

## **Documentation of Respondent Age Information in MIDUS**

Respondent age is probably one of the most important variables collected in a study of aging like MIDUS. This document provides some detailed background on how respondent age was obtained and/or calculated at the baseline data collection in MIDUS 1 (M1), as well as how gaps and errors in age and date-of-birth data have been addressed since that time.

**How age was determined at M1.** M1 baseline data collection was performed in 1995 by DataStat Inc., the data collection firm contracted to conduct the initial MIDUS survey by the MIDMAC network (MacArthur Foundation Network on Successful Mid-Life Development). More details are available in the M1 Field Report, but the following summarizes the procedures and policies used to determine age and/or birthdate at M1:

- Respondents' "stated" age was obtained from a household informant during initial phone screening of the sample. The HH informant enumerated the sex and age of all members of the HH.
- The stated age of the selected HH member was not necessarily verified with the respondent during the interview.
- Full birth dates were only obtained in the Self-Administered Questionnaire (SAQ) that followed the phone interview, but approximately 800 respondents failed to complete SAQ so the M1 data included missing birth date information.
- During the phone interview some respondents indicated that their stated age (provided by the informant) was incorrect, and during post-processing of the SAQ data some respondents' birth date information contradicted their stated age variable. In both such instances, the original M1 ages were only corrected if they erred by 5 or more years.

**How age has been updated since M1.** During MIDUS 2 (M2) data collection beginning in 2004, a stringent methodology was used to validate participant identity and age, including asking the participant for their birth date and confirming their previous address. These methods highlighted some of the problems with the age and birth date information collected at M1. In particular, when M1 and M2 age information was compared, there were a number of cases where the difference between the two was incompatible with the actual time interval between the M1 and M2 phone interviews (which ranged between about 8 and 10 years). Using the updated birth date information obtained at M2, age was recomputed using a standard formula. For example:

$$\begin{array}{rclcl} \text{InterviewDate} & - & \text{BirthDate} & = & \text{CalculatedAge} \\ 6/1/1995 & - & 10/13/1955 & = & 39 \end{array}$$

The result was rounded down to a whole number so that the variable represented the participant's age as of his or her last birthday prior to the phone interview.

The additional birth date information obtained at M2 allowed MIDUS to assign ages to about 300 respondents who did not previously have M1 age data. Nonetheless many M1 respondents were still missing accurate age and birthdate information.

**Finding new age and birthdate information.** In the years since M2, the University of Wisconsin Institute on Aging and the University of Wisconsin Survey Center have employed a variety of state-of-the-art tracing resources—including public and proprietary databases—to track down missing birthdate information and correct errors. As a result, nearly all of missing age and birth year data in the MIDUS sample has since been discovered or updated. This new information has allowed a more accurate and complete calculation of M1 age than was previously available.

**Comparing previous and updated versions of age and birth year.** Table 1 below presents summary descriptive statistics of the previous and newly updated versions of M1 age and birth year variables. It shows that nearly all the missing information has been filled in, and that the mean and standard deviation of the newly-calculated M1 age variable have not appreciably changed from the previous version.

Table 1. Comparing previous and updated M1 age/birth year

	Previous	Updated
Number missing M1 age	59	3
Number missing M1 birth year	524	3
M1 age range	20-75	20-75
M1 birth year range	1920-1975	1919-1975
Mean (SD) of M1 age	46.38 (13.00)	46.38 (12.98)
Mean (SD) of M1 birth year	1947.79 (12.89)	1948.10 (12.95)

While the average age has not changed much in the updated M1 variable, to help identify the individual cases that have experienced a change in their calculated ages, the latest M1 and M2 datasets include variables (M1AGE\_FLAG, M2BYEAR\_FLAG, etc.) that indicate whether age or birth year was changed. Table 2 summarizes the contents of M1 age flag variable and shows that while the vast majority (97%) of cases have not changed, about 140 cases (2%) experienced at least a 1-year change in calculated age.

Table 2. Flag variable (M1AGE\_FLAG) indicates status changes in M1 age.

	Frequency	Percent
Age not changed	6911	97.2
One year change in age	83	1.2
Two years or greater change in age	58	0.8
Changed from missing to valid age	56	0.8
Total	7108	100.0

Both versions of the M1 and M2 age variables—the previous (A1PAGE\_M2, B1PAGE\_M2) and the updated (A1PRAGE\_2019, B1PRAGE\_2019)—are included in the latest M1 and M2 datasets. Researchers who have used previous age variables in past analysis can compare these versions to determine the extent to which this change affects any prior analysis.