**Health and Retirement Study Questions for Study Variables**

Below are descriptions of the variables for the spousal depression and frailty study. Further documentation of HRS variables can be found here:

<https://hrs.isr.umich.edu/documentation/codebooks?_ga=2.37293607.622096824.1515160277-935309192.1471978139>

**Depression**

Now think about the past week and the feelings you have experienced. Please tell me if each of the following was true for you much of the time during the past week. Much of the time during the past week, you felt depressed.

Would you say yes or no?

**Age**

Age at the end of the interview.

**Race/Ethnicity**

What race do you consider yourself to be: White, Black or African American, American Indian, Alaska Native, Asian, Native Hawaiian, Pacific Islander, or something else?

Response options are White/Caucasian, Black/African American, and Other; and Hispanic and non-Hispanic. “Other” includes American Indian, Alaskan Native, Asian, and Pacific Islander; however, these responses are masked (collapsed to protect participant confidentiality). Beginning in Wave 8 (2006), the respondent can report up to three races and then select the race that is considered the primary race. See RAND HRS Data Documentation, p. 123. Final categories are non-Hispanic White (reference category), African-American, Hispanic, and Other race/ethnicity. African-American, Hispanic, and Other are included as dummy variables in model specifications.

**Education Level**

What is the highest grade of school or year of college you completed?

Response options are less than high school, GED, high school graduate, some college, college and above. Some college includes if the respondent has a high school diploma or GED and more than 12 years of education or if the degree is less than a BA or “other.” See RAND HRS Data Documentation, p. 139. Final categories are less than high school (reference category), high school or GED, some college, and college and above. High school/GED, some college, and college and above are included as dummy variables in model specifications.

**Income**

Sums income in the household (across the spouse and respondent). This includes (for both respondent and spouse) income earnings, household capital income, pension and annuity, SSI and Social Security Disability, Social Security Retirement, unemployment and Worker’s Compensation, other government transfers, and other household income. See RAND HRS Data Documentation, p. 787.

**Frailty**

Frailty is an indicator (1=yes, 0=no) of difficulties in ≥2 domains of functioning. The four functioning domains are: (1) physical functioning, (2) nutritive functioning, (3) cognitive functioning, (4) sensory functioning. Physical functioning difficulty indicates (a) dizziness as a persistent problem, (b) ≥2 falls in the previous 2 years, or (c) difficulty lifting 10 pounds. Nutritive functioning difficulty indicates (a) weight in wave 2012 minus weight in wave 2010 is equal to ≥10% of weight in wave 2010 or (b) BMI<18.5kg/m^2 in 2012. Cognitive functioning difficulty indicates mild to severe cognitive impairment on performance-based measure (score of ≥10 on the HRS' total cognitive score, which ranges from 0-35), or according to a proxy rating (≥2 of 7 symptoms as reported by proxy respondent). Sensory functioning difficulties indicate (a) fair or poor eyesight despite use of corrective lenses or (b) fair or poor hearing despite use of hearing aids.

**Dizziness**

Have you had any of the following persistent or troublesome problems? Since we last talked to you in the previous wave, have you had any of the following persistent or troublesome problems? Persistent dizziness or lightheadedness?

**Falls**

Have you fallen down since the past interview wave? ELSE in the last two years?

**Difficulty lifting 10 pounds**

We need to understand difficulties people may have with various activities because of a health or physical problem. Please tell me whether you have any difficulty doing each of the everyday activities that I read to you. Exclude any difficulties that you expect to last less than three months. [yes/no]

Because of a health problem do you have any difficulty with lifting or carrying weights over 10 pounds, like a heavy bag of groceries?

**Weight loss of 10 lbs. or more**

Have you gained or lost ten or more pounds in the last 2 years?

Coded as ‘yes’ if responded “yes, lost 10 lbs. or more.’

**BMI**

BMI obtained from the RAND HRS dataset. From the RAND HRS Codebook: “We derive one body mass index (RwBMI) that is calculated as weight divided by the square of height. Height is converted into meters and weight into kilograms. Beginning in Wave 3, height is only asked of new Respondents, but weight is asked in every wave. For Respondents being re-interviewed, height is carried forward from their first interview.”

**Self-rated Health**

Would you say your health is excellent, very good, good, fair, or poor?

**Cognition**

Cognitive measures include word recall and mental status. Word recall questions can be found here: <http://hrsonline.isr.umich.edu/modules/meta/2016/core/codebook/h16d_ri.htm>

Memory recall questions are the following:

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| --- | --- |
| Serial 7’s Test | Now let’s try some subtraction of numbers. One hundred minus 7 equals what?... This is the second subtraction. And 7 from that?... This is the third subtraction. And 7 from that? … This is the fourth subtraction. And 7 from that?... This is the fifth subtraction. And 7 from that? Certain values were imputed in the HRS dataset. (The interviewer does not repeat the difference said by the respondent after each trial.)244 |
| Backwards counting from 20 | For this next question, please try to count backward as quickly as you can from the number I will give you. I will tell you when to stop. Please start with 20. (Code correct if respondent counted backwards from 19 to 10 or from 20 to 11 without error). Respondent has two attempts to correctly count backwards for 10 continuous numbers. Two points are given if successful on the first try, one if successful on the second, and zero if not successful on either try. Certain values were imputed in the HRS dataset. |
| Date naming | The respondent is asked to report today’s date correctly, including the day of month, month, year, and day of week, respectively. (“Please tell me today’s date.” The interviewer can probe the respondent with the following questions: “The date is:” and “The day is:” Each of these four answers is coded as a 1 for a correct answer and 0 for an incorrect answer. Certain values were imputed in the HRS dataset. |
| Object naming | What do you usually use to cut paper? What do you call the kind of prickly plant that grows in the desert? |
| Vice-president/President naming | Who is the President of the United States right now? Who is the Vice-president? |

Further documentation of cognitive measures can be found here: http://hrsonline.isr.umich.edu/sitedocs/userg/dr-006.pdf

**Vision**

Is your eyesight excellent, very good, good, fair, or poor using glasses or corrective lenses as usual? Scores range from 1-6 where 1 = excellent, 2 = very good, 3=good, 4=fair, 5=poor, 6=legally blind.

**Hearing**

Hearing was measured with the question, “Is your hearing excellent, very good, good, fair, or poor (using a hearing aid as usual)?” Scores range from 1-5 where 1=excellent, 2=very good, 3=good, 4=fair, 5=poor.