User Guide for the Time Diary Media Files from the Child Development Supplement to the Panel Study of Income Dynamics

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This User Guide describes the data structure and contents of the PSID Child Development Supplement time diary media files.

Background

The PSID Child Development Supplement (CDS) is a nationally-representative multi-cohort longitudinal study that collects comprehensive information on the health, development, and well-being of US children in their family, neighborhood, and school contexts. CDS began in 1997 (CDS-I) with a cohort of children, and collected two additional waves of data in 2002 (CDS-II) and 2007 (CDS-III). CDS subsequently changed to an ongoing design that included all eligible children from PSID families in each main wave. Time diaries continued to be collected as part of the new, ongoing design in 2014 and 2019. Note that the CDS-2019 data collection was disrupted by the Covid-19 pandemic and time diaries were collected and released for a subset of CDS-2019 participants as part of CDS-2020.

At each wave, participants completed two 24-hour time diaries describing their activities on one randomly selected weekday and one randomly selected weekend day. In the diaries, participants recorded the titles of the television shows, movies, and videos they watched. These titles have been reviewed and coded to describe each program's content, nature, and target audience. These codes comprise the content of the CDS time diary media code data files.

Media code data files are currently in public release for five waves of CDS: 1997 (CDS-I), 2002 (CDS-II), 2007 (CDS-III), 2014 (CDS-2014), and 2019 (CDS-2019, which includes time diary data from CDS-2020).

More information about CDS and the time diaries is provided in the CDS User Guides: https://psidonline.isr.umich.edu/Guide/documents.aspx.

Media Codes in CDS-I, CDS-II, and CDS-III

The original CDS began in 1997 (CDS-I) as a study of 3,563 children aged 0-12 years and their caregivers in PSID families. The study included up to two randomly selected age-eligible children per family. Children and their caregivers were reinterviewed in 2002 (CDS-II), when children were aged 5-17 years, and in 2007 (CDS-III), when children were aged 10-17 years. (Children aged 18 years and older in 2007 were not age-eligible for CDS-III.)

Users may review the time diary instrument used in 1997 (CDS-I) at https://psidonline.isr.umich.edu/cds/questionnaires/cds-i/english/Tdiary.pdf. The time diary instrument used in 2002/03 (CDS-II) is available at https://psidonline.isr.umich.edu/cds/questionnaires/cds-ii/english/cdsiitdday.pdf, and the time diary instrument used in 2007 (CDS-III) at https://psidonline.isr.umich.edu/cds/questionnaires/cds-iii/cdsiiitdday.pdf.

Media Codes in CDS-2014

By 2014, all children included in the original CDS had aged into adulthood. A new round of CDS data collection in that year included eligible children aged 0-17 years living in PSID families in 2013 (N=4,333). A randomly selected 50 percent of CDS-2014 families were selected to be eligible to complete time diaries.

Users may review the time diary instrument used in CDS-2014 at https://psidonline.isr.umich.edu/cds/questionnaires/cds-14/td weekday weekend.pdf.

Media Codes in CDS-2019 and CDS-2020

CDS-2019 was the second round of the ongoing CDS design and collected information on eligible PSID children aged 0-17 years living in PSID families in that year (N=4,629). CDS-2019 included reinterviews with many children aged 5-17 years who participated in CDS-2014. CDS-2020 was a follow-up to CDS-2019 for families that did not complete time diaries and other components as part of CDS-2019 due to the Covid-19 pandemic.

Users may review the time diary instrument used in CDS-2019 at https://psidonline.isr.umich.edu/cds/questionnaires/cds-19/CDS2019 20202-Weekday-TD.pdf and https://psidonline.isr.umich.edu/cds/questionnaires/cds-19/CDS2019 2020-Weekend-TD.pdf.

Acknowledgements

Television, movie, and video content reported in the 1997 and 2002 CDS time diaries was coded at the Center for Research on Interactive Technology, Television and Children (CRITC) at University of Texas at Austin. Content reported in CDS-2014 time diaries was coded by Dr. Elizabeth Vandewater at the University of Texas at Austin. Content reported in the 2007 and 2019 waves of CDS was coded by Dr. Paula Fomby at the University of Michigan.

Direct any questions to the PSID Help Desk at psidhelp@umich.edu.

Data Structure and Content

Time diary media coding files are available free of charge through the CDS Online Data Center (www.cds-tas.org) and the PSID Online Data Center (www.psidonline.org), which provide customized extracts and codebooks using a detailed index of variables. Each file is structured at the activity level. There is one record per media activity for each weekday/weekend diary for each child for each wave of data collection. Identifier variables that allow users to link the media codes to the main time diary activity files are listed below.

Unique Identifiers for CDS-I (1997)

TD97M02 1997 Interview Number (corresponds to ER33401)

TD97M03 1997 Sequence Number (corresponds to ER33402)

TD97M04 Type of Diary (corresponds to WDAYWEND)

TD97M05 Start Time (corresponds to COLB)

TD97M06 End Time (corresponds to COLC)

Unique Identifiers for CDS-II (2002)

TD02M02 2001 Interview Number (corresponds to ER33601)

TD02M03 2001 Sequence Number (corresponds to ER33602)

TD02M04 Type of Diary (corresponds to DIARY_02)

TD02M05 Start Time (corresponds to COLB_02)

TD02M06 End Time (corresponds to COLC_02)

Unique Identifiers for CDS-III (2007)

TD07M02 2007 Interview Number (corresponds to ER33901)

TD07M03 2007 Sequence Number (corresponds to ER33902)

TD07M04 Type of Diary (corresponds to DIARY_07)

TD07M05 Start Time (corresponds to COLB_07)

TD07M06 End Time (corresponds to COLC_07)

Unique Identifiers for CDS-2014

TD14M02 2013 Interview Number (corresponds to ER34201)

TD14M03 2013 Sequence Number (corresponds to ER34202)

TD14M04 Type of Diary (corresponds to DIARY_14)

TD14M05 Start Time (corresponds to COLB_14)

TD14M06 End Time (corresponds to COLC_14)

Unique Identifiers for CDS-2019

TD19M02 2019 Interview Number (corresponds to ER34701)

TD19M03 2019 Sequence Number (corresponds to ER34702)

TD19M04 Type of Diary (corresponds to DIARY_19)

TD19M05 Start Time (corresponds to COLB_19)

TD19M06 End Time (corresponds to COLC_19)

Variables

There are ten variables generated by the media coding project:

(1) Format (TD97M09, TD02M09, TD07M09, TD14M09, TD19M09);

(2) Intended Audience (TD97M10, TD02M10, TD07M10, TD14M10, TD19M10);

(3) Character Age (TD97M11, TD02M11);

(4) Genre (TD97M12, TD02M12, TD07M12, TD14M12, TD19M12);

(5) Comedy (TD97M13, TD02M13, TD07M13, TD14M13, TD19M13);

(6) Science Fiction, Fantasy or Supernatural/Paranormal (SF/F/SP) (TD97M14, TD02M14, TD07M14, TD14M14, TD19M14);

(7) Curriculum (TD97M15, TD02M15, TD07M15, TD14M15, TD19M15);

(8) Violence (TD97M16, TD02M16, TD07M16, TD14M16, TD19M16) of each television program;

(9) Competitive Element (TD07M17, TD14M17, TD19M17); and

(10) Online Only Content (TD14M18, TD19M18).

Please consult the codebook for a description of these variables for each wave.

Merging the Media Coding Data with Data Center Data

The CDS Time Diary Media Coding file provides information about the attributes of the TV and show title. The file is structured at the activity level and limited to time spent watching a show, video or movie. A record in the Time Diary Media Coding file indicates that there is a corresponding Time Diary Activity Spell code of "TV" (activity code 919 for variable COLA in 1997; activity code 9190 for variable COLA_02 in 2002) or "Watching a show, video, or movie" (activity code 9190 for variable COLA_07 in 2007, COLA_14 in 2014, and COLA_19 in 2019). The content coding relies on the title of the movie or show. Records without a codeable program title will have missing data on all the media coding variables.

User may wish to link the Media Coding file and the Activity Spell file to combine information of an activity. Since both files are structured at the activity level, this can be achieved by performing a one-to-one merge using five common identifier variables: the Interview Number and Sequence Number for each CDS wave, the Weekday or Weekend Diary type, and the start time and end time of each activity. These variables are listed above for each wave (TD97M02-TD97M06 for 1997; TD02M02-TD02M06 for 2002; TD07M02-TD07M02 for 2007, TD14M02-TD14M06 for 2014, and TD19M02-TD19M06 for 2019).

In the 1997 and 2002 wave of CDS, however, users will need to perform many-to-many merge and apply additional step to successfully link some media records. This is because more than one TV and show titles are involved during an activity spell (e.g., a Time Diary Activity Record can be split into multiple Media Coding records). Hence, the records do not always have common start time and/or end time to their corresponding activity record. To perform a many-to-many merge, use three common identifiable variables: The Interview Number, Sequence Number and the Weekday or Weekend Diary Type. The next step is to flag matching records. The timing fields are available in both files to identify the correct media records. Identify matching records using the following three conditions: the start time matches (that is TD97M05=COLB in 1997), the end time matches (that is TD97M06=COLC in 1997) or the media records in in the middle of the activity spell. Last, users may want a combined file at the media coding level or at the activity level depending on their analyses plan.

The following example illustrate the process of linking three media records to a 70-minute activity spell. As shown in three timing flags, the correct media records will fulfill at least one timing conditions. The first record (30 minutes) has a start time that matches with the start time of the activity, the second record (30 minutes) happens in the middle of the activity spell, and the last record (10 minutes) matches the end time of the activity spell. The PSID Data Center provides sample SAS and STATA codes with data extract when Media Coding file/variables are requested. Follow the general approach if using other data management programs.

Example from the Media Coding file:

TD02M02	TD02M03	TD02M04	TD02M05	TD02M06	Start Time match	End Time match	In the middle of the spell
122	36	0	34200	36000	Yes	No	No
122	36	0	36000	37800	No	No	Yes
122	36	0	37800	38400	no	Yes	No

Example from the Activity Spell file:

ER33601	ER33602	DIARY_02	COLB_02	COLC_02
122	36	0	34200	38400

Creating a Cross-Year Media File

Users who wish to create a cross-year file containing media file information and information from unaggregated activity file must first merge each media file with time diary data from the data center for the corresponding year (1997 with 1997, 2002 with 2002, 2007 with 2007, 2014 with 2014, and 2019 with 2019). Then merge the files using the unique individual identifiers: ER30001 and ER30002 to combine all available records.