MIDUS
Midlife in the United States
A National Study of Health & Well-Being

Documentation of Post-Stratification Weights

Created for MIDUS Refresher 1 (MR1)

This document describes how post-stratification weights were calculated for the MIDUS Refresher baseline (MR1) sample. Two sets of weights were created for respondents who completed the phone interview (N=3,577) and the subsample who completed the SAQ (N= 2,598[1]). The MR1 weights described in this document were created in order to coincide with the post-stratification weights created for the MIDUS Baseline (M1) sample. The MR1 weights described here use a transparent post-stratification scheme similar to that as M1, allowing both weighted datasets to be combined, compared, and analyzed.

The sets of MR1 weights described in this document were created using a population-based adjustment called a post-stratification weight. It is a *post*-stratification weight because it is computed *after* the data are collected. The *stratification* part comes from the use of various known strata (such as age group, or sex distribution) of the population to which the new data are adjusted to better conform to the population's parameters.

In order to calculate a post-stratification weight, an auxiliary dataset is needed to which the new data are compared. MR1 used the October 2012 Current Population Survey (CPS) data derived from the Census Bureau. CPS data show the demographic characteristics of the U.S population at a comparable time to which the MR1 data were collected. (See www.census.gov/cps/).

The MR1 weights discussed in this document can be found in the dataset titled:
MR1_P1_SURVEY_N3577_20250407.sav

Here is a list of relevant weight variables and the strata characteristics on which they were computed:

RA1PWGHT1 = Education for Phone Survey
RA1PWGHT2 = Race for Phone Survey
RA1PWGHT3 = Age for Phone Survey

[1] There are 2,600 cases with SAQ data in the data file. Two cases the SAQ data were added after the post-stratification weights were created.

RA1PWGHT4 = Sex for Phone Survey
RA1PWGHT5 = Marital Status for Phone Survey
RA1PWGHT6 = Education x Race x Sex x Age x Marital Status for Phone Survey
RA1PWGHT7 = Sex x Education x Age for Phone Survey
RA1PWGHT8 = Race x Education x Age for Phone Survey
RA1SWGHT1 = Education for SAQ
RA1SWGHT2 = Race for SAQ
RA1SWGHT3 = Age for SAQ
RA1SWGHT4 = Sex for SAQ
RA1SWGHT5 = Marital Status for SAQ
RA1SWGHT6 = Education x Race x Sex x Age x Marital Status for SAQ
RA1SWGHT7 = Sex x Education x Age
RA1SWGHT8 = Race x Education x Age for SAQ

The first step in creating the MR1 post-stratification weights was to decide which demographic variables to correct for in the MR1 sample. For the MR1 Phone (N= 3,577) sample and the MR1 SAQ subsample (N= 2,598), the sample percentages among for the five demographic variables (Sex, Race, Age, Education, and Marital Status) were compared to the population percentages (Table 1). The largest discrepancies observed between the sample and population percentages were among Education and Age categories. For the MR1 SAQ subsample, there were also discrepancies in Sex, Marital Status, and Race. Therefore, the MR1 weights discussed in this document are multivariate post-stratification weights that simultaneously correct for Sex, Race, Age, Education, and Marital Status. Two additional multivariate weights were created. One is a multivariate weight that corrects for Sex, Age, and Education only, and the other is a multivariate weight that corrects for Race, Age, and Education.

To calculate simple univariate weights, the population proportion among strata for each demographic variable was divided by the sample proportion, resulting in five univariate weights for Sex, Race, Age, Education, and Marital Status. These univariate weights are displayed in Table 1 below.

Table 1. Comparison of MR1 Phone sample SAQ subsample with the Current Population Survey (October 2012) and constructed univariate weights.

MIDUS Refresher Baseline	CPS (October 2012)[2]	Unweighted MR1 Phone data	Unweighted MR1 SAQ data	Univariate Weights MR1 Phone data[3]	Univariate Weights MR1 SAQ data[4]
	(N=81,379)	(N=3,577)	(N=2,598)	(N=3,577)	(N=2,598)
	%	%			
SEX					
Male	47.9	48.1	46.9	1.00	1.02
Female	52.1	51.9	53.1	1.00	0.98
RACE[5]					
White	82.5	82.3	84.4	1.00	0.98
Others	17.5	17.7	15.6	0.99	1.13
AGE[6]					
25-34	20.9	19.4	16.8	1.06	1.23
35-44	21.0	20.2	17.9	1.04	1.17
45-54	23.3	20.2	19.9	1.16	1.17
55-64	213	18.1	20.3	1.18	1.05
65-74	13.6	22.1	25.1	0.62	0.55
EDUCATION					
12 years or less	39.2	23.2	22.5	1.69	1.74
13 – 15 years	27.7	30.7	29.2	0.90	0.95
16 years or more	33.2	46.1	48.3	0.72	0.69
MARITAL					
Married	62.5	64.0	65.1	0.98	0.96
Unmarried	37.5	36.0	34.9	1.04	1.08

[2] CPS data filtered by age: >/=25 & </=74

[3] Values are based on the univariate weights: RA1PWGHT1, RA1PWGHT2, RA1PWGHT3, RA1PWGHT4, RA1PWGHT5

[4] Values are based on the univariate weights: RA1SWGHT1, RA1SWGHT2, RA1SWGHT3, RA1SWGHT4, RA1SWGHT5

[5] Race based on RA1PF7A, RA1PF8A1 and OS variables-allows Respondent to have multiple racial categories

[6] Categories based on computed age

To create the multivariate post-stratification weight that simultaneously adjusts for Sex, Race, Age, Education and Marital status, the population proportion for Sex, Race, Age, Education and Marital status was divided by the sample proportion. Table 2 shows the multivariate post-stratification weights for the various strata that were used for the entire MR1 Phone (N=3,577) sample (RA1PWGHT6).

Table 2. Post-stratification weights for MR1 Phone Sample created based on various strata among Sex, Race, Age, Education, and Marital Status.

Males							
Marital Status	**Race**	**Education**	**Age**				
			25-34	35-44	45-54	55-64	65-74
Married	White	12 years or less	1.6	1.7	2.3	1.9	1.0
		13-15 years	0.6	0.8	1.0	0.9	0.6
		16 years or more	0.5	0.6	0.9	0.7	0.4
	Other	12 years or less	2.2	1.6	2.2	2.7	0.9
		13-15 years	0.4	0.9	0.9	1.5	0.5
		16 years or more	0.7	1.3	1.6	0.8	0.7
Not Married	White	12 years or less	2.9	2.5	1.9	2.4	1.7
		13-15 years	1.8	1.5	1.0	1.3	0.5
		16 years or more	1.3	1.1	1.0	0.8	0.3
	Other	12 years or less	1.6	2.9	0.9	5.9	1.0
		13-15 years	0.8	1.7	0.5	1.8	0.5
		16 years or more	1.1	1.3	1.0	1.0	0.9
Females							
Marital Status	**Race**	**Education**	**Age**				
			25-34	35-44	45-54	55-64	65-74
Married	White	12 years or less	2.8	3.0	2.1	2.0	1.0
		13-15 years	1.0	0.9	1.1	1.4	0.9
		16 years or more	0.7	0.7	0.9	1.0	0.6
	Other	12 years or less	1.8	2.0	1.0	2.5	1.0
		13-15 years	0.5	1.2	0.5	1.2	1.2
		16 years or more	0.9	0.8	1.7	1.2	1.7
Not Married	White	12 years or less	3.2	2.5	1.6	1.4	0.7
		13-15 years	1.2	1.7	0.9	1.1	0.4
		16 years or more	1.2	0.6	0.9	0.6	0.3
	Other	12 years or less	1.7	1.4	1.0	1.3	1.6
		13-15 years	0.7	0.5	0.9	0.8	0.7
		16 years or more	0.5	0.5	0.6	0.6	0.5

The multivariate post-stratification weight that is described was applied to each of the demographic variables to determine how well the multivariate weight adjusted for discrepancies in sex, race, age, education, and marital status. Table 3 shows the unweighted and weighted strata distributions for the MR1 Phone (N=3,577) sample and the MR1 SAQ subsample (N=2,598).

Table 3. Comparison of un-weighted and multivariate post-stratification weighted MR1 Phone sample and MR1 SAQ subsample with the Current Population Survey (October 2012).

	CPS (October 2012)	Unweighted MR1 Phone data	Weighted MR1 Phone data[7]	Unweighted MR1 SAQ data	Weighted MR1 SAQ data
MIDUS Refresher 1	(N=81,379)	(N=3,577)	(N=3,577)	(N=2,598)	(N=2,598)[8]
	%	%	%	%	%
SEX					
Male	47.9	48.1	47.9	46.9	48.0
Female	52.1	51.9	52.1	53.1	52.0
RACE					
White	82.5	82.3	82.4	84.44	82.4
Others	17.5	17.7	17.6	15.6	17.6
AGE					
25-34	20.9	19.4	20.6	16.8	20.6
35-44	21.0	20.2	21.0	17.9	20.9
45-54	23.3	20.2	23.3	19.9	23.3
55-64	21.3	18.1	21.3	20.3	21.3
65-74	13.6	22.1	13.8	25.1	13.9
EDUCATION					
12 years or less	39.2	23.2	39.1	22.5	39.1
13 – 15 years	27.7	30.7	27.6	29.2	27.6
16 years or more	33.2	46.1	33.2	48.3	33.3
MARITAL					
Married	62.5	64.0	62.5	65.1	62.5
Unmarried	37.5	36.0	37.5	34.9	37.5

[7] Values are based on multivariate weight labeled: RA1PWGHT6
[8] Values are based on multivariate weight labeled: RA1SWGHT6