f3j21a, f3j21b, f3j21c1, f3j21c2, f3j21c3, f3j21d1, f3j21d2, f3j21d3, f3j22- f3j29, f3j30a, f3j30b, f3j30c, f3j30d, f3j30e, f3j30f, f3j30g** (24 variables)

Constructed: **cm3gad_case**/**cf3gad_case** mother/father meets anxiety criteria.

Stata code to create this measure is available upon request by emailing ffdata@princeton.edu.

Note: The information below is taken directly from the "*Scoring the World Health Organization's Composite International Diagnostic Interview Short Form*."[37]

The mental health questions dealing with Generalized Anxiety Disorder (GAD) from the Year 3 Core Survey are derived from the Composite International Diagnostic Interview - Short Form (CIDI-SF)[38]. 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 (DSM-IV)[39]. 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.

[37] 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).
[38] 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.
[39] American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders, Fourth Edition.* Washington, DC: American Psychiatric Association.

11.7.2. Modifications

The FFCWS Year 3 Core Surveys include 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.

11.7.3. Scoring Information

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 (m3j18/f3j20 or m3j18a/f3j21a=1) that lasted at least six months (m3j19/f3j22=1 or (m3j18c/f3j21c>=6 months or m3j18d/f3j21d>=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 (m3j19/f3j22=1), further qualifiers are asked to determine whether the worry was excessive (m3j20/f3j23=1), lasted more days than not (m3j21/f3j24=1), and involved worrying about more than one thing (m3j22/f3j25=1 or m3j24/f3j27=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 (m3j23/f3j26=1 or m3j25/f3j28=1 or m3j26/f3j29=1). The types of physiological symptoms that characterize the worried, tense, or anxious period (criterion C) are then assessed in questions m3j27a-g/f3j30a-g.

As outlined in Table 23, if respondents endorse an anxious period that lasted at least 6 months (m3j19/f3j22=1), the above mentioned qualifiers are satisfied (m3j20/f3j23=1 and m3j21/f3j24=1 and either m3j22/f3j25=2 or m3j24/f3j27=1), lack of control over this anxious period was endorsed (m3j23/f3j26=2 or m3j25/f3j28=1 or m3j26/f3j29=1) and at least three of the physiological symptoms are endorsed (m3j27a-g/f3j30a-g =1), a probability of caseness equal to one is assigned.

Table 23: Generalized Anxiety Disorder (GAD) Caseness

Probable GAD Caseness	Year 3 Mothers	Year 3 Fathers
Yes (1)	193	109
No(0)	4029	3177
Totals	4222	3286

11.8. Scale – Family Mental Health History

11.8.1. Variables

Mother questions: **m3j45, m3j45a, m3j45b, m3j46, m3j46a, m3j46b, m3j47, m3j47a, m3j47b, m3j48, m3j48a, m3j48b, m3j49, m3j49a, m3j50, m3j50a, m3j50b, m3j51, m3j51a, m3j51b, m3j52, m3j52a, m3j52b, m3j53, m3j53a, m3j53b, m3j54, m3j54a** (28 variables)
Father questions: **f3j52, f3j53a f3j53b, f3j54, f3j54a, f3j54b, f3j55, f3j55a, f3j55b, f3j56, f3j56a, f3j56b, f3j57, f3j57a, f3j58, f3j58a, f3j58b, f3j59, f3j59a, f3j59b, f3j60, f3j60a, f3j60b, f3j61, f3j61a, f3j61b, f3j62, f3j62a** (28 variables)

The questions on family mental health history (addressing the mental health of the FFCWS respondents' mothers and fathers) are derived from the National Comorbidity Survey (NCS).

The NCS is a collaborative epidemiological investigation designed to study the prevalence and correlates of DSM III-R[40] disorders and patterns and correlates of service utilization for these disorders. The NCS was the first survey to administer a structured psychiatric interview to a nationally representative sample

A two-phase sample design was used in the NCS. The questions in the FFCWS derive from Part II of the NCS survey.[41] The Part II interview contained a section evaluating the history of five psychiatric disorders in respondents' natural mothers and fathers. The five disorders are: major depression (MD), generalized anxiety disorder (GAD), antisocial personality disorder (ASP), alcohol abuse/dependence (AAD), and drug abuse/dependence (DAD).[42] The FFCWS does not incorporate the questions on ASP. Like the NCS, FFCWS also addresses attempted suicide.

11.8.2. Modifications

Aspects of the Family History questions that are part of the NCS have been altered in the FFCWS. Specifically, the FFCWS asks the preliminary questions regarding the respondent's family history but does not include subsequent questions which evaluate the symptoms and social problems associated with the disorders (X3, X6, X8, X11, X16, X19, X20-25, X29, X32, X34, X37, X42, X45 and X46-51).

11.8.3. Scoring

Those questions which were omitted are critical to the scoring of the NCS, and therefore exclude the possibility of a comparable scoring procedure for the FFCWS.[43] One

[40] American Psychiatric Association. & American Psychiatric Association. Work Group to Revise DSM-III. (1987). *Diagnostic and statistical manual of mental disorders : DSM-III-R*. Washington, DC : American Psychiatric Association
[41] The NCS survey instrument is available at http://www.hcp.med.harvard.edu/ncs/Baseline_NCS.php . Section X contains family history questions used in Fragile Families.
[42] Kendler, K.S., Davis, C.G., Kessler, R.C. (1997). The familial aggregation of common psychiatric and substance use disorders in the National Comorbidity Survey: a family history study. *British Journal of Psychiatry* 170:541- 548
[43] For a description of procedures used to score MD, AAD, ASP and DAD in the NCS, see Endicott J., Andreasen, N. and Spitzer, R. L. (1978) *Family History Research Diagnostic Criteria*. New York: Biometrics Research Department, New York State Psychiatric Institute. For a description of procedures used to score GAD, see Kendler, K.S., Neale, M. C. Kessler, R. C., et. Al. (1992)

potential approach is to treat responses as symptom counts and simply sum them; however we make no official recommendations on how to score these items.

12. Cognitive and Behavioral Assessments

In Year 3 assessments (PPVT/TVIP) were administered to the primary caregiver and/or child in order to describe their cognitive ability. Survey questions regarding cognitive and behavioral development were also asked to the mother, father, PCG and caregiver included questions about impulsivity, internalizing behavior, externalizing behavior, delinquency and time-use. The following table displays in which survey one might find items from cognitive and behavioral development.

Table 24: Subtopics in Cognitive and Behavioral Assessments in Year 3 by survey instrument

Subtopics	**m**	**f**	**p**	**h**	**o**	**d**	**e**	**r**	**s**	**u**
Behavior	X		X	X	X	X	X	X	X	X
Cognitive Skills	X	X		X						

12.1. Scale – Peabody Vocabulary Test (PPVT)

The PPVT and Test de Vocabulario en Imagenes Peabody (TVIP) were administered to the focal child and PCG for families who had consented to participate in the In-Home Study (roughly 2,600 cases). Child's scores were computed based on the information recorded for Section B of the In-Home Activity Workbook. PCG's scores were computed based on information recorded for Section E of the In-Home Activity Workbook.

Child's and PCG's date of birth and date of measurement were also used for scoring. About ten percent of In-Home Study participants did not have PPVT/TVIP scores because the child or the PCG or both refused to participate in the tests or the tests could not be administered completely due to some irregularities. The survey firm MPR developed these scores.

12.1.1. Constructed Variables - PCG's PPVT scores

- **ch3ppvtage_m** PCG's age (months), calculated based on date at time of PPVT administration and the date of birth
- **ch3ppvtraw_m** PCG's raw PPVT score
- **ch3ppvtstd_m** PCG's standardized PPVT score
- **ch3pvbasal_m** PCG's PPVT basal value

The following variables were created to mark irregular PPVT administrations:

- **ch3pvnbasal_m** indicator variable whose value is 1 if no basal was reached
- **ch3pvtwceil_m** indicator variable whose value is 1 if two ceilings were reached.
- **ch3pvceilr_m** indicator variable whose value is 1 if the last block was administered because no ceiling was reached. This block was used for calculating the raw PPVT score in ch3ppvtraw_m.
- **ch3pvpercom_m** percent of items used for total score missing. If a high percent of the items is missing, PPVT raw score and standard score should not be used.

12.1.2. Constructed Variables - PCG's TVIP scores

- **ch3tvipraw_m** PCG's raw TVIP score
- **ch3tvipstd_m** PCG's standardized TVIP score
- **ch3tvbasal_m** PCG's TVIP basal value.
- **ch3tvceil_m** PCG's TVIP ceiling value.

The following variables were created to mark irregular TVIP administration:

- **ch3tvmis_m** number of missing items between the basal and the ceiling.
- **ch3tvnbasal_m** all records with no basal before adjustment. If no basal could be calculated, records were flagged and the basal was adjusted to 91.
- **ch3tvinback_m** interviewer back tested before item 91 but did not reach basal.
- **ch3tvnback_m** interviewer started at item 91, did not reach a basal and did not back test.
- **ch3tvback91_m** interviewer started at item 91, did not reach basal on first 8 items but reached basal after 91.
- **ch3tvnceil_m** if no ceiling was reached and test not administered to end.

12.1.3. Constructed Variables - Child's PPVT Scores

- **ch3ppvtage** child's age (months), calculated based on the date at time of PPVT administration and the date of birth.
- **ch3ppvtraw** child's raw PPVT score.
- **ch3ppvtstd** child's standardized PPVT score.

The following variables were created to mark irregular administrations:

- **ch3pvbasal** child's PPVT basal value
- **ch3pvnbasal** indicator to identify if no basal was reached
- **ch3misppvt** indicator to identify that PPVT was not administered to the child.
- **ch3pvtwceil** indicator to identify if two ceilings were reached.
- **ch3pvnceil** no ceiling was reached.
- **ch3pvceilr** last block administered if no ceiling was reached. This block was used for calculating ch3ppvtraw.
- **ch3pvpercom** percent of items for total score missing. If a high percent of the items is missing, total raw and standard score should not be used.

12.1.4. Constructed Variables - Child's TVIP Scores

- **ch3tvipraw** child's raw TVIP score

- **ch3tvipstd** child's standardized TVIP score
- **ch3tvipage** child's age at time of administering TVIP

The following variables were created to mark irregular TVIP administration:

- **ch3tvmis** number of missing items between the basal and the ceiling.
- **ch3tvbasal** child's basal TVIP value.
- **ch3tvceil** child's ceiling TVIP value.
- **ch3tvnceil** indicator to identify that no TVIP ceiling was reached and test not administered to end. Ceiling was set to highest score=49.

12.1.5. Scoring PPVT & TVIP

The following section provides information on how PPVT/TVIP scores (basal, ceiling, raw and standardized) were constructed. The raw data used to construct these variables is not released in public FFCWS data.

This explanation focuses on scoring and assumes some familiarity with the PPVT test materials and basic administration. Technical information (test construction and standardization, norm development, reliability and measurement error, and validity) is covered at length in Part 3 of the Examiner's Manual[44]. It will be helpful to refer to the "Practice Exercises Worksheet" on page 27[40].

Part 1: Calculating a raw score

There are two parts of this process, a) establishing a Basal and b) calculating a Ceiling.

Establishing a Basal - The Basal is the lowest set of items administered containing fewer than two errors. For the Year 3 In-Home Survey, respondents fell into two categories: the children, who were in the "age 2.6 - 3" category and therefore started with item one (the first set is always their basal); and the PCGs, who were in the "ages 17 - adult" category and therefore began with item 145 on set 13. This set did not necessarily set the adult's Basal; if she/he made more than one error in the set (items 145-156) the examiner administered lower sets (set 12, set 11, etc.) until the respondent completed a set with no more than one error – this set was then the respondent's Basal (set 13 was an adult's Basal if she completed the set with no errors or one error).

Calculating the Ceiling – Once a Basal was established, the examiner administered higher sets of items until the respondent (child or adult) made eight or more errors in a set. The examiner always completed administering a set of items, even if the respondent made eight errors before all items in the set have been administered. The highest set administered containing eight or more errors was the Ceiling Set; the last

[44] Dunn, L.M. and L.M. Dunn (1997). Examiner's Manual for the Peabody Picture Vocabulary Test, Third Edition. American Guidance Services, Inc.

item in this set was the "Ceiling Item." N.B. This can be confusing – for example, if an adult began with set 13, made eight errors (no Basal) and was therefore given set 12, where he also made eight errors, then he moved to set 11, at which point the adult completed this set without making any errors (establishing a Basal), his Ceiling Set was 13, not 12, and the Ceiling Item was 156.

Once Basal and Ceiling Sets are established, calculating the raw score is a straightforward process: add up all errors in every set that was administered and then subtract the total from the ceiling item. There are several practice exercises in the examiner's manual that illustrate both simple and more complex scoring scenarios.

Part 2: I have a raw score. Now what?

A Norms Booklet included with the PPVT Test Kit includes a set of tables for easy conversion from raw scores to standard score equivalents by age, percentile ranks, normal curve equivalents, stanines, and age equivalents. The Examiner's Manual also provides directions for how to obtain reliability confidence bands for most of these measures. As noted earlier, the Examiner's Manual, Part 2, Section D (pp. 26-35) provides a set of exercises that can help curious minds learn how to determine Basal and Ceiling Sets, calculate raw scores, locate and record normative scores, and estimate reliability confidence bands.

There are two parallel PPVT-III forms, IIIA and IIIB. For the Year 3 In-Home Study, we used only IIIA.

Part 3: Great. So what about the TVIP?

Test de Vocabulario en Imagenes Peabody (TVIP) is a measure of receptive vocabulary for Spanish-speaking children and adolescents. It was developed from parallel forms of a past edition of the PPVT using the most appropriate items for the Spanish population. You cannot directly correlate the PPVT and TVIP because they were normed on separate populations in different languages.

In contrast to the PPVT's 408 items (204 on form IIIA and 204 on form IIIB), the TVIP offers a single form with 125 items. It is appropriate for ages 2.5-18, while the PPVT includes national norms for ages 2.5-90+.

Scoring for the TVIP differs from scoring for the PPVT in several important ways. The most important are the following: a) a Basal for the TVIP is the highest eight consecutive correct responses; and b) the Ceiling is the lowest eight consecutive responses containing six errors. To help understand these basic rules, several illustrative examples are included on pp. 15-23 of the TVIP Examiner's Manual – English Edition.[45]

There will be several sources of confusion as a result of these differences for those familiar with only the rules for scoring the PPVT. For one, in the TVIP only errors made after the Basal are included in the error count used in determining the raw score

[45] Dunn, L.M., E.R. Padilla, D.E. Lugo, and L.M. Dunn (1986). Examiner's Manual for the Test de Vocabulario en Imagenes Peabody: Adaptacion Hispanoamericana (English-Language Edition). American Guidance Services, Inc.

(contrast with the PPVT rules that you must use the lowest Basal Set and include errors in every set that has been administered). The rule governing Ceilings is also a bit awkward in that without "sets" per se the examiner must constantly look at the current question as well as the preceding seven items to determine when the respondent has answered six of eight items incorrectly. Also, without pre-established "sets," as soon as a respondent gets one of the first eight items wrong, the interviewer must backtrack question by question until the respondent puts together a string of eight correct responses to establish a Basal. Thankfully, with the Basal and Ceiling established, the raw score is calculated as with the PPVT: Ceiling Item minus errors (remember, the TVIP only uses errors above the Basal) equals raw score.

More technical information for the PPVT-III is and TVIP is available online.

12.2. *Scale – Wechsler Adult Intelligence Scale – Revised (WAIS-R)*

12.2.1. Variables

Constructed: **cm3cogsc, cf3cogsc** mother/father variables of cognitive ability

Parental cognitive ability is measured as the sum of the correct items in the Similarities subtest of the Wechsler Adult Intelligence Scale – Revised (WAIS-R) [46].

Note: For some fathers, this measure was administered at the one-year follow-up. Therefore there may be a cognitive score on the Year 3 record for fathers not interviewed at Year 3.

These questions are taken from the Similarities subtest of the WAIS-R. The WAIS-R similarities test is one of 6 verbal tests and 5 performance tests designed to measure adult intelligence. The Similarities subtest is expected to measure verbal concept formation and reasoning abilities. Performance on these items may also reflect long-term memory and cultural opportunities. When given in its entirety, the WAIS-R Similarities subtest is reliable (r=.84) and is moderately correlated with the WAIS-R Full Scale IQ (r=.75). 62% of its variance may be attributed to a general intelligence factor, or *g.*

Responses to the word association questions are scored as two, one, or zero. A score of two indicates that the respondent recognized a conceptual similarity or general classification; a one indicates a specific property or more concrete similarity; and zero indicates the respondent identified no relationship at all or an inaccurate one. For example, when asked, "In what way are an orange and a banana alike?" the respondent who answered "both are fruit" would receive a two, one who said "both are foods" would get a one, and a respondent who said "I don't know" or "both are round" would receive a score of zero. Sample answers that would receive a score of two, one, or zero are provided by Wechsler. When a respondent gives one of these answers, the corresponding score is assigned. All other responses (that is, those that are not on the list) are scored on an individual basis according to general criteria of pertinence and conceptual quality.

12.2.2. Modifications

The similarities test consists of 14 items. The FFCWS includes a subset of eight items taken from the similarities test (items 1, 2, 5, 8, 9, 12, 13, and 14). The alpha for these items using the FFCWS mother sample is .60 and the father sample is .59.

The WAIS-R similarities test is normally administered in person by an examiner. Test items are arranged in sequence from easiest to most difficult. Examiners are instructed to discontinue the test after four consecutive failures, where failure means a score of zero. Examiners are instructed to probe respondents who have provided an unclear or ambiguous response. Answers provided in response to probing may either "spoil" or "improve" an original response. Any spoiled response is scored zero. If a second

[46] Wechsler, David. Wechsler Adult Intelligence Scale – Revised (WAIS-R Manual). The Psychological Corporation. Harcourt Brace Jovanovich, 1981.

response is intended to replace an earlier response, the earlier response should be ignored and the second one scored. The eight word association items included in the FFCWS were asked as part of the Core Study. As in the original WAIS-R test, the items were ordered from easiest to most difficult. However, telephone interviewers on the FFCWS were not trained to score responses or to probe answers, as required in the original WAIS-R. FFCWS telephone interviewers keyed the verbatim response as it was provided by the respondent.

Scoring of responses was completed by FFCWS research staff after data had been collected from all survey respondents. Scoring was conducted in two stages. First, responses were scored electronically by programming key words and key phrases for each score. Results of electronic scoring were reviewed and responses that did not fit any of the key words were scored by hand.

To test the validity of modified WAIS-R score in the FFCWS Survey, we ran correlations between the mother's education level, the mothers' Peabody Picture Vocabulary Test (PPVT) score, and the child's PPVT score at age 3 (PPVT scores are available for a subset of the FFCWS sample). The correlations are presented below.

Table 25: Modified WAIS-R, education and PPVT score correlations

	Mother's Education	Mother's PPVT	Child's PPVT
Mother's WAIS-R summed score	0.1979	.3886	0.3916

Using mother's education at baseline. PPVT samples are English-speakers only. PPVT scores are standardized.

12.2.3. Scoring Information

We provide the sum of the raw scores, ranging from zero to sixteen, to provide a rough estimate of cognitive ability. This index may serve as a dependent or independent variable using statistical methods appropriate for truncated discrete variables.

Given the departures from standard WAIS-R administration procedures (e.g., using only 8 items, not probing, not scoring while testing, and not stopping after four consecutive failures), it is not possible to use WAIS-R norms to evaluate these scores (e.g., by providing percentiles or cut-scores).

12.3. Scale – Impulsivity

12.3.1. Variables

Mother questions: **m3j44a-m3j44f** (6 variables) – *available for 18-cities only*[47]

The impulsivity questions included in the Year 3 Mother's Survey are an abbreviated form of Dickman's impulsivity scale. [48]

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 (Farrington 1998)[49]. This finding from psychological research is consistent with sociological theory that shows that capacity for self-control is a key determinant of crime (Gottfredson and Hirschi 1990)[50]. 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.[46]

A study by H. Caci et al.[51] translated the Dickman questionnaire into French and asked male and female students to answer the items, to test the scale's validity. They find that males tend to score higher in functional impulsivity than females. However, the study shows that Functional Impulsivity (FI) and Dysfunctional Impulsivity (DI) scores are independent of gender, probably independent of age, and that the distribution shapes are similar between genders.

12.3.2. Modifications

The full impulsivity scale developed by Dickman consists of 23 items.[46] Twelve items loaded primarily for dysfunctional impulsivity and these items are listed in the table below. The twelve items had an alpha of .86. The Core Year 3 Survey includes six of these items (the items with positive weights), as indicated in the table. The alpha for these items using the FFCWS father sample is .84.

12.3.3. Scoring Information

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 factor loadings.

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[47] Father's impulsivity is obtained at the one-year follow-up.

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

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

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

[51] Caci, H. et al. (2003) Functional and Dysfunctional Impulsivity: contribution to the construct validity. Acta Psychiatr Scand, 107, 34-40.

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 26: Dickman's Factor Loadings and Corresponding FFCWS Items[46]

Variables	Source Item
m3j44a	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.
m3j44f	I often make up my mind without taking the time to consider the situation from all angles.
m3j44b	Often, I don't spend enough time thinking over a situation before I act.
m3j44d	I often get into trouble because I don't think before I act.
m3j44e	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.
m3j44c	I often say and do things without considering the consequences.

12.4. Scale - Child Behavior Problems (CBCL)

12.4.1. Variables

PCG questions: **p3m1, p3m2, p3m2a, p3m2b, p3m2c, p3m3, p3m3a, p3m3b, p3m5, p3m6, p3m6a, p3m6b, p3m7, p3m7a, p3m9, p3m10, p3m11, p3m13, p3m14, p3m16, p3m17, p3m18, p3m18a, p3m18b, p3m19, p3m21, p3m21a, p3m22, p3m23, p3m25, p3m26, p3m26a, p3m28, p3m28a, p3m29, p3m30, p3m31, p3m32, p3m33, p3m35, p3m36, p3m37, p3m38, p3m39, p3m40, p3m40a, p3m41, p3m42, p3m44, p3m45, p3m46, p3m47, p3m48, p3m49, p3m50** (55 variables)

This measure includes some of the items and scales from the *Child Behavior Checklist* 2-3[52] (also known as the *Achenbach System of Empirically Based Assessment*, or *ASEBA*[53]). The purpose of this assessment was to obtain maternal ratings of children's behavioral problems and prosocial behavior.

When children were approximately 36 months of age, PCGs were asked these questions as part of the In-Home Study, during a telephone or home interview, following the Core study interview.

Items were read to each PCG, who was asked to indicate whether the statement was not true (0), sometimes or somewhat true (1), or very true or often true of her child (2). Scores for subscales can be calculated either by adding scores for each item (allowing comparison to T-scores and percentiles for the normalization sample for each subscale – see below) or by averaging item scores.

A subset of questions from CBCL 2000[50] Scale was also asked about the child in the child care provider or the family care provider surveys **(d3c15a-d3c15ff; r3a19a-r3a19ff).**

12.4.2. Modifications

In the Year 3 In-Home pilot survey, a set of 50 items were administered, including all items from the 1992 *CBCL*[51] Aggressive Behavior and Withdrawn subscales, all but one item from the 1992 *CBCL*[51] Anxious/Depressed scale ("nervous movements or twitching" was inadvertently substituted for "nervous, high strung, tense").

Before the survey was also administered in the remaining 18 cities, the measure was expanded to include all of the scales listed in the Description section, with "nervous, high strung, tense" added, and "nervous movements or twitching" deleted. In the 18 city version of the survey 65 questions were asked. These comprised 56 of the original 100 behavior problem items from the CBCL: 1) the Aggressive Behavior, Withdrawn and Anxious/Depressed subscales for the 2000 version of the *CBCL*/1.5-5[51], 2) the Aggressive

[52] Achenbach, T.M. (1992). Manual for the Child Behavior Checklist / 2-3 and 1992 Profile. Burlington, VT: University of Vermont Department of Psychiatry.

[53] Achenbach, T.M., & Rescorla, L.A. (2000). Manual for the ASEBA Preschool Forms and Profiles. Burlington, VT: University of Vermont, Research Center for Children, Youth & Families.

Behavior, Withdrawn and Anxious/Depressed subscales for the 1992 version of the *CBCL*/23[50], 3) the 1988 *CBCL*/2-3 Aggressive Behavior subscale[54].

The Anxious/Depressed subscale for the 20 cities sample includes all but one ("nervous, high strung, or tense") of the 11 items from the CBCL 1992. The Withdrawn subscale for the 20 cities includes the entire CBCL 1992 Withdrawn scale. The Total Internalizing scale includes all but one of the Internalizing items from the CBCL 1992. The Aggressive subscale includes the entire CBCL 1992 Aggressive scale.

The Anxious/Depressed subscale for the 18 cities sample includes all of the 11 items from the CBCL 1992. The Withdrawn subscale for the 18 cities includes the entire CBCL 1992 Withdrawn scale. The Total Internalizing scale includes all of the Internalizing items from the CBCL 1992. The Aggressive subscale includes the entire CBCL 1992 Aggressive scale. The Destructive subscale includes 7 of the 11 CBCL 1992 Destructive scale items. The Total Externalizing scale includes all but 4 of the CBCL 1992 Externalizing scale items. See table below to determine which items are included in which subscale.

Contents of the following items were changed following the pilot: **p3m25** and **p3m38**. Refer to questionnaires for details. In the data, items specific for the pilot survey were marked with the words "two cities only" in the variable labels and these variable names end with "_x".

Table 27: CBCL Subscales and Diagnostics; Aschenbach & Rescorla, 2000[51]

Question	*N*	*Item*
Anxious/Depressed (8 variables)		
Clings to adults	3246	p3m3
Feelings hurt easily	3245	p3m16
Too upset by separation	3239	p3m19
Look unhappy	3246	p3m22
Nervous/high strung	2803	p3m25*
Self-conscious/easily embarrassed	3243	p3m32
Too fearful	3245	p3m42
Looks sad	3242	p3m46
Alpha on full sample = .62		
* In 2 cities, asked about nervous twitching instead		
Withdrawn (8 variables)		
Acts too young for age	3248	p3m1
Avoids eye contact	3248	p3m2
Doesn't answer when spoken to	3244	p3m9
Refuses to participate in games/activities	3241	p3m29
Unresponsive to affection	3245	p3m31
Shows little affection	3234	p3m35
Shows little interest in things	3245	p3m36
Withdrawn/doesn't get too involved	3241	p3m50

[54] McConaughty, S. H., & Achenbach, T. M. (1988). *Practical guide for the Child Behavior Checklist and related materials*. Department of Psychiatry, University of Vermont.

Question	*N*	*Item*
Alpha on full sample = .66		
ADHD (from diagnostics, not from CBCL; 6 variables)		
Can't concentrate	2813	p3m2a
Can't sit still	2814	p3m2b
Quickly shifts activities	2803	p3m28a
Can't wait turn	2814	p3m2c
Demanding	3243	p3m6
Gets into everything	2809	p3m18a
Alpha on full sample = .66		
Most asked to 18 cities only		
Aggressive (19 variables)		
Can't wait turn	2814	p3m2c
Defiant	3213	p3m5
Demanding	3243	p3m6
Destroys others' things	2809	p3m6b
Disobedient	3248	p3m7
Does not feel guilty after misbehaving	3243	p3m13
Easily frustrated	3248	p3m14
Gets in fights	3244	p3m18
Hits others	3243	p3m21
Hurts animals/people without meaning to	2803	p3m21a
Angry moods	3245	p3m23
Attacks people	2802	p3m26a
Punishment doesn't change behavior	3236	p3m28
Screams a lot	3245	p3m30
Selfish/won't share	3247	p3m33
Stubborn/sullen/irritable	3241	p3m39
Temper tantrums	3246	p3m41
Uncooperative	3240	p3m44
Wants a lot of attention	3244	p3m48
Alpha on full sample = .88		
Opposition Defiant Disorder (6 items; subset of aggressive from the 2000 Diagnostics, not the CBCL)		
Defiant	3213	p3m5
Disobedient	3248	p3m7
Angry moods	3245	p3m23
Stubborn/sullen/irritable	3241	p3m39
Temper tantrums	3246	p3m41
Uncooperative	3240	p3m44
Alpha on full sample = .77		

Table 28: CBCL Summary of Subscales in 18 cities In-Home Interview 1992 CBCL

CBCL 1992 Subscale	Items	Alpha[55]	N[56]	Mean (SD)	Range	Skew	Kurtosis
Anxious/Depressed	p3m3, p3m16, p3m19, p3m22, p3m25, p3m26, p3m32, p3m37, p3m42, p3m46, p3m48	0.69	2809	RAW: 5.34 (3.21) AVEGD: .49 (.29)	0-19 0-1.73	0.74	0.32
Withdrawn	p3m1, p3m2, p3m9, p3m10, p3m11, p3m13, p3m29, p3m31, p3m35, p3m36, p3m39, p3m44, p3m45, p3m50	0.74	2810	RAW: 4.20 (3.50) AVEGD: .30 (.25)	0-22 0-1.57	1.22	1.93
Total Internalizing	Anxious/depressed & withdrawn items	0.82	2810	RAW: 9.54 (5.96) AVEGD: .38 (.24)	0-38 0-1.52	1.02	1.29
Aggressive	p3m5, p3m6, p3m7, p3m14, p3m17, p3m18, p3m21, p3m23, p3m28, p3m30, p3m33, p3m40, p3m41, p3m47, p3m49	0.86	2809	RAW: 9.48 (5.88) AVEGD: .63 (.39)	0-30 0-2.00	0.58	-0.04
Destructive	p3m2a, p3m3b, p3m6a, p3m6b, p3m18a, p3m21a, p3m28a	0.64	2809	RAW: 3.81 (2.40) AVEGD: .54 (.34)	0-13 0-1.86	0.85	0.74
Total Externalizing	Aggressive and destructive items	0.88	2809	RAW: 13.29 (7.68) AVEGD: .60 (.35)	0-42 0-1.91	0.68	0.2
Total CBCL	Anxious/depressed, withdrawn, aggressive, destructive items, 1 sleep problem and 8 other problem items	0.93	2808	RAW: 26.99 (15.06) AVEGD: .48 (.27)	0-88 0-1.57	0.77	0.46

[55] Scale alphas are computed using only cases with valid responses on all items in the scale; for Anxious/Depressed, n = 2760; for Withdrawn, n = 2741; for Total Internalizing, n = 2699; for Aggressive, n = 2741; for Destructive, n = 2778; for Total Externalizing, n = 2713; for Total CBCL, n = 2592.

[56] Ns for each scale apply to the scale means, standard deviations, ranges, and skew and kurtosis statistics; they reflect the number of cases that have valid responses on at least 80% of the scale items; for cases with fewer than the total number of items, the raw score was multiplied by (total # scale items/case total # of items).

Table 29: CBCL Summary of Subscales in 20 cities In-Home Interview1992 CBCL

CBCL 1992 Subscale	Items	Alpha[57]	N[58]	Mean (SD)	Range	Skew	Kurtosis
Anxious/Depressed	p3m3, p3m16, p3m19, p3m22, p3m26, p3m32, p3m37, p3m42, p3m46, p3m48	0.66	3246	RAW: 5.27 (3.03)	0-17	0.6	0.01
				AVEGD: .43 (.30)	0-1.70		
Withdrawn	p3m1, p3m2, p3m9, p3m10, p3m11, p3m13, p3m29, p3m31, p3m35, p3m36, p3m39, p3m44, p3m45, p3m50	0.74	3247	RAW: 4.30 (3.47)	0-22	1.15	1.71
				AVEGD: .31 (.25)	0-1.57		
Total Internalizing	Anxious/depressed & withdrawn items	0.81	3247	RAW: 9.58 (5.76)	0-36	0.91	0.96
				AVEGD: .65 (.39)	0-1.50		
Aggressive	p3m5, p3m6, p3m7, p3m14, p3m17, p3m18, p3m21, p3m23, p3m28, p3m30, p3m33, p3m40, p3m41, p3m47, p3m49	0.86	3246	RAW: 9.70 (5.87)	0-30	0.53	-0.13
				AVEGD: .65 (.39)	0-2.00		
Total CBCL	Anxious/depressed, withdrawn and aggressive items	0.90	3245	RAW: 19.28 (10.72)	0-88	0.77	0.46
				AVEGD: .48 (.27)	0-1.57		

[57] Scale alphas are computed using only cases with valid responses on all items in the scale; for Anxious/Depressed, n = 3200; for Withdrawn, n = 3170; for Total Internalizing, n = 3131; for Aggressive, n = 3159; for Total CBCL, n = 3057.
[58] Ns for each scale apply to the scale means, standard deviations, ranges, and skew and kurtosis statistics; they reflect the number of cases that have valid responses on at least 80% of the scale items; for cases with fewer than the total number of items, the raw score was multiplied by (total # scale items/case total # of items).

12.5. Scale – Adaptive Social Behavior Inventory (ASBI)

12.5.1. Variables

PCG questions: **p3m4, p3m8, p3m12, p3m15, p3m20, p3m24, p3m27, p3m34, p3m43** (9 variables)

These items were adapted from the Express subscale of the *Adaptive Social Behavior Inventory*[59,60,61]. The ASBI is designed to be an educator's report of child social skills.

When children were approximately 36 months of age, PCGs were asked these questions as part of the In-Home Study, over the telephone or during the home interview, following the Core Study interview. The purpose of this assessment was to obtain maternal (or caregiver) ratings of children's prosocial behavior. Items were read to each PCG, who was asked to indicate whether the statement was not true (0), sometimes or somewhat true (1), or very true or often true of her child (2). Scores for subscales can be calculated either by adding scores for each item (allowing comparison to T-scores and percentiles for the normalization sample for each subscale – see below) or by averaging item scores.

12.5.2. Modifications

In the Year 3 In-Home pilot survey, a set of 10 positive behavior items whose provenance is unknown were used. Before the survey was also administered in the remaining 18 cities, these 9 *ASBI* positive items were substituted for the 10 positive behavior items previously used.

Table 30: Variables included from the ASBI Subscale at Year 3

	Items	Alpha[62]	N	Mean (SD)	Range	Skew	Kurtosis
ASBI Express Subscale	p3m4, p3m8, p3m12, p3m15, p3m20, p3m24, p3m27, p3m34, p3m43	0.72	2809	RAW: 15.40 (2.63)	0-18	-1.31	1.76
				AVEGD: 1.71 (.29)	0-2.00		

[59] Achenbach, T.M., & Rescorla, L.A. (2000). Manual for the ASEBA Preschool Forms and Profiles. Burlington, VT: University of Vermont, Research Center for Children, Youth & Families.
[60] Greenfield, D.B., Wasserstein, S.B., Gold, S., & Jorden, B. (1997). The Adaptive Social Behavior Inventory (ASBI): Evaluation with high-risk preschoolers. Journal of Psychoeducational Assessment, 15, 322-333.Helping Low Birth Weight, Premature Babies (pp. 335-340), Stanford, CA: Stanford University Press.
[61] Hogan, A.E., Scott, K.G., & Bauer, C.R. (1992). The Adaptive Social Behvaior Inventory (ASBI): A new assessment of social competence in high-risk three-year-olds. Journal of Psychoeducational Assessment, 10, 230-239.
[62] Scale alphas are computed using only cases with valid responses on all items in the scale; for the ASBI, n = 2765.

13. Employment

At Year 3, the child's mother, father, PCG and child care provider were asked about their employment. PCGs were administered an employment calendar, as part of the In-Home Activity Workbook, to record detailed data about their employment history. Mothers and fathers were asked about their type of employment, including traditional and non-traditional employment, and unemployment. In traditional work questions, respondents were asked about their regular forms of work, the typical times they spend at work and how often they've worked in the last year. Non-traditional work questions also included information about types of work (including working for self, "hustles", and other work) and how much time was spent working these jobs. Questions related to unemployment included if the respondent was looking for a regular job, how long had they been looking, and when they last received a regular paycheck. In work stress/flexibility, both mother and father answered questions related to attitudes surrounding their work, such as whether it is true or false that their shift/work schedule causes extra stress for them and child or whether their schedule is flexible enough to handle their family's needs.

Table 31: Subtopics in Employment in Year 3 by survey instrument

Subtopics	m	f	p	h	o	d	e	r	s	u
Employment Calendar				X						
Traditional work	X	X				X		X		
Non-traditional work	X	X								
Unemployment	X	X								
Work stress/flexibility	X	X								

13.1. Constructed Variables - Employment Calendar Variables

PCGs were administered an employment calendar, as part of the In-Home Activity Workbook, to record detailed data about their employment history. A similar calendar was also administered for the PCGs child care schedule. 2,055 respondents completed the child care and/or employment calendars at Year 3 and approximately 1,400 respondents completed both. Please note there are approximately 1,200 respondents who completed the In-Home activities or the PCG telephone survey at the Year 3 wave but do not have child care or employment calendar data.

In order to complete an employment history calendar at the Year 3 wave of data collection, a respondent had to work in a paid job for at least two weeks since the "focal" child was born. The respondent was instructed to start by describing characteristics of the first job following the birth of their child and, then, each subsequent job. The employment calendars collected information on the length of time the respondent spent in each job and the hours and shifts worked. Data users should refer to questions F2 through F14 in the Year 3 In-Home Activity Workbook for the exact wording of the survey questions.

Please note that the employment history variables do not correspond precisely to the questions in the Employment History Calendar sections of the Year 3 In-Home Activity Workbook. For example:

- The first question asked is whether the respondent "worked in a paid job for at least two weeks in a row." Those who responded "no" to this question will have a "0" in the variable for the total number of jobs and then no subsequent values in the variables which store substantive information about particular jobs. Those who responded "yes" to this question will have a value of "1" or greater for the total number of jobs. These respondents will have been asked for substantive information on each job based on how many times they continued to say that they had additional jobs at the end of the section.
- This Year 3 file does not contain the variable that was asked at each wave regarding the "ideal" number of total hours the respondent would like to work each week.

At each wave, the employment calendar collected a short set of basic descriptive variables, including the date of the interview (ch3emp_month and ch3emp_year) and the total number of jobs the respondent has had (ch3emp_totjob). The employment calendars also collected descriptive information on up to 10 jobs that the respondent had had by the time of the interview. The employment calendar also contains supplemental information that denotes when significant changes in hours and/or work shifts for a particular job occurred, if applicable.

Table 32: Employment Calendar Variables

Constructed Variable	Description
ch3emp_year	Date of interview (year)
ch3emp_month	Date of interview (month)
ch3emp_job_[0-9]	Whether employed in Job N
ch3emp_totjob	Number of Jobs (total)
ch3emp_leave_[0-9]	Leave protected in Job N
ch3emp_hrwk_[0-9]	Hours worked per week in Job N
ch3emp_cs_[0-9]	Change in shift for Job N
ch3emp_csday[1-5]_[0-9]	Change in shift is for Job N is day
ch3emp_cseve[1-5]_[0-9]	Change in shift for Job N is evening
ch3emp_csnum_[0-9]	Number of changes in shift
ch3emp_csrot[1-5]_[0-9]	Change in shift for Job N is night
ch3emp_csswi[1-5]_[0-9]	Change in shift for Job N is swing
ch3emp_shday_[0-9]	Shift for Job N is day
ch3emp_sheve_[0-9]	Shift for Job N is evening
ch3emp_shrot_[0-9]	Shift for Job N is night
ch3emp_shswi_[0-9]	Shift for Job N is swing
ch3emp_chhr[1-5]_[0-9]	Hours worked per week for Job N after change
ch3emp_chnum_[0-9]	Number of hour changes for Job N
ch3emp_csq[1-5]_[0-9]	1st day of 1st/2nd/3rd/4th quarter of year in which shift change occurred
ch3emp_chq[1-5]_[0-9]	First day of 1st/2nd/3rd/4th quarter of year in which hour change occurred
ch3emp_startq_[0-9]	First day of 1st/2nd/3rd/4th quarter of year in which job started
ch3emp_endq_[0-9]	First day of 1st/2nd/3rd/4th quarter of year in which job ended

Note: 0 denotes 10th job; 1-5 is the shift or hour change within the job that is being referred to

13.2. Open Ended Response Codes - Occupations

For **traditional employment**, we constructed an occupation variable for mothers (m3k12) and fathers (f3k12) based on the 3 digits codes from the U.S. Bureau of Labor Statistics (BLS) Occupational Classification System by Major Occupational Groups. These categories are summarized below:

101 – Professional, Technical, and Related Occupations (Group A)
102 – Executive, Administrative, and Managerial Occupations (Group B)
103 – Sales Occupations (Group C)
104 – Administrative Support Occupations, including Clerical (Group D)
105 – Precision Production, Craft, and Repair Occupations (Group E)
106 – Machine Operators, Assemblers, and Inspectors (Group F)
107 – Transportation and Material Moving Occupations (Group G)
108 – Handlers, Equipment Cleaners, Helpers, and Laborers (Group H)
109 – Service Occupations, except Private Household (Group K)
110 - Other

For **non-traditional employment** (e.g. working in own business and other sources of income), occupation variables (*3k24a, *3k25a, *3k27a) were coded using a slightly different set of categories designed by staff that incorporated some additional categories necessitated by the data. The staff followed the classifications described by Occupational Classification System by Major Occupational Groups (though these code numbers differ slightly):

101 - Professional
102 – Clerical/Administrative Support
103 -- Sales
104 - Maintenance
105 - Hair/Beauty
106 - Babysitting
107 - Landscaping
108 – Automotive
109 – Food services
110 - Cleaning
111 - Arts/Entertainment
112 - Other

14. Childcare

At Year 3, both mother and father were asked about their childcare arrangements. PCGs were also administered a child care calendar as part of the In-Home Activities. The child's caregiver (whether a family caregiver or from a child day care center), answered questions regarding the type of service offered (ex: whether the school is head start, whether the school provides scholarships, the school's policy if the child is suspected of being abused), the characteristics other kids they care for (ex: the number of children being cared core, their ages, their special needs) and the day care center's other staff members (ex: whether the center administers performance evaluations, whether the staff undergo training, the kinds of benefits the staff receive).

Table 33: Subtopics in Childcare in Year 3 by survey instrument

Subtopics	**m**	**f**	**p**	**h**	**o**	**d**	**e**	**r**	**s**	**u**
Childcare Calendar				X						
Childcare Services and Availability	X	X	X			X	X	X	X	X
Childcare Center Composition						X	X	X		
Childcare Staff Characteristics						X		X		

14.1. Constructed Variables - Child Care Calendar

At the Year 3 wave of data collection, PCGs were administered a child care calendar as part of the In-Home Activity Workbook. The child care calendars collected information on type, hours, and duration of child care arrangements that the focal child had been in. In order to complete a child care calendar at the Year 3 wave of data collection, the child had to ever have been cared for by someone other than the respondent parent on a regular basis.

The respondent was instructed to start by describing characteristics of the first child care arrangement the child was in and, then, each subsequent child care arrangement. Data users should refer to questions F15 through F25 in the Year 3 In-Home Activity Workbook for the exact wording of the survey questions.

Please note that the child care arrangement variables in these files do not correspond precisely to the questions in the Child Care Calendar sections of the Year 3 In-Home Activity Workbook. For example:

- The first question asked is whether the focal child had ever been cared for on a regular basis by someone other than the respondent. Those who responded "no" to this question will have a "0" in the variable for the total number of child care arrangements and then no subsequent values in the variables which store substantive information about particular arrangements. Those who responded "yes" to this question will have a value of "1" or greater for the total number of arrangements. These respondents will have been asked for substantive information on each arrangement based on how many times they continued to say that they had additional arrangements at the end of the section.

- This file does not contain variables that directly correspond to final two questions in the Child Care Calendar sections (F26/F27 in the Year 3 wave); these questions were created to lead interviewers through a script inviting the respondent to participate in the Child Care Provider Survey.

At each wave, the child care calendar collected a short set of basic descriptive variables, including the date of the interview (ch3cc_month and ch3cc_year), the total number of arrangements the respondent has had for the focal child (ch3cc_totarr).

The child care calendars also collected descriptive information on up to 10 child care arrangements that the respondent had had by the time of the interview. The child care calendars may also contain supplemental information that denotes when significant changes in hours the focal child spends in a particular arrangement occurred.

Table 34: Child Care Calendar Variables

Constructed Variable	Description
ch3cc_year	Date of interview (year)
ch3cc_month	Date of interview (month)
ch3cc_arr_[0-9]	Whether child care in Arrangement N
ch3cc_totarr	Number of arrangements (total)
ch3cc_vouch_[0-9]	Voucher provided in Arrangement N
ch3cc_prov_[0-9]	Type of provider – additional documentation in instrument
ch3cc_provlo_[0-9]	Location provider – additional documentation in instrument
ch3cc_cch_[0-9]	Indicates any significant change in hours for Arrangement N
ch3cc_cchhr[1-5]_[0-9]	Hours child in Arrangement N per week after change
ch3cc_cchnum_[0-9]	Number of hour changes for arrangement N
ch3cc_cchq[1-5]_[0-9]	First day of 1st/2nd/3rd/4th quarter of year in which house change occurred
ch3cc_chrwk_[0-9]	Hours worked per week child in Arrangement N
ch3cc_cstrtq_[0-9]	First day of 1st/2nd/3rd/4th quarter of year in which arrangement started
ch3cc_cendq_[0-9]	First day of 1st/2nd/3rd/4th quarter of year in which arrangement ended

Note: 0 denotes 10th child care arrangement; 1-5 references to the significant hour change within the arrangements that is being referred to.

14.2. Scale – Family Child Care Environment Rating Scale (FDCRS)

14.2.1. Variables

Family Care Provider Observation questions: **s3f1-s3f7, s3i1-s3i5, s3i6a, s3i6b, s3i7-s3i13, s3i14a, s3i14b, s3i15a, s3i15b, s3i16-s3i29, s3l1-s3l11** (50 variables)

For children who were in family day care settings, the Year 3 Child Care Study included observational data from the interviewer on the conditions of the home the family day care was based in. The FDCRS is designed to assess family child care programs conducted in a provider's home for children from infancy through school-age.

The scale consists of 37 items organized into 7 subscales:

- Space and Furnishings
- Personal Care Routines
- Listening and Talking
- Activities
- Interaction
- Program Structure
- Parents and Provider

14.2.2. Scoring

Ratings are to be assigned in the following way:

- Ratings are based on the current situation that is observed or reported, not on future plans.
- A rating of 1 is given if any part of that description applies.
- A rating of 3 or 5 is given only if all parts of the description are met. All positive descriptions in 3 must be met before any higher rating is given for an item.
- A mid-point rating of 2 is given if nothing in 1 is present and half or more of 3 is observed.
- Any observations listed under rating 3 (minimal) that have an asterisk beneath the check box are considered "negative minimal" observations. If any of these behaviors are NOT observed (and so not checked), you may advance to the next rating level if all other observations are checked.
- A mid-point rating of 4 or 6 is given when all of the lower and half or more of the next higher description applies. Partial credit within indicators may be given for mid-point ratings.
- A rating of 7 is given only when all of the description in 5 plus all of the description in 7 applies.
- Some items and indicators apply only to certain age groups. If even one child is within that age group, the item should be rated.
- If an item is not applicable because it refers to older or younger children than those enrolled, write N/A next to the box. Score the item as if that indicator wasn't there.

14.3. Scale – Early Childhood Environment Rating Scale (ECERS)

14.3.1. Variables

Child *Care Center Observations:* **e3f1-e3f7, e3i1-e3i38, e3l1-e3l11,** (56 variables)

For children who were in child care center settings, the Year 3 Child Care Study included observational data from the interviewer on the conditions of the center, using the revised Early Childhood Environment Rating Scale (ECERS)[63]. The revised ECERS contains inclusive and culturally sensitive indicators for many items. Also, new items were added on Interaction (staff-child, child-child and discipline), Curriculum (nature/science and math/number), Health & Safety and Parents & Staff.

The scale consists of 43 items organized into 7 subscales:

- Space and Furnishings
- Personal Care Routines
- Language-Reasoning
- Activities
- Interactions
- Program Structure
- Parents and Staff

14.3.2. Scoring

Ratings are to be assigned in the following way:

- A rating of 1 must be given if any indicator under 1 is checked.
- A rating of 2 is given when all indicators under 1 are not checked and at least half of the indicators under 3 are checked.
- A rating of 3 is given when all indicators under 1 are not checked and all indicators under 3 are checked.
- A rating of 4 is given when all indicators under 3 are met and at least half of the indicators under 5 are checked.
- A rating of 5 is given when all indicators under 5 are checked.
- A rating of 6 is given when all indicators under 5 are met and at least half of the indicators under 7 are checked.
- A rating of 7 is given when all indicators under 7 are checked.
- A score of NA (Not Applicable) may only be given for indicators or for entire items when "NA permitted" is shown on the scale. Indicators that are scored NA are not counted when determining the rating for an item, and items scored NA are not counted when calculating subscale and total scale scores.

[63] Harms, T., Clifford, R. M., & Cryer, D. (2014). Early Childhood Environment Rating Scale, third edition (ECERS-3). New York, NY: Teachers College Press.

15. Romantic Relationships

A number of questions were asked during the Year 3 mother and father surveys to understand the parent's romantic relationship with one another as well as, if applicable, new partners. Questions were asked regarding their relationship quality with their partner (i.e. communication, supportiveness, cooperation, intimate partner violence) and their relationship status (whether they are married, cohabiting, dating, no longer together) and to whom. Constructed variables regarding their relationship status was made by the CRCW staff.

Table 35: Subtopics in Romantic Relationships in Year 3 by survey instrument

Subtopics	m	f	p	h	o	d	e	r	s	u
Relationship Quality	X	X								
Relationship Status	X	X	X			X		X		

15.1. Constructed Variables - Mother's relationship with child's father

- **cm3relf** mother's reported romantic relationship with child's father at Year 3

In the Year 3 Mother Survey, the mother's relationship with the child's father was recorded based on information reported by the mother. Mothers were asked about their relationship status with the baby's father (m3a4), and cohabitation status as reported in question m3a4a1.

Mothers were considered married to the focal child's father for cm3relf if m3a4 =1. For mothers who reported to be romantically involved (m3a4=2), m3a4a1 was tabulated to determine the cohabitation status. Mothers who were romantically involved and lived with their respective babies' fathers "all or most of the time" were considered to be romantically involved – cohabiting (cm3relf=2). Mothers who were romantically involved with the respective babies' fathers but lived with father only "some of the time" were coded as rom-some visit (cm3relf=3). Mothers who were romantically involved with the respective babies' fathers but lived with them only "rarely", "never" or "rarely/never" were coded as rom-no-visit (cm3relf=4). Mothers who didn't live with the respective babies' fathers due to separation, divorce or death were coded as "sep/div/wid" (cm3relf=5). The three additional categories in the cm3relf variable: "friends", "not in any kind of relationship" and "father unknown" are based on mothers' report in m3a4.

Table 36: Constructed variables about parents' romantic relationships

Constructed Variable	Description of Constructed Variable
cm3alvf	Mother age when started living with father (years)
cm3amrf	Mother age when married father (years)
cm3cohf	Mother living with (not married) child's father at Year 3
cf3cohm	Father living with (not married) child's mother at Year 3
c[m|f]3cohp	Mother/Father living with (not married) new partner at Year 3
cm3marf	Mother married to baby's father at Year 3
cf3marm	Father married to baby's mother at Year 3
c[m|f]3marp	Mother/Father married to new partner at Year 3
cm3relf	Mother relationship with father at Year 3

16. Parenting

Questions were asked to the mother, father and PCG at Year 3 – about the respondent's relationship to their child and parenting practices. Questions about child welfare services include questions asked of the PCG about contact with Child Protective Services and questions asked of the mother and father about the focal child's foster parents, if applicable. In the category of parent-child contact are questions related to the time parent spends with child and the extent of their communication and visitation, for those parents who do not live with their child. In the parenting abilities subtopic, are questions regarding parent's decision-making, co-parenting, stress and self-perception as a parent. Activities, routines and discipline-related questions are grouped within the parenting behavior category.

Table 37: Subtopics in Parenting in Year 3 by survey instrument

Subtopics	**m**	**f**	**p**	**h**	**o**	**d**	**e**	**r**	**s**	**u**
Child Welfare Services	X	X				X		X		
Parent-Child Contact	X	X	X					X		
Parenting Abilities	X	X	X							
Parenting Behavior	X	X	X		X					

16.1. Constructed Variables - PCG's relationship with child

- **cp3pcgrel** identifies the primary caregiver's relationship with the child. In most cases the PCG is the child's biological mother but the PCG can also be the biological father, grandmother, other relative or non-relative. 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.

16.2. Scale - Aggravation in Parenting

These items are taken from the JOBS[64] (Job Opportunities and Basic Skills Training Program) Child Outcomes Study, and also are found in the Child Development Supplement of the Panel Study of Income Dynamics[65].

16.2.1. Variables

Mother questions: **m3b6a- m3b6d** (resident mothers; 4 variables), **m3b34a-m3b34d** (non-resident mothers; 4 variables)
Father questions: **f3b6a-f3b6d** (resident fathers; 4 variables), **f3b34a-f3b34d** (non-resident fathers; 4 variables)

The Aggravation in Parenting questions in the Year 3 Core Surveys are derived from the Child Development Supplement (CDS) of the Panel Study of Income Dynamics (PSID)[66]. 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 developed for the JOBS child outcome survey by Child Trends, Inc. and several items come from the Parent Stress Inventory[67]. Items Q1B11a-e are from the primary caregiver/child questionnaire in the PSID-CDS, and Q2A29a-d are from the primary caregiver/household questionnaire. The items used in the JOBS study are marked with an asterisk in the table below. Their 5-question scale had an alpha of 0.69. Research has shown that high levels of aggravation in parenting are related to mothers' employment status and to child behavior problems.[68]

16.2.2. Modifications

The Year 3 FFCWS surveys do not use all 9 of the items mentioned above. Instead, the four questions (asked to resident and non-resident parents separately) from Q2A29a-d are used (see table below for complete listings). The Year 3 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."

16.2.3. Scoring Information

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

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[64] Now known as the National Evaluation of Welfare-to-Work Strategies (NEWWS).
[65] *Primary Caregiver of Target Child Household Questionnaire for the Child Development Supplement to the Family Economics Study, 1997*. (1997). Retrieved March 27, 2003, from ftp://ftp.isr.umich.edu/pub/src/psid/questionnaires/97child/PCGhhld.pdf
[66] Hofferth, S., Davis-Kean, P.E., Davis, J., & Finkelstein, J. *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
[67] Abidin, R. (1995). *Parent Stress Inventory, 3rd Edition.* Odessa, FL: Psychological Assessment Resources.
[68] Hofferth, S., Davis-Kean, P.E., Davis, J., & Finkelstein, J. *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.

Table 38: Aggravation in Parenting Variables[69]

PSID-CDS	Year 3 Variables	Source Items
Q1B11a		(CHILD) seems to be harder to care for than most children.
Q1B11b*		There are some things that (he/she) does that really bother me a lot.
Q1B11c*		I find myself giving up more of my life to meet (CHILD)'s needs than I ever expected.
Q1B11d*		I often feel angry with (CHILD).
Q1B11e		I would be doing better in my life without (CHILD).
Q2A29a*	m3b6a, m3b34a f3b6a f3b34a	Being a parent is harder than I thought it would be
Q2A29b*	m3b6b, m3b34b f3b6b, f3b34b	I feel trapped by my responsibilities as a parent
Q2A29c	m3b6c, m3b34c f3b6c, f3b34c	I find that taking care of my child(ren) is much more work than pleasure
Q2A29d	m36d, m3b34d f3b6d, f3b34d	I often feel tired, worn out, or exhausted from raising a family

[69] One question from this scale, Q2A29b, was also asked in the PCG survey (p3g1c).

16.3. Scale - Conflict Tactics

Section J of the PCG Survey contains 14 of the items from the Parent-Child Conflict Tactics Scales (CTSPC). The original Conflict Tactics Scale (1979) was designed for use with partners in a marital, cohabiting, or dating relationship. The CTSPC was created in 1995 in response to limitations of the original scale as a measure of child maltreatment[70].

16.3.1. Variables

PCG Variables: **p3j1-p3j19** (19 variables about PCG), **p3j23a-p3j23n** (19 variables about Secondary Caregiver)

16.3.2. Modifications

Our survey eliminates eight questions from the CTSPC that ask about severe physical maltreatment. However, we include the CTSPC's supplemental scale on Neglect (5 questions; p3j15-p3j19). The 19 resulting questions from our survey are listed in Table 39 under relevant subsections with prevalence and chronicity statistics from the pioneer Gallup survey conducted in 1995.

Changes made following pilot:

- **p3j20**-**p3j22** were added to ascertain whether another adult besides [respondent] lives in the household and spends time caring for the child, and if so, who is the other adult.
- **p3j23a-p3j23n** re-administered the series of questions J1-J14 with reference to the secondary caregiver identified in questions J20-J22, where applicable.

[70] 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(4), 249 – 270.

Table 39: Conflict Tactics Scales Variables

Variable Name; *S*cale; Item	Year	Ever	Chronicity*
Nonviolent Discipline	***97.7***	***99.9***	***46.0***
p3j1. Explained why something was wrong	94.3	94.5	18.3
p3j5. Gave him/her something else to do instead of what he/she was doing	77.0	83.1	12.2
p3j12. Took away privileges from him/her	76.0	78.5	10.8
p3j2. Put in "time out" (or sent to room)	75.5	81.3	13.0
Psychological Aggression	**85.6**	**89.9**	**21.7**
p3j6. Shouted, yelled, or screamed at	84.7	86.7	12.8
p3j10. Threatened to spank or hit but didn't actually do it	53.6	61.8	10.6
p3j8. Swore or cursed at	24.3	26.0	6.5
p3j14. Called him/her dumb or lazy or some other name like that	16.3	17.5	5.7
p3j9. Said they would send him/her away or would kick him/her out of the house	6.0	7.0	3.9
Physical Assault	**n/a**	**n/a**	**n/a**
p3j7. Spanked him/her on the bottom with their bare hand	46.9	63.6	7.5
p3j4. Hit him/her on the bottom with something like a belt, hairbrush, a stick or some other hard object	20.7	29.4	5.5
p3j11. Slapped him/her on the hand, arm, or leg	36.9	51.2	7.3
p3j13. Pinched him/her	4.3	5.9	6.4
p3j3. Shook him/her	9.0	15.0	2.8
Neglect	**27.0**	**30.6**	**6.9**
p3j15. Had to leave their child home alone, even when they thought some adult should be with him/her	19.5	21.3	6.0
p3j16. Was so caught up with their own problems that they were not able to show or tell their child that they loved him/her	.2	1.1	4.6
p3j17. Was not able to make sure their child got the food he/she needed	11.0	13.7	5.5
p3j18. Was not able to make sure their child got to a doctor or hospital when he/she needed it	.4	1.2	2.0
p3j19. Was so drunk or high that they had a problem taking care of their child	2.3	3.3	5.9

*prevalence and chronicity statistics from the pioneer Gallup survey (1995), NOT based on FFCWS data

16.3.3. Scoring Information

For each question, subjects were asked to choose one of eight responses to the question "How many times have you done this in the past year?" The possible responses were:

a) once, b) twice, c) 3-5 times, d) 6-10 times, e) 11-20 times, f) more than 20 times, g) not in the past year, but it happened before, or h) this has never happened.

As seen above, the CTSPC can be used to estimate both *Prevalence* and *Chronicity*. For research use, Prevalence (the percent who engaged in one more of the acts in the

scale or subscale) is the most frequently used score. For some research purposes, a Chronicity score is also important[71].

Prevalence is often expressed using a dichotomous variable indicating whether an event: a) has happened one or more times, or b) has never happened (alternately, "has happened one or more times in the past year" or "has not happened in the past year"). *Chronicity* may be measured in several ways:

1. Give responses a value between 0 and 6 and sum the total for each subsection (we will need to pay attention to "not in the past year," currently coded as '07', so that it does not receive greater weight than other responses).

2. Assign weights to values in accordance with the frequencies indicated by the response categories. In our case these would be: 0, 1, 2, 4, 8, 15, and 25. This is done by adding the midpoints for the response categories chosen by the participant. The midpoints are the same as the response category numbers for categories 0, 1, and 2. For category 3 (3 – 5 times) the midpoint is 4, for category 4 (6 – 10 times) it is 8, for category 5 (11 – 20 times) it is 15, and for category 6 (More than 20 times in the past year) using 25 is suggested as the midpoint.[72]

3. Convert raw scores to percentages using 0-100 standardized scales. This is done by simply dividing the score for each respondent by the maximum possible score, multiplying by 100, and rounding to an integer. Thus, for the Reasoning scale, a respondent with a raw score (by method 1) of 9 would have a percentage score of 50, and a respondent with a raw score of 12 would have a percentage score of 67. The advantage of the percentage standardization is that it expresses all scales in the same units and uses units that have meaning to the general public: i.e., percentage of the maximum possible score. However, there is no statistical advantage.[73]

Categorical measures for CTSPC responses are employed chiefly for assault data, and utilize questions not administered in the FFCWS. Straus suggests that it may be useful to set threshold criteria for "low" and "high" rates of incidence for the various subscales,[74] though there are currently no established norms for such categories.

Summing responses for the entire scale or constructing categories would be problematic since for several items high frequencies may represent socially desirable conflict management tactics. Even for undesirable tactics, there is a lack of agreement over how to measure the severity of physical and psychological maltreatment. With applicable standards, however, measures combining severity and chronicity would be

[71] Straus, M.A. (2001). Scoring and norms for the CTS2 and CTSPC Family Research Laboratory, University of New Hampshire. http://pubpages.unh.edu/~mas2

[72] 25 is an assumed mid-point for the "more than 20 times" category. See Murray A. Straus' "Scoring and Norms for the CTS2 and CTSPC" at Straus, M.A., Hamby, S.L., Warren, W.L. (2003). The Conflict Scales Handbook, Western Psychological Services.

[73] Straus, M.A. (1990). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. In M.A. Straus & R.J. Gelles (Eds.), Physical violence in American families, New Brunswick, NJ: Transaction.

[74] Also see Straus section on "Cutting Points For … Scales"

possible.[75] For more information on scoring, please review the following papers: Straus, M.A. (1990)[66], Straus, M.A., Hamby, S.L., Finkelhor, D., Moore, D.W., & Runyan, D. (1998)[76] or Straus (2001)[64].

[75] Such measures are available for assault data. For one such measure, see the Frequency Times Severity Weighted (FS) Scale in Kantor, G.K. and Jasinski, J.L. Out of the Darkness, pp. 123-124.
[76] 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 and Neglect. Vol. 22. No. 4. pp. 249-270.

16.4. Scale – Toddler Attachment Q-Sort

16.4.1. Variables

In-Home Variables: **ch3att_s, ch3att_t, ch3att_u, ch3att_v, ch3att_w, ch3att_x, ch3att_y, ch3att_z, ch3att_codeabc, ch3att_secure2, ch3att_b1, ch3att_b2, ch3att_b3, ch3att_ad, ch3att_bd, ch3att_cd** (16 variables)

The Toddler Attachment Q-Sort was conducted during the Year 3 In-Home Activity Workbook as part of the survey on Child Care and Parental Employment. The Q-Sort consisted of 39 attachment-related items from Everett Waters' 90-item Attachment Q-Set. This 90-item set was revised for simplicity and limited time constraints in the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), resulting in a 39-item version, called the Toddler Attachment Sort-39 (TAS-39)[77]. Some variation in the wording of the 39 items exists between the ECLS-B and the FFCWS sets. The items included in the FFCWS TAS-39 are as follows:

1. Cooperates willingly with mother and passes things if asked
2. Is very clingy
3. Seeks and enjoys being hugged by mother
4. If asked, child lets friendly strangers hold and share playthings
5. Actively ignores visitors and finds own activities more interesting
6. Generally finds something else to do when finished with an activity and does not go to mother for help
7. When child sees something desirable to play with, child will fuss
8. When child cries, cries loud and long
9. Rarely goes to mother for any help
10. Gets upset if mother leaves or shifts to another place
11. Hugs or cuddles with mother without being asked to do so
12. If there is a choice, child prefers to play with toys rather than friendly adults
13. When others ask child to do something, child readily understands what is wanted but may not obey
14. Child easily becomes angry at mother
15. Cries as a way of getting mother to do what is wanted
16. When child is bored will go to mother looking for something to do
17. Enjoys copying what friendly strangers do
18. Turns away from friendly adult strangers if they come too close
19. Obeys when asked to bring or give something to mother
20. Explores freely in new unfamiliar places
21. Is content to be alone without mother's involvement playing or watching TV
22. When mother does not do what child wants right away, child gets angry
23. Wants to be center of attention
24. When upset by mother's leaving, is hard to comfort by friendly adult strangers

[77] See Andreassen, C. and Fletcher, P. (2007). "Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) Psychometric Report for the 2-year Data Collection." National Center for Education Statistics

25. A social child who enjoys the company of others
26. Is easily comforted by contact or interaction with mother when crying or otherwise distressed
27. Protests or interrupts if mother shows affection to other people including family members
28. Relaxes when in contact with mother
29. Is fearless (approaches things and people without hesitation)
30. Enjoys being hugged or held by friendly adult strangers
31. Responds positively to helpful hints from mother
32. When mother talks with anybody else, child seeks mother's attention
33. If wary, pulls back or freezes but does not go looking for mother for comfort or reassurance
34. When child is upset after mother leaves, will sit and cry without attempting to follow
35. Is very independent
36. Eager to join in with friendly adult strangers
37. When mother says follow child does so willingly
38. Cries or otherwise tries to prevent separation if mother is leaving or moving to another place
39. Often wants mother's attention

16.4.2. Modifications

Items 24, 33, and 34 replaced the following three items in the ECLS-B version of the TAS-39: "Cries often, regardless of how hard or how long," "Child does not try new things and always wants mother to help," and "Soon loses interest in friendly adult strangers/new visitors."

16.4.3. Scoring

Raw data were scored by Dr. John Kirkland at Massey University (New Zealand). The models used for scoring the Q-Sort were data driven, not theory driven. Models for analyses included multidimensional scaling, factor analysis and hierarchical clustering.

The resultant attachment classifications from the scoring are three categories of attachment (insecure-avoidant, secure, and insecure-resistant). The final attachment category, disorganized, was not supported by these data. The variable, "ch3att_codeabc" codes children into these three categories: 1=insecure-avoidant, 2 = secure, and 3=insecure-resistant. Table 40 describes the distribution of children in these three categories.

Table 40: Q-Sort Attachment Profiles

Secure	**Insecure-Avoidant**	**Insecure-Resistant**
1,719	47	502

The binary variable, "ch3att_secure2," separates secure attachment ("ch3att_codeabc"=2 secure) from the two other categories of insecure attachments.

Three additional variables ("ch3att_ad", "ch3att_bd", and "ch3att_cd") indicate distance between the child's specific profile classification and the three attachment classifications.

Table 41: Child Attachment Classifications

Item	Description
ch3att_ad	Distance to A – Avoidant
ch3att_bd	Distance to B – Secure
ch3att_cd	Distance to C – Resistant

16.4.4. Q-Sort Additional Analysis Variables

As mentioned above, one component of the classification of children into attachment categories was factor analysis. Data processing yielded eight significant factors that are included in the file (variables "ch3att_s" through "ch3att_z"). Ultimately, classification was done by comparing children's scores on these eight factors or "latent constructs" to prototypical descriptions of the A, B and C styles of attachment.

Table 42: Additional Child Attachment Classification

Item	Description
ch3att_s	Comfortably cuddly, enjoys and is comforted by close physical contact with parent
ch3att_t	Cooperative, responsive to directions and suggestions; interaction with parent is harmonious
ch3att_u	Enjoys company, happy and friendly
ch3att_v	Independent, little use or reliance on parents, self-sufficient and self-regulating
ch3att_w	Attention-seeking, reliant on parent's attention or affection, competes with other calls upon them
ch3att_x	Upset by separation, early upset by parents actual or anticipated absence
ch3att_y	Avoids others/Does not socialize, shows little interest in interaction with parent or friendly adults
ch3att_z	Demanding, fusses, cries, becomes angry if parent's responses are not immediate

Higher positive scores on these factors indicate greater congruence with behaviors encompassed by the factor whereas lower negative scores indicate less congruence. For example, children with high positive scores on factor "ch3att_s" (Comfortably cuddly, enjoys and is comforted by close physical contact with parent) were rated as more cuddly, whereas children with low negative scores on factor "ch3att_s" were rated as less cuddly.

Three additional variables also included on this file were derived from multidimensional scaling. These variables ("ch3att_b1," "ch3att_b2" and "ch3att_b3') describe children's fit on each of the following dimensions, with sociability being the least important:

Table 43: Child Attachment Scales

Item	***Description***
ch3att_b1	Security
ch3att_b2	Dependency
ch3att_b3	Sociability

Higher values for these variables indicate more security, dependence or sociability whereas lower values indicate less security, dependence or sociability.

17. Legal System

At Year 3, both mother and father 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. Questions were also asked regarding their history with the criminal justice system, including if they were ever sent to a youth correctional facility. Police contact questions included whether the respondent was stopped by police but not arrested, and whether the respondent reported an incident of IPV to the police. Other legal questions in the data are related to legal paternity the father has over the child and which parent has legal custody.

Table 44: Subtopics in Legal System in Year 3 by survey instrument

Subtopics	**m**	**f**	**p**	**h**	**o**	**d**	**e**	**r**	**s**	**u**
Criminal Justice Involvement	X	X								
Legal Custody	X	X								
Paternity	X	X								
Police Contact and Attitudes	X	X								

17.1. Constructed Variables - Father in Jail

cm3finjail, cf3finjail, cm3ffinjail, cm3fevjail, cf3fevjail, cm3ffevjail

The constructed jail variables for mother report of father in jail, father report of his own jail, combined reports, and cumulative measures of whether father has ever been in jail are available at each wave. The constructed jail variables maximize reports of fathers' jail status based on information in the Core files and from disposition reports. The variables are coded as 0 for not in jail/never in jail and 1 for in jail/ever in jail. We did not code cases "not in wave" on these variables; instead, missing values represent no information available on jail status.

18. Housing and Neighborhood

At Year 3, mother, father and PCG were asked questions regarding their and their child's living arrangements. 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 since the child's first birthday or been evicted in the last year (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. Respondents were asked to describe their home environment, by answering about the state of their housing utilities (heating, electricity and gas) and if their utilities were ever shut off in the last year. In the In-Home study, the interviewer noted a variety of observations about the home environment, such as if the home had a television, toys, or a highchair, which floor the home was on, whether there was an operational elevator, etc. Regarding the neighborhood conditions, the mother and father were 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.). The interviewer also remarked on neighborhood conditions of the home and family child care facility, as did the child's family child care provider.

Table 45: Subtopics in Housing and Neighborhood in Year 3 by survey instrument

Subtopics	**m**	**f**	**p**	**h**	**o**	**d**	**e**	**r**	**s**	**u**
Child Living Arrangements	X	X	X							
Home Environment	X	X	X		X			X		X
Household Composition	X	X	X					X		
Housing Status	X	X			X					
Residential Mobility	X	X								
Neighborhood Conditions			X		X	X		X		X

Table 46: Constructed variables for household composition

Constructed Variable	Description of Constructed Variable
c[m|f]3adult	Number of adults 18 or over in household
c[m|f]3kids	Number of children under 18 in household
cm3cohf	Mother living with (not married) child's father at year three
cf3cohm	Father living with (not married) child's mother at year three
c[m|f]3cohp	Mother/father living with (not married) new partner at year three
c[m|f]3gdad	Grandfather present in household
c[m|f]3gmom	Grandmother present in household

18.1. Scale - Home Observation for Measurement of the Environment

The Year 3 In-Home Study includes items in the Infant-Toddler Child Care Home Observation of Environment (HOME) Inventory and selected items from older age HOME scales. The HOME scale provides means to examine and assess the caring environment in which the child has been reared. Table 47 lists question items in the Year 3 In-Home Interviewer Observations which can be used to construct six HOME subscales and the relevant statistics of the items and these subscales.

Several variables in the PCG questionnaire (p3c1a – p3c1h) were also drawn from the HOME scale.

Table 47: HOME Observational Scales

Subscale*	Variable
Responsivity (9 of 11 items in subscale)	
Parent spontaneously vocalizes to child at least twice	o3t1
Parent responds verbally to child's vocalizations or verbalizations	o3t2
Parent tells child name of object or person during visit	o3t3
Parent's speech is distinct, clear, audible	o3t4
Parent initiates verbal interchanges with visitor	o3t5
Parent converses freely and easily	o3t6
Parent spontaneously praises child at least twice	o3t7
Parent's voice conveys positive feelings toward child	o3t8
Parent responds positively to praise of child	o3t9
Acceptance (5 of 7 items in subscale)	
Parent does not shout at child	o3t10
Parent does not express overt annoyance with or hostility to child	o3t11
Parent neither slaps or spanks child during visit	o3t12
Parent does not scold or criticize child during visit	o3t13
Parent does not interfere with or restrict child more than three times during visit	o3t14
Involvement (only 2 of 6 items in subscale)	
Parent provides toys that challenge child to develop new skills	o3t15
Parent keeps child in visual range, looks at often	o3t16
Home Interior Environment (XX)[c]	
No broken window/cracked window panes?	o3r1
Wiring in the house are concealed	o3r2
Housing unit does not contain open cracks or holes in walls or ceiling?	o3r3
Housing unit does not contain holes in floor?	o3r4
Housing unit does not contain broken plaster/peeling paint over 1 sq foot?	o3r5

Subscale*	Variable
Inside of home not dark?	o3r6
Is inside of home crowded?	o3r7
All visible rooms of house/apartment not noticeably cluttered?	o3r8
All visible rooms of the house/apartment not dirty	o3r9
Home free of any potential hazards	o3r10
House not overly noisy from noise in the house	o3r12
House not overly noisy from noise outside the house	o3r13
Condition of Surrounding Block[c]	
Garbage, litter, broken glasses on street	o3p1
General condition of most buildings on block	o3p2
Graffiti on the buildings/walls on block/within 100 yards	o3p3
Vacant or abandoned building on block	o3p4
Abandoned vehicles on block/within 100 yards	o3p5
Home Exterior Environment[c]	
Environment immediately outside home does not have unlit entrance or stairway	o3p6_a
Environment outside home does not have broken steps	o3p6_b
Environment outside home does not have broken glass or broken toys	o3p6_c
Environment outside home does not have large ditches	o3p6_d
Environment outside home does not have alcohol/drug paraphernalia	o3p6_e
Environment outside home does not have strewn garbage/litter	o3p6_f
Exterior of building does not have peeling paint/need paint jobs	o3p7_a
Exterior of building does not have crumbling or damaged walls	o3p7_b
Exterior of building does not have broken or cracked windows	o3p7_c

[a]Corrected item-total correlation shows how the item is correlated with a reduced scale computed without it.

[b]Each alpha value associated with an item in the column shows how the alpha for the scale would change if the corresponding item was excluded from the scale.

[c]All item scores were reversed such that higher score represents better situation. Except Conditions of Surrounding Block subscale which based on the 4-point (1-4) items, all other subscales use 2-point (0,1) items.

[d]Cronbach's alpha or scale reliability coefficient is the correlation between the current scale and all other possible same-number-of-item scales measuring the same thing.

18.1.1. Scoring

Each subscale can be computed when respondents have valid responses for at least 80 percent of the scale items. For the included respondents: missing response(s) for any items can be been replaced by the mean of valid responses provided for all remaining items before the scale scores were computed.

18.2. Concept - Exposure to Violence

The items in this section were adapted from the "My Exposure To Violence" Interviews.[78,79] Because we utilize only 7 items from this instrument, and because these items have been adapted from the originals, we offer no standardized methods for coding or analysis.

18.2.1. Variables

In-Home Survey: **p3l1-p3l7** (7 variables)

18.2.2. Modifications

Changes made following the pilot:

The paragraph introducing the section changed from:

"*We do not want to know about things done by members of your family or people you know well, but only about violent things done by others. Some of these may be painful to discuss, and we appreciate your willingness to answer them*."

to:

"*For these questions, we do not want to know about violence carried out by your circle of family or loved ones. Rather, we are interested in learning only about violence carried out by people outside of your circle of family or loved ones, no matter who the victim might have been. We also do not want to know about violence you saw on TV or in movies*."

[78] Buka, S., Selner-O'Hagan, M., Kindlon, D., & Earls, F. (1996). My exposure to violence and my child's exposure to violence.

[79] Selner-O'Hagan, M. B., D.J. Kindlon, S.L. Buka, S.W. Raudenbush and F.J. Earls (1998). "Assessing Exposure to Violence in Urban Youth." Journal of Child Psychology and Psychiatry and Allied Disciplines, 39, pp. 215-224.

18.3. Scale - Neighborhood Collective Efficacy

The Year 3 PCG Survey includes 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.

Items K1:A-E of this Section were reconstructed from the Informal Social Control Scale[80,81] , items K2:A-E from the Social Cohesion and Trust Scale[70,71] and items K3:A-H from the Neighborhood Environment for Children Rating Scales.[82,83] We are unable to offer a standardized method for scoring/analyzing these items, as the measures have been altered from the original instruments. No change in instrument was made.

18.3.1. Variables

PCG *Questions:* **p3k1a-p3k1e, p3k2a-p3k2e, p3k3a-p3k3h** (18 variables)

[80] Sampson, R. J. (1997). "Collective Regulation of Adolescent Misbehavior: Validation Results from Eighty Chicago Neighborhoods." Journal of Adolescent Research, 12(2), 227-244.
[81] Sampson, R. J., S. W. Raudenbush, and F. Earls (1997). "Neighborhoods and Violent Crime: A 'Multilevel Study of Collective Efficacy." Science, 277, 918-924.
[82] Coulton, C. J., Korbin, J. E., Su, M., & Chow, J. (1995). Community level factors and child maltreatment rates. *Child development*, *66*(5), 1262-1276.
[83] Coulton, C.J., J.E Korbin, and M. Su (1999). "Neighborhoods and child maltreatment: A multi-level study." Child Abuse & Neglect, 23(11):1019-1040.

19. Education

At Year 3, both mothers and fathers were asked about their own educational attainment including any schooling they had attended or completed since the last interview. Mothers and fathers were also asked about their current partner's educational attainment. Child care providers were asked about their own educational attainment and teaching credentials. For parent school involvement, child care providers were asked about their interactions with the parents and each parent was asked if they had talked to the child's care provider about how the child was doing in the past year.

Table 48: Subtopics in Education in Year 3 by survey instrument

Subtopics	**m**	**f**	**p**	**h**	**o**	**d**	**e**	**r**	**s**	**u**
Educational Attainment/Achievement	X	X				X		X		
Parent School Involvement	X	X				X		X		

19.1. Constructed Variables - Parent's Education

- **cm3edu, cf3edu** mothers' and fathers' education at Year 3

In constructing these variables, parents' report of new education, training and schooling since the previous wave was used. Parents' reports from previous waves were used as needed when parents did not report attaining any new, additional education at the time of the interview. Mothers' reports of fathers' education were also used when fathers' reports were missing and mothers' were available.

20. Other Topics in Year 3

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 49: Other topics and subtopics in Year 3 by survey instrument

Topics and Subtopics	m	f	p	h	o	d	e	r	s	u
Attitudes and Expectations										
Attitudes/Expectations/Happiness	X	X	X			X		X		
Demographics										
Age	X	X		X		X	X	X	X	
Citizenship and Nativity	X	X				X				
Language	X	X			X	X		X		
Mortality	X	X								
Race/Ethnicity	X	X				X		X		
Sex/Gender	X	X				X		X		
Family and Social Ties										
Community Participation	X	X	X							
Grandparents	X	X								
Parent's Family background	X	X								
Religion	X	X	X							
Social Support	X	X	X							

Appendix: Additional Information on the Year 3 In-Home Survey

0. Study Background and Administration

The In-Home Study was funded by a grant from the National Institute of Health. The research was a collaborative work of the researchers at the Center for Health and Wellbeing (CRCW) of Princeton University and Teachers College of Columbia University. Data collection was administered by Mathematica Policy Research, Inc. (MPR) in Princeton, NJ.

0.1. Research Team

The PIs of the In-Home Study included Christina Paxson, Jane Waldfogel, Neal B. Guterman, and Jeanne Brooks-Gunn.

0.2. Components of the Study

The In-Home Study consisted of three major components at Year 3: (1) the Primary Caregiver (PCG) Survey, (2) the Activity Workbook, and (3) Interviewer Observations.

The PCG Survey covered a broad range of topics such as: child's health status and some details about the most-recent accidents which occurred to the child, family routines, home toys and activity items, nutrition, family's expenditure on foods, housing characteristics, parental stress, parental mastery, child discipline, informal social control and social cohesion and trust, exposure to violence, child's behavior problems, housing common areas, interior of house, child's appearance, home scale, and child's emotion and cooperation. Variables derived from the Year 3 PCG Survey begin with the prefix "p3".

The remaining questions in the In-Home questionnaire were designed for the interviewers to fill in their observations about the home environment, child's appearance, and the parent-child interaction. We call this section of the survey the **Interviewer Observations**. Variables derived from the Year 3 Interviewer Observations begin with the prefix "o3".

The **Activity Workbook** was used to record the anthropometric measurements of both PCG and child; responses provided for the Peabody Picture Vocabulary Test (PPVT) and/or the Test de Vocabulario en Imagenes Peabody (TVIP) scores. Variables derived from the Year 3 Activity Workbook begin with the prefix "h3".

0.3. Conducting the In-Home Survey

The In-Home Study was conducted mostly in 2001 in the two pilot cities; and in 2002-2003 in the remaining eighteen cities. A handful of respondents, because of some difficulties to locate, completed the survey in 2004.

More than 79 percent of the respondents of the Year 3 Core Study participated in the Year 3 In-Home Study. Of these, about 78 percent of the participants completed both components of the survey. Most of the remaining participants completed only the PCG interview over the telephone because the parent or the care giver refused a home visit

or such visit could not be conducted because the family had moved away from the city where the child was born. A very small fraction of the respondents completed only a part of the Activity Workbook.

Respondents of the FFCWS Baseline Survey were located and screened for eligibility for inclusion in the succeeding waves of the Core Survey and collaborative studies of the Core Survey. Only respondents of the Year 3 Core survey were invited to participate in the Year 3 In-Home Study.

The survey administration process for both the Core and In-Home Studies is illustrated in the flowchart in Figure 1.1. The process of administering the Year 3 In-Home surveys is presented in the flowchart in Figure 1.2.a., 1.2.b, and 1.2.c. These charts show the initial process of administering the Year 3 In-Home Study in the two pilot cities and the revised process implemented in the remaining eighteen cities as follows:

- Version 1.2.a was used for the first wave survey in the two pilot cities with In-Home Survey completed in home.
- Version 1.2.b was used for the second wave survey, In-Home Survey completed in home.
- Version 1.2.c was used for the third wave survey, In-Home Survey completed over the telephone.

Figure 1.1 Process of Administering the FFCWS Core Survey and the In-Home Survey

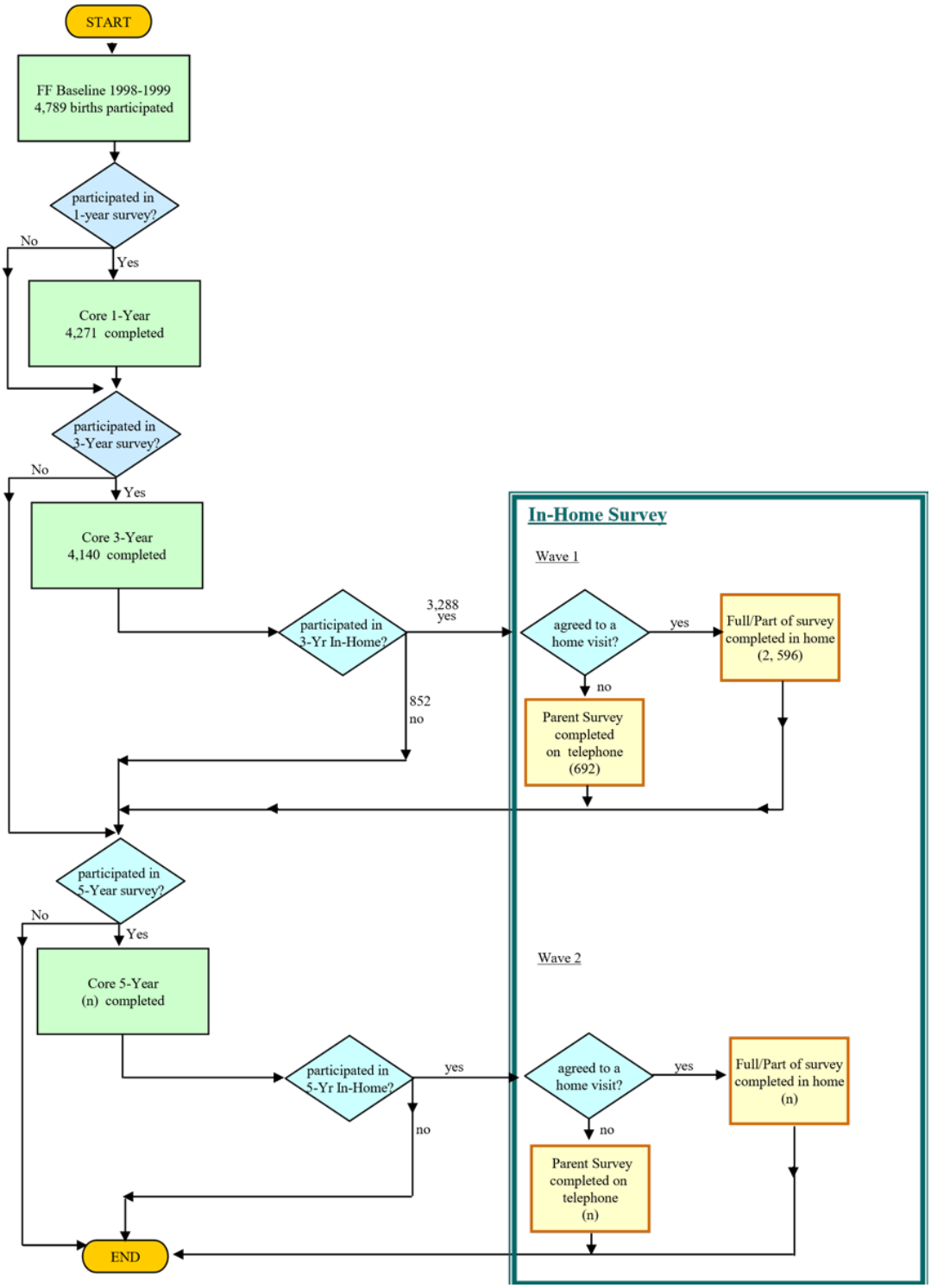


Figure 1.2.a Conducting Year 3 In-Home Survey in Pilot Cities

Core Survey completed on telephone or contact made in field. In-Home Survey completed in home.

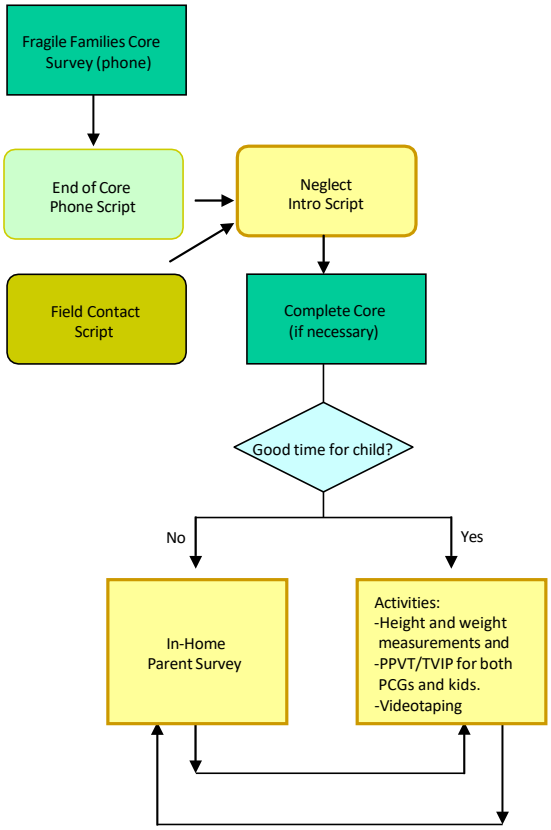


Figure 1.2.b. Conducting Year 3 In-Home Survey in 18 cities

Core Survey completed on telephone or contact made in field. In-Home Survey completed in home.

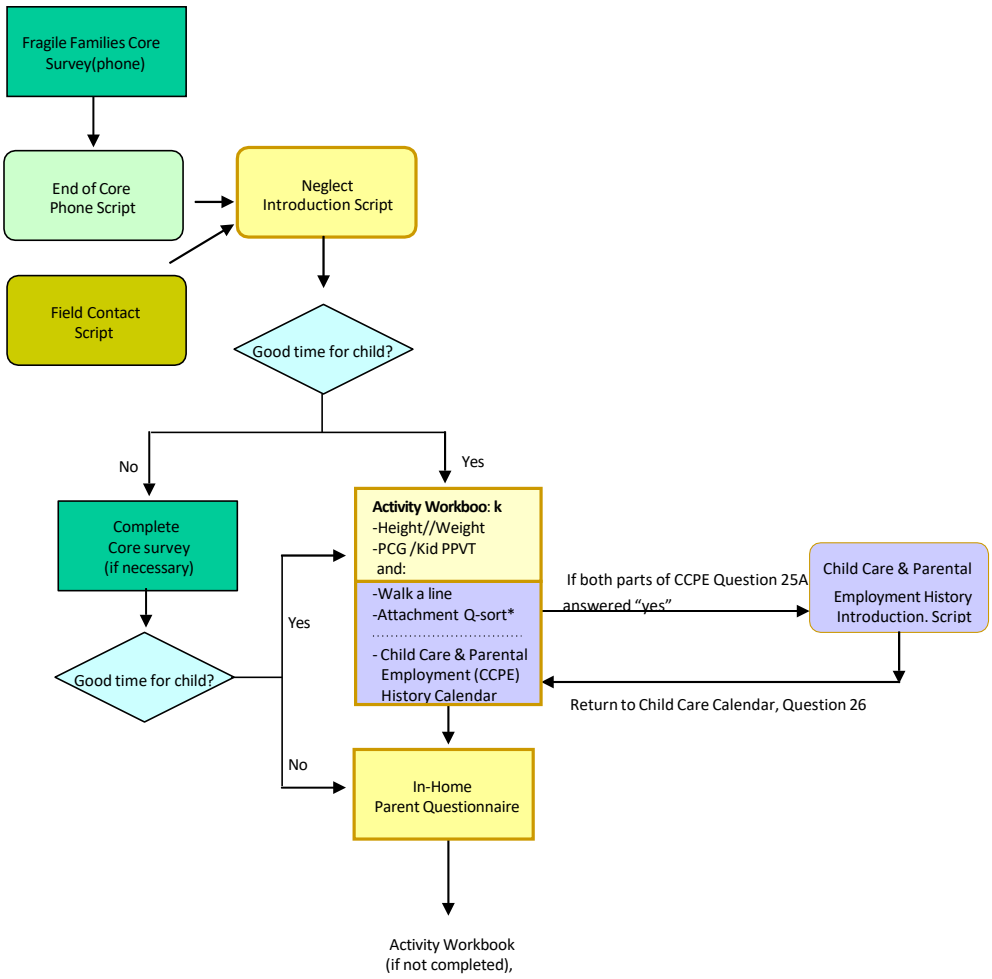
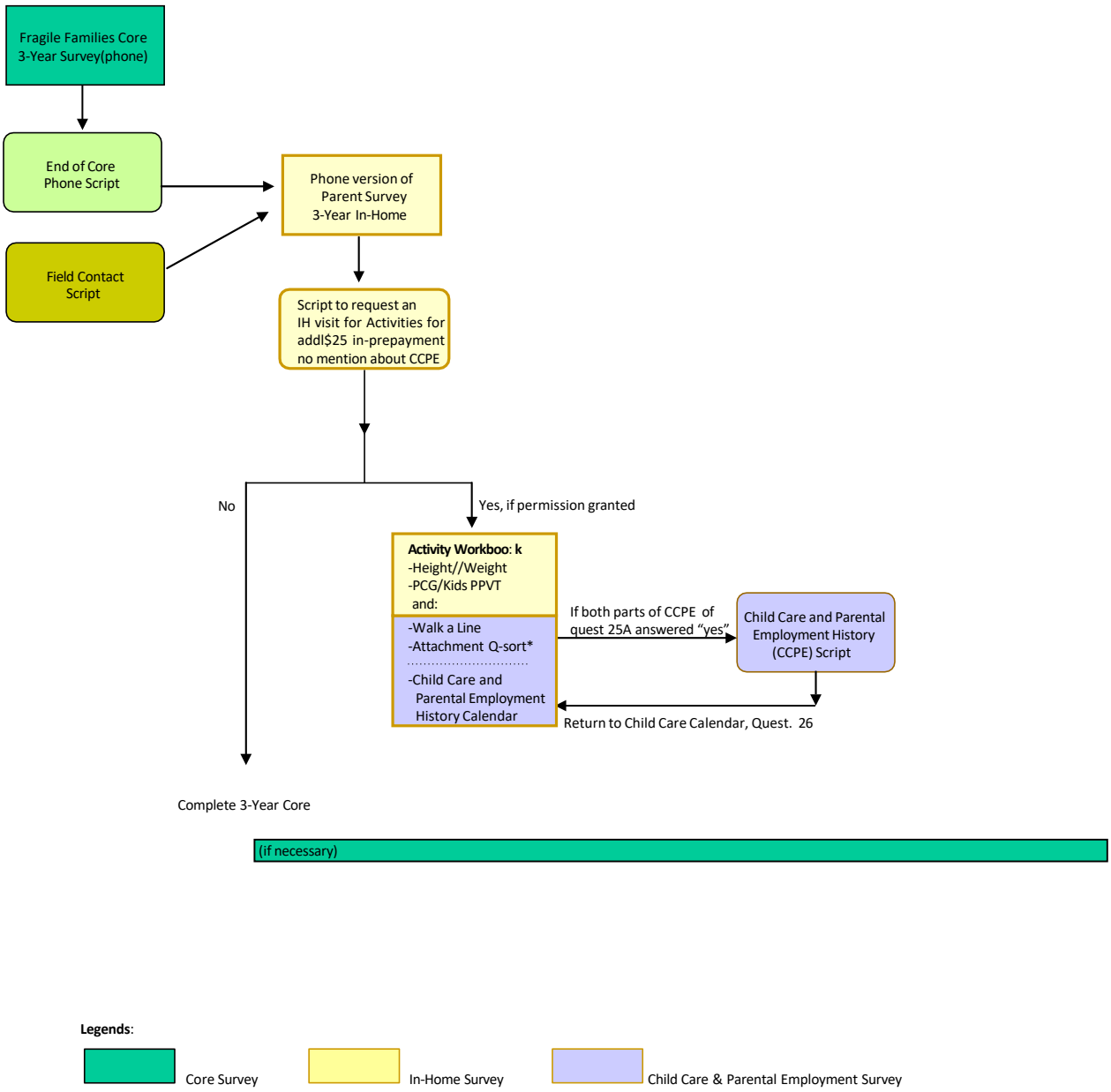


Figure 1.2.c. Conducting Year 3 In-Home Survey in 18 cities

Core Survey completed on telephone or contact made in field. In-Home Survey completed over the telephone.



*NOTE: After explaining Q-sort to parent/caretaker and working through several examples, interviewer may work with child on Walk-a-line and/or kid's PPVT; this cut down on time and interference in kid's activities by parent/care taker.

1. Questionnaire Changes between Pilot Survey and the Revised Survey

The first data collection (in 2001) of the Year 3 In-Home Study was conducted for two pilot cities only. Data collection in this period was closely monitored and the data gathered were analyzed and, evaluated in order to design strategies to improve data collection in the remaining cities, as well as, to identify necessary modifications to the contents and structure of the questions to improve the usefulness and quality of data collected.

Several major structural changes were made, based on the pilot results and experiences, for the second data collection (2002-2003) in the remaining eighteen cities. These changes included the following:

1. A videotape section was eliminated.

2. The survey on Child Care and Parental Employment was incorporated for the convenience of data collection during the home visit. Consequently, the following components were added to the activity workbook: Walk-a-line; Attachment Q-sort; Child care and Employment History calendars.

When both parts of Child Care and Parental Employment question 25A were answered "yes," the respondent was read a script introducing the Child Care and Parental Employment Project and asked for permission to contact the child care provider.

3. Activity Workbook timing – when the In-Home Study was conducted in the remaining 18 cities, the interviewer could conduct the Activity Workbook with the respondent and child in one of the following three orders:

a) immediately after the "Neglect Introduction Script" (first thing),
b) following completion of the core, or
c) at the end of the interview (after Core and PCG Survey).

Refer to flowchart version 1.2.b for further illustration.

4. Amount of incentive payments offered to the respondents for participation in the project also changed following the pilot survey.

Item-specific questionnaire changes are noted in the relevant sections below.

1.1. Health and Accidents (PCG Survey Section A)

Changes following the pilot:

p3a15 – number corresponding with "no visits for an accident or injury" changed from 02 to 00

p3a16c – added response option, "swallowed an object" (08)

1.2. Family and Routines (PCG Survey Section B)

Changes made following pilot:

p3b6 – added response option, "both parents" (07)

p3b7 – added response options, "brush teeth" (13) and "watch TV or video" (14)

1.3. Home Toy and Activity Items (PCG Survey Section C)

Changes made following pilot:
p3c4 – moved to Activity Workbook; the item was placed after weighing and measurement to insure that the child is present and also to make praise more natural.

1.4. Food Expenditures (PCG Survey Section E)

Data gathered from the pilot cities on food expenditures was compiled using questions on cost of food used at home, cost of food delivered, and cost of eating out in section E, as well as, food stamp data (question p3a1a1 in the 18 cities following the pilot; for the pilot, we used food stamp information from questions in the Core Survey. Our composite food expenditure measure was found comparable to the similar measure generated from data of the 1999 Panel Study of Income Dynamics (PSID).

Changes made following pilot:
p3e1 – changed from "last 12 months..." to "last month" when asking about food stamp receipt
p3e1a_1 – added question asking about amount received in food stamps during last month
p3e1a_2 – was E1A in pilot
p3e1a_2 – changed from "in an average week" to "last month" when asking about food used at home
p3e2_per – eliminated "per year" from response options
p3e4 – changed from "in an average week" to "last month" when asking about food delivered
p3e4_per – eliminated "per year" from response options
p3e5 – changed from "in an average week" to "last month" when asking about eating out
p3e5_per – eliminated "per year" from response options
p3e9- p3e13 were added after the pilot – these questions ask about participation in the WIC program

1.5. Housing/Building Characteristics (PCG Survey Section F)

Changes made following pilot:
p3f5 – question added: "How many people (adults and children) live here now?"

1.6. Parental Mastery (PCG Survey Section H)

Changes made following pilot:
p3h1– response options added: "take away dessert" (code 18) and "try to get (him/her) to eat again later" (code 15). Some other response options were recoded to accommodate the two additional options.

1.7. Discipline (PCG Survey Section J)

Changes made following the pilot:

p3j20-p3j22 were added to ascertain whether another adult besides [respondent] lives in the household and spends time caring for the child, and if so, who is the other adult.

p3j23a-p3j23n re-administer series of questions J1-J14 with reference to the secondary caregiver identified in questions J20-J22, where applicable.

1.8. Exposure to Violence (PCG Survey Section L)

Changes made following the pilot:

Paragraph introducing the section changed from (a) to (b):

(a) "*We do not want to know about things done by members of your family or people you know well, but only about violent things done by others. Some of these may be painful to discuss, and we appreciate your willingness to answer them*."

(b) "*For these questions, we do not want to know about violence carried out by your circle of family or loved ones. Rather, we are interested in learning only about violence carried out by people outside of your circle of family or loved ones, no matter who the victim might have been. We also do not want to know about violence you saw on TV or in movies*."

1.9. Child's Behavior Problems (PCG Survey Section M)

Changes made following the pilot:

Contents of the following items were changed: **p3m4, p3m8, p3m12, p3m15, p3m20, p3m24, p3m25, p3m27, p3m34, p3m38, p3m43**. Refer to questionnaires for details.

1.10. Observation Items (Interviewer Observations Section P-U)

Changes made following the pilot:

o3r10a – question added asking interviewer to check all hazardous conditions observed that were mentioned in question o3r10 (is inside environment unsafe for kids), if o3r10 answered "yes"

o3t0 – refers interviewer to Activity Workbook question A8 (in pilot, it was question p3c4)

o3u3, **o3u4** – deleted (videotape discontinued)

1.11. Activity Workbook – Height/Weight

Several changes were made to the Height/Weight measurement protocol between the pilot of Year 3 In-Home Study and that of 18 cities. Many of these changes were made based on the advice of Robert Whitaker, a visiting research scholar at the Center for Health and Wellbeing, Princeton University during 2001-2003 and the recommended procedures on the CDC Growth Charts
Training website: https://www.cdc.gov/growthcharts/cdc_charts.htm

The following new procedures are results of changes following the pilot:

- The respondent self-reports his/her height only if he/she refuses to be measured by the interviewer using the stadiometer. In the pilot round the only measurement of a respondent's height was through a question (A2) asking him/her to self-report.
- The interviewer attempts to weigh the child without the PCG first, then (if it is not possible) reweighs the PCG alone and then with the child. This is a switch from the pilot round, where an attempt was made to weigh the child alone only when it was not possible to weigh the PCG and child together.
- Both child and PCG receive explicit instructions before each section (if they're still wearing shoes) to remove their shoes before height or weight is measured (there was only one such prompt on the pilot).
- A set of explicit instructions about how to stand on the stadiometer have been added to both the PCG's and child's instructions preceding height measurement. These instructions are based on material found on the above referenced CDC website.
- The "Praise Child" item, previously included in Section C (Home Toy and Activity Items) has been moved to the end of the height/weight section (it is now item A8).

The same type of measurement devices were used in both the pilot survey and the second wave survey of eighteen cities. The devices are: SECA 840 Bella Digital Scales and SECA 214 "Road Rod" Stadiometers.

2. Sample Counts and Attrition Overtime

About 86 percent of the Baseline respondents completed the Year 3 Core Survey. Then, due to interview fatigue or other reasons, not all these respondents agreed to participate in the Year 3 In-Home Study. Overall, about 66 percent of the respondents of the Baseline Survey participated in all the three succeeding surveys: Year 1 Core (mother survey), Year 3 Core (mother survey), and Year 3 In-Home.

2.1. Response Rate

Due to some shortcomings in the administration of data collection, about 70 cases not supposed to be included for the In-Home Study, were interviewed. These cases[84] were not selected for the FFCWS survey, but included together with the FFCWS sample at Baseline for convenience of data collection. As such, they were dropped from the public-use data of the In-Home Study.

Overall, a total of 4,248 parents or caretakers were contacted for the Year 3 In-Home Study. Only cases *eligible* for the In-Home Study are presented in Table A2 and A3. All 4,140 *eligible* respondents of the Three-Year Core Study were invited to participate in the In-home Study. Of these, 3,288 cases completed either the full In-Home Study or a component of the Study. As such, the overall crude response rate is about 79 percent. Response rate based on the mother's race and the relationship of mother and father at time of conducting the Year 3 Core Study are presented in Table A1 and A2.

Table A1: Crude Response Rate by Race of Mother

Mom's Race	Y3 In-Home Respondent	Total Cases Contacted	Crude Response Rate (%)
Missing race	19	24	79.17
White, Non-Hispanic	712	900	79.11
Black, Non-Hispanic	1599	1986	80.51
Hispanic	842	1072	78.54
Other	116	158	73.42
Total	3288	4140	79.42

[84] These belonged to a separate group of 109 cases included in the Baseline Fragile Families survey. These cases were either selected for the TLC3 study or for other related research purposes.

Table A2: Crude Responses by Relationship of Mother and Father at Year 3

Relationship	In-Home Respondent	FF Core Respondent	Crude Response Rate (%)
Missing relationship*	12	17	70.59
Married	1032	1313	78.60
Romantic	822	1026	80.12
Separate	215	261	82.38
Friends	595	737	80.73
No Relationship	612	786	77.86
Total	3288	4140	79.42

Note: Data users interested in using the largest possible sample for the analysis may request data for the 67 ineligible cases who inadvertently completed the survey, but were not included in the public data set.