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Midlife in the United States (MIDUS 2): Daily Stress Project, 2004-2009

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Readme File

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MIDUS Project 2:

*N*ational *S*tudy of *D*aily *E*xperiences

Wave 2: Read Me File

For file: M2_P2_DAILY DATA_7-14-09.sav

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***N*ational *S*tudy of *D*aily *E*xperiences**

Wave 2: Read Me File

NOTE: Please read through this document carefully prior to using the data and documentation.

The purpose of this memo is to provide basic information about the MIDUS data and documentations that are being made publicly available via ICPSR.

A. What Data File is Available?

The NSDE 2 datasets:
Daily Data (Person-Day Dataset): M2_P2_Daily Data_7-14-09.sav

(For details about Project 2, see M2_P2_Study Description_7-14-09.pdf)

B. What is the Structure of the MIDUS 2 Project 2 Dataset?

The dataset is a 'stacked' or 'person-day' dataset (see below) comprised of data for 16,176 days on 548 study variables from 2,022 participants. The dataset combines random digit dialed (RDD), twins, siblings, and Milwaukee respondents. The variable SAMPLMAJ, from Project 1, identifies which of the sub-samples a respondent derives.

Variables have been named according to the Short Variable Name (SVN) conventions (see M2_Variable Naming and Coding Conventions_10-26-05.doc). All variables include labels to aid interpretation. Value labels have been applied where appropriate. Details about P2 variables can be found in the following documents: M2_P2_Daily Data Measurement Instrument_7-14-09.pdf; M2_P2_Scales Documentation_7-14-09.pdf; and Saliva Collection_7-14-09.pdf.

The Person-Day Dataset

The NSDE daily data file (M2_P2_Daily Data_7-14-09.sav) is structured as a "person-day" dataset such that each row of data corresponds to a single day for a given individual. Data regarding days are 'nested' within individuals over time. Micro-level information (data collected on a given day) comes from a macro-unit, in this case a single individual. In contrast to typical multivariate datasets, where each row of values corresponds to one single individual and that individual's values for some set of variables, each row of a person-day dataset corresponds to an individual's values for some set of variables on that day. Figures 1 and 2 depict the traditional multivariate and person-day datasets, respectively. Both figures 1 and 2 represent data from 5 participants, actually, the same 5 participants (note the *same* IDs). The figures below depict data from two components of a study. First, Figure 1 shows data about participant's age, gender, and depression scores (CESD, The Center for Epidemiologic Studies Depression Scale) taken at the baseline

assessment (i.e., MIDUS P1). These data can be seen as characteristics that vary across individuals in the study (traditional individual differences research).

Figure 1. Traditional multivariate dataset.

ID	Age	Gender	CESD
101	45	M	4
102	86	F	7
103	37	F	11
104	72	M	8
105	66	M	18

Figure 2 depicts data collected from the same participants assessed on three consecutive days. Participants were asked whether they experienced a stressor on that day (variable 'Any Stress'; Yes = 1, No = 2), as well their negative affect (Neg. Affect) over the past 24 hours (sum of NA items). The day of assessment is indicated by the variable 'DAY'.

Figure 2. Person-day dataset (3 days of assessment).

ID	Day	Any Stress	Neg. Affect
101	1	1	7
101	2	2	5
101	3	1	7
102	1	1	11
102	2	1	15
102	3	2	10
103	1	1	9
103	2	1	9
103	3	1	8
104	1	2	5
104	2	2	6
104	3	1	9
105	1	2	5
105	2	2	5
105	3	2	6

Figure 2 shows participant 101 experienced a stressful event on the first and third days that they were assessed, whereas participant 105 did not report experiencing a stressor on any of the days. Figure 2 also shows that across all 5 participants, their negative affect varies from one day to the next. Figure 2 displays quite clearly the concept of the 'nested' data structure. Notice that there are multiple observations for each individual, and these observations are organized by ID **and** DAY of assessment.

Linking Traditional Multivariate and Person-Day Datasets

It may be of interest to link the data from the baseline assessment to the daily assessments to answer certain research questions (e.g., Are age and depressive symptomatology

related to the likelihood of experiencing a stressor on any given day?). To answer these questions, we would need to merge the two datasets into one. Let us assume that the data from the traditional multivariate dataset (baseline variables, including age, gender, and CESD scores) are in a dataset called 'baseline', and the data from the daily component of the study are contained in a dataset called 'daily'. SAS and SPSS codes to merge these two datasets into one are shown below:

SAS Codes

```
Data all; *Create/name a dataset;
Merge baseline daily; *Tells SAS that the new dataset 'all' is going to be a combination of the 'baseline' and 'daily' datasets;
By ID;*Tells SAS that 'ID' is the relevant variable by which the data should be linked;
Run;
```

SPSS Codes

```
MATCH FILES /FILE=*
  /TABLE='C:\NSDE\aggr2.sav'
  /BY ID
EXECUTE.
```

When these commands are executed, the resulting dataset should look similar to Figure 3.

Figure 3. Combined multivariate (baseline) and person-day (daily) datasets.

ID	Day	Any Stress	Neg. Affect	Age	Gender	CESD
101	1	1	7	45	M	4
101	2	2	5	45	M	4
101	3	1	7	45	M	4
102	1	1	11	86	F	7
102	2	1	15	86	F	7
102	3	2	10	86	F	7
103	1	1	9	37	F	11
103	2	1	9	37	F	11
103	3	1	8	37	F	11
104	1	2	5	72	M	8
104	2	2	6	72	M	8
104	3	1	9	72	M	8
105	1	2	5	66	M	18
105	2	2	5	66	M	18
105	3	2	6	66	M	18

Figure 3 shows that age, gender, and CESD variables from the 'baseline' dataset have been appended to the 'daily dataset. Furthermore, notice that each participant's age, gender, and CESD score have been appended to EACH row. Because age, gender, and

CESD only were assessed once each variable has a single value for each participant, and that value is included at each observation ('DAY') for each participant ('ID'). Although age, gender, and CESD only were assessed once, the fact that they appear at each observation after merging the datasets is normal. Because these measures were not time-varying (i.e., collected more than once), in the context of this example, we would not expect them to have differing values across DAYs for any given participant. If a value did vary from day to day (say CESD for participant 103 was 11, 14, 11, for days 1 to 3, respectively), something went wrong in the data merging process.

C. New ID Systems

New Ids

A new respondent identification system has been applied to MIDUS 2 data. The new variable is called M2ID. The new system has been implemented to help maintain confidentiality of respondents. It will be used throughout the release of all the remaining Project 2 to 5 data. We also have re-identified MIDUS 1 data with M2IDs to facilitate longitudinal analyses.

New Family IDs

A new family identification system has been applied to MIDUS 2 data. The variable is called M2FAMNUM. Every respondent has a family number except Milwaukee respondents. Related respondents (Main-Siblings or Twin-Twin) have the same family number. This system also has been added to the MIDUS 1 data.

D. Constructed Variables and Scales

Constructed variables and scales can be found immediately following the cortisol variables (see M2_P2_Scales Documentation_7-14-09.pdf and Saliva Collection_7-14-09.pdf).