

Psychosocial and Lifestyle Questionnaire
2006 - 2016

Documentation Report
Core Section LB

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Introduction

Overview

In 2004, HRS piloted a new feature for data collection in the form of self-administered questionnaires that were left with respondents upon the completion of an in-person Core Interview. Since 2006, this mode of data collection has been utilized to obtain information about participants' evaluations of their life circumstances, subjective wellbeing, and lifestyle. This psychosocial information is obtained in each biennial wave from a rotating (random) 50% of the core panel participants who complete the enhanced face-to-face interview (EFTF). Longitudinal data will be available at four-year intervals: the 2010 wave provides the first longitudinal psychosocial data from the 2006 participants. Some longitudinal data is also available for the 2004 participants in subsequent waves. Electronic versions of the HRS Participant (Psychosocial) Lifestyle Questionnaires used in the 2004 pilot, and the 2006, 2008, 2010, 2012, 2014, and 2016 waves are available on the HRS website (Documentation/Questionnaires - scroll down to the end of the Biennial Content to Psychosocial - Section LB). Because the questionnaire was left with respondents at the end of the EFTF interview for them to complete and mail back to study offices, the questionnaire came to be known and is referred to on the HRS website as the Leave-Behind (LB). We use the terms Participant Lifestyle Questionnaire (PLQ) and Leave-Behind (or LB) in this report to refer to the self-administered psychosocial data collection.

Background

Since its inception in 1992, the HRS survey has focused on the health, economics, and demographics of aging and the retirement process. Initially, the assessment of psychosocial issues in aging was not a goal of the HRS. In 2003, the NIA-HRS Data Monitoring Committee commissioned a report by Professor Carol Ryff of the University of Wisconsin, which described the research opportunities from expansion into this area. That report is online at:

<https://hrs.isr.umich.edu/publications/biblio/9187>

The launch of the English Longitudinal Study of Ageing (ELSA) in 2002 provided a starting-point model for psychosocial data collection in the HRS. The HRS then formed a Working Group under the direction of Jim House to consider content and methods toward four aims: 1) to determine the extent to which psychosocial measures may improve understanding of causes and effects of health, well-being, and retirement in middle and later life, 2) to improve understanding of social disparities in health, 3) to increase utilization of HRS data by researchers in additional social science fields, including social epidemiology, social gerontology, and psychology, and 4) to facilitate the cross-cultural comparison of data from the English Longitudinal Study of Ageing (ELSA; <https://www.elsa-project.ac.uk/>) and the Survey of Health, Aging, and Retirement in Europe (SHARE; <http://www.share-project.org/>).

In 2004, the HRS Psychosocial Working Group developed a pilot Participant Lifestyle Questionnaire and administered it as a leave-behind self-administered questionnaire to a pilot sample of about 4,000 respondents. In 2005, the scientific review of the HRS renewal proposal strongly endorsed this new content and recommended an approach more strongly grounded in psychological theory than that taken by ELSA. In conjunction with a subcommittee of the NIA-HRS Data Monitoring Committee (Lisa Berkman, John Cacioppo, Nicholas Christakis, and

Carol Ryff), the HRS consulted widely with experts in the psychology of aging and conducted a workshop at the Annual Meeting of the Gerontological Society of America in Orlando, FL on November 18, 2005. The purpose of this meeting was to review the data collected from the pilot study, and discuss plans for a revised survey to be administered in 2006.

Participants at the November 18, 2005 Psychosocial Workshop included:

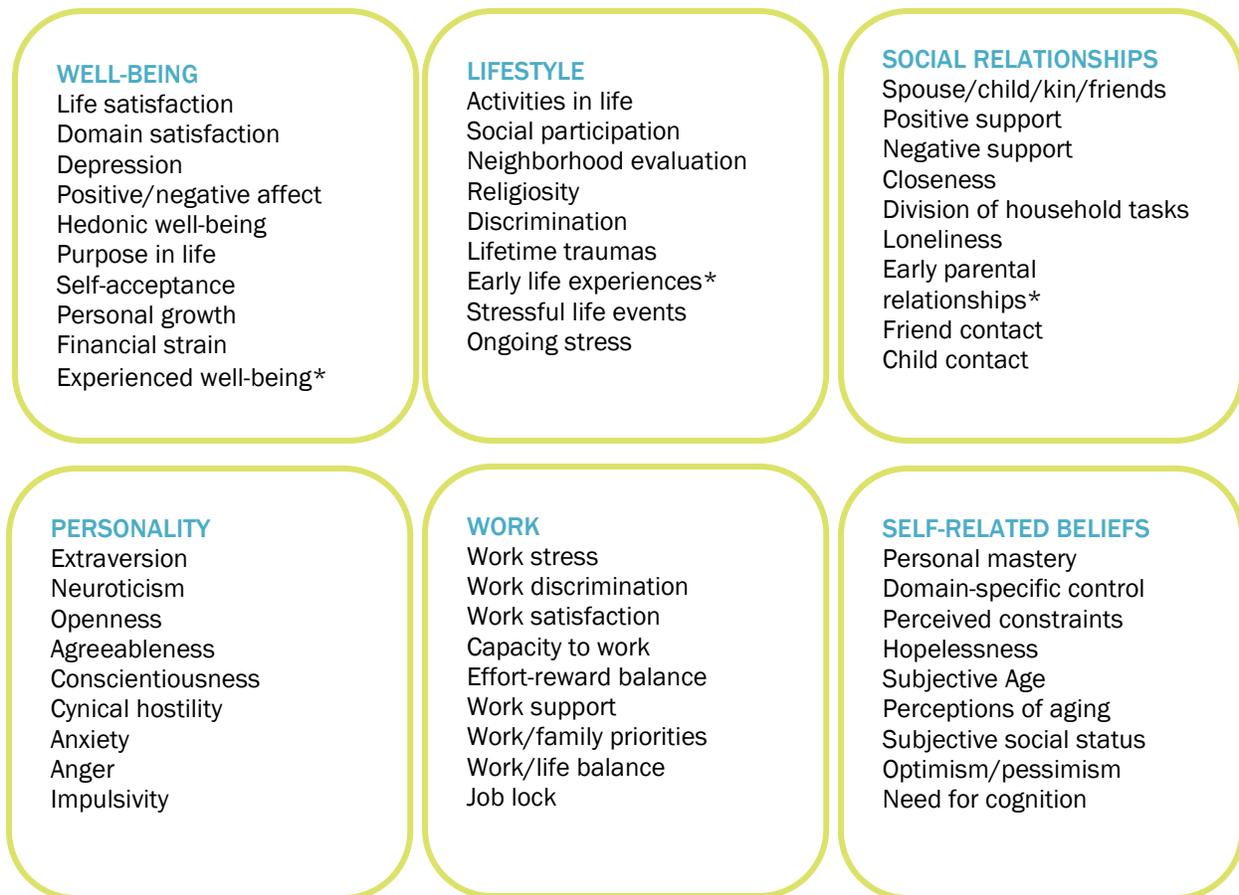
Toni Antonucci, University of Michigan
Elizabeth Breeze, University College, London
Deborah Carr, Rutgers University
Philippa Clarke, University of Michigan
Sheldon Cohen, Carnegie Mellon University
Eileen Crimmins, University of Southern California
Gwenith Fisher, University of Michigan
Robert Hauser, University of Wisconsin
Tess Hauser, University of Wisconsin
Jim House, University of Michigan
James Jackson, University of Michigan
Margie Lachman, Brandeis University
John J. McArdle, University of Southern California
Carol Ryff, University of Wisconsin
Richard Schulz, University of Pittsburgh
Jacqui Smith, Max Planck Institute of Human Development, Berlin
Ron Spiro, VA Boston Healthcare System and Boston University
David Weir, University of Michigan
Robert Willis, University of Michigan

Since 2007, the content of the Psychosocial Questionnaire has been regularly discussed and revised by the HRS Co-PIs. The co-authors of this study guide are especially grateful for the valuable assistance provided by Rachel King, Jennifer Morack, Elizabeth Morris, and Marina Larkina in various preparation phases.

Overview of Psychosocial Content and Timeline 2006-2016

After a pilot study in 2004, the psychosocial content was revised and updated in 2006. The psychosocial and lifestyle questionnaires from 2006 to 2016 now cover six substantive areas of interest to researchers in many disciplines. These substantive areas are: 1) subjective well-being; 2) lifestyle and experience of stress; 3) quality of social ties; 4) personality traits; 5) work-related beliefs; 6) self-related beliefs. **Figure 1** summarizes the constructs assessed in each of these areas. Specific information about the scales together with their sources, psychometrics, cross-wave inclusion, and examples of their application in the literature is included below in this documentation report. Cross-wave concordance is also summarized in Table 3.

Figure 1: Overview of Content in the HRS Psychosocial and Lifestyle Questionnaires: 2006-2016



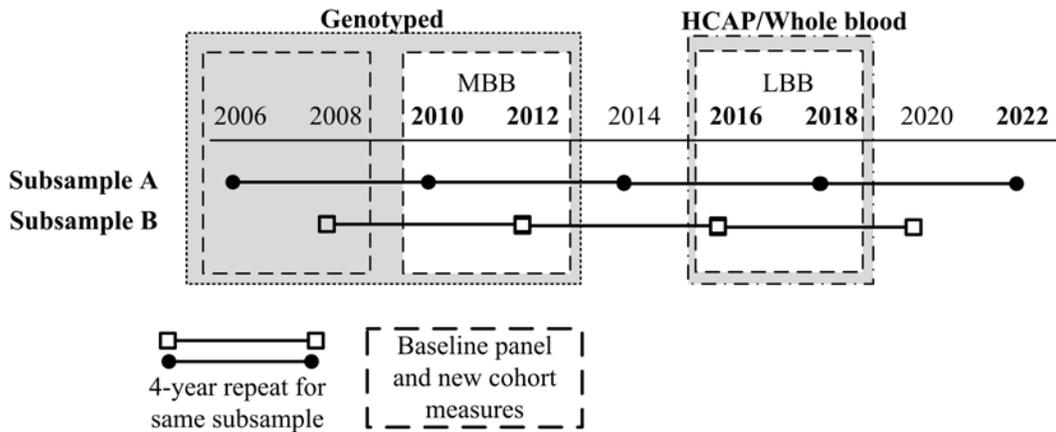
**Not in every wave*

Since 2006, HRS has collected psychosocial and lifestyle data biennially using a **self-administered questionnaire (SAQ)** which is “left behind” with participants at the end of the enhanced in-person interview to complete in their own time and return by mail. The questionnaires are available for download on the HRS website for all waves (labeled section LB – Leave Behind): <https://hrs.isr.umich.edu/documentation/questionnaires>. Both spouses/partners

in an eligible household are given the psychosocial and lifestyle SAQ to complete, a design feature that now provides unique couple-level (dyadic) information from an increasingly diverse national panel over age 50.

Each wave, a rotating random 50% subsample of the longitudinal panel is scheduled for this enhanced interview that, together with the psychosocial questionnaire, includes the collection of physical and biomarker assessments. **Figure 2** illustrates this cross-sectional and longitudinal enhanced interview design from 2006 onwards. The two random 50% panel subsamples are distinguished as **Subsample A** (begins in 2006) and **Subsample B** (begins in 2008). Researchers utilize this HRS subsample design: i) to report cross-sectional associations; ii) to replicate analyses across consecutive waves; iii) for prospective analyses after a baseline; and iv) to analyze longitudinal change in psychosocial functioning. Figure 2 also shows the overlap of the psychosocial data collection design with the recruitment of new cohorts (i.e., the 1954-59 MBB cohort in 2010; the 1960-65 LBB cohort in 2016) and two other HRS initiatives (e.g., the 2006-12 genotype coverage; the 2016-2018 whole blood collection and enhanced cognitive assessments). The period 2006-2016 provides 3 longitudinal waves of data for both subsamples for HRS cohorts born prior to 1954 and 2 waves for the MBB cohort.

Figure 2: Timeline for the HRS Psychosocial SAQ: 2006-2016 and Beyond



In order to accommodate researcher interests in longitudinal change and/or associations with biomarkers collected in specific waves, the general content of the psychosocial questionnaire has, for the most part, not changed substantially since 2006. After 2012, psychosocial constructs that require only a one-time collection were omitted (e.g., retrospective information about early life trauma and relationships with parents). In the future, these will, however, be collected for new cohorts (e.g., people recruited in 2016) as part of a cohort-specific supplemental off-year life history mail survey.

Survey Methodology

2004 Pilot Wave

In the 2004 wave of HRS, two questionnaires were administered to separate random subsamples of living, non-institutionalized respondents. One was a Participant Questionnaire on Work and Health which consisted of a series of work disability vignettes and was targeted to respondents below 75 years of age. This SAQ is labelled “LB1” on the table of questionnaires under the documentation link. The other was a Participant Lifestyle Questionnaire that contained questions on psychosocial topics and was administered to respondents of all ages. This SAQ is labelled “LB2.” At the end of the core interview, respondents were presented with the SAQ and asked to complete it and mail it back to the main field office at the University of Michigan (in a pre-paid envelope provided with the questionnaire). Respondents did not receive any additional incentive to complete the leave-behind questionnaire in 2004.

Administration of the pilot leave-behind questionnaires began around April 27 and continued through the end of the 2004 field period. Questionnaire assignments were made by Primary Sampling Unit (PSU) in such a way as to provide roughly equal numbers of respondents for each of the two leave-behind questionnaires. In households containing two respondents, both respondents received the same type of questionnaire.

2006 and Later Waves

Sample design:

As noted previously, starting in 2006, the Psychosocial and Lifestyle SAQ was integrated into the enhanced face-to-face (EFTF) interview, which also includes a set of physical measures and biomarkers and is administered to an alternating random half of the sample each wave. A random 50% of the sample was selected to receive the EFTF interview in 2006 (designated as subsample A in Figure 2); this subsample also received the EFTF interview in 2010 and 2014. The other 50% of the sample (designated as subsample B in Figure 2) was assigned to receive the EFTF interview in 2008, 2012 and 2016.

The eligibility rules for administration of the Psychosocial and Lifestyle SAQ have changed some across waves, as depicted in **Table 1**. In 2006, the Psychosocial and Lifestyle SAQ was administered to EFTF participants who completed their interview in person (at least through Section I, physical measures and biomarkers), as opposed to by telephone. Participants whose interview was completed by a proxy respondent and those residing in nursing homes were eligible for the Psychosocial and Lifestyle SAQ, as long as the interview was conducted in-person. In the 2008-2014 waves the mode restriction was lifted and all living EFTF respondents were eligible for the Psychosocial and Lifestyle SAQ. Starting in 2016, the eligibility rules for the Psychosocial and Lifestyle SAQ were tightened to match those for the physical measures and biomarkers. Specifically, the Psychosocial and Lifestyle SAQ will only be administered to self-respondents who are non-institutionalized and who complete their interview (through Section I) in person.

Table 1: Psychosocial and Lifestyle SAQ Inclusion by Wave

Wave	Interview completed by telephone	Proxy interview (EFTF)	Nursing home resident (EFTF)	Self-respondent, non-institutionalized (EFTF)
2006		X	X	X
2008	X	X	X	X
2010	X	X	X	X
2012	X	X	X	X
2014	X	X	X	X
2016+				X

In 2006 and 2008, respondents who had not returned a questionnaire after the second reminder notice were offered the option of completing the Psychosocial and Lifestyle SAQ by telephone. This practice was discontinued after 2008 for cost reasons.

Incentives: Starting with the 2006 wave, respondents have received a \$20 incentive for the Psychosocial and Lifestyle SAQ. For most respondents, this incentive is presented at the end of the interview when the interviewer introduces the SAQ to the respondent. In this case, it is clear to respondents that they are receiving an extra incentive for the questionnaire. For new cohort participants in 2010, however, the Psychosocial and Lifestyle SAQ incentive was folded in with their interview incentive, for a total amount of \$100. New cohort respondents typically received their interview incentive at the end of the interview, after the SAQ was introduced. They were not informed that part of the incentive was for the core interview and part for the SAQ.

Psychosocial and Lifestyle SAQ eligibility and completion indicators: The psychosocial questionnaire data file (Core Section LB - Leave Behind) for each wave includes a set of indicators that identify the eligibility and completion status for the psychosocial questionnaire in that wave. The files also include a respondent (R) type variable that will enable users to define a comparable sample across all waves. The indicators are defined as follows (the “X” in the variable name denotes the wave):

Respondent type indicator (XLBRTYPE)

- 1 = not EFTF R
- 2 = EFTF R, phone interview
- 3 = EFTF R, proxy or nursing home resident
- 4 = EFTF R, self-respondent, FTF interview, not in nursing home
- . (missing/blank) = no core IW

Eligibility indicator (XLBELIG)

- 1 = eligible for Psychosocial and Lifestyle SAQ in this wave
- 5 = not eligible for Psychosocial and Lifestyle SAQ in this wave
- . (missing/blank) = no core IW

Completion indicator (XLBCOMP)

- 1 = self-completion, returned by mail
- 2 = self-completion, completed by phone with interviewer
- 4 = completed by someone other than the designated respondent
- 5 = not completed, eligible for Psychosocial and Lifestyle SAQ
- . (missing/blank) = not completed, not eligible for Psychosocial and Lifestyle SAQ

These indicators are available for all waves. The new indicators will replace the LBELIG and LBCOMP indicators that had previously been released for 2006 and 2008.

Response Rates

Table 2 presents response rates for the Psychosocial and Lifestyle SAQ among eligible respondents in each wave. Response rates were very high in 2006 and 2008, the first waves for which the psychosocial questionnaire was incorporated into the EFTF interview. The response rates fell quite a bit in 2010. This was due in part to the much lower response rates among the newly recruited respondents in 2010, who were asked to complete the SAQ at the end of a very long baseline interview (over 3 hours, on average). However, response rates also fell for panel respondents. Interviewers are trained to emphasize the importance of the psychosocial questionnaire to respondents and the value of having repeated measures for these items. The higher response rates in 2014 suggest that multiple, and potentially different factors, play a role in each wave. The 2016 response rates were not available when writing this report.

Table 2: Psychosocial and Lifestyle SAQ Response Rates by Wave

Wave	All Eligible Respondents	Panel Respondents	2010 New Cohort Respondents
2004	76.8	--	--
2006	87.7	--	--
2008	83.7	--	--
2010	73.1	78.1	59.4
2012	72.7	76.9	63.1
2014	77.8	81.1	69.8

Weights

We generate sample weights for the Psychosocial and Lifestyle SAQ for each wave in order to adjust for non-response. These sample weights are generated for respondents who are eligible in a given wave (XLBELIB = 1) and who completed the questionnaire themselves (XLBCOMP = 1 or 2). Respondents in nursing homes who completed the Psychosocial and Lifestyle SAQ will be assigned weights for waves for which nursing home weights are available (currently 2006-2010). The Psychosocial and Lifestyle SAQ weights are the product of three factors:

- 1) The core or nursing home weight for the given wave
- 2) A non-response adjustment factor obtained from a propensity model predicting Psychosocial and Lifestyle SAQ response
- 3) A post-stratification adjustment to the weighted HRS sample

The non-response adjustment factor was obtained from a propensity model predicting the probability of completing the psychosocial SAQ among all eligible cases. The propensity model was estimated by logistic regression and weighted by the HRS respondent-level weight. Predictor variables included age, sex, race/ethnicity, coupleness, education, work status, self-rated health, counts of functional limitations (Nagi, IADL and ADL), vision rating, cognitive status, and religious attendance. The inverse of the fitted probabilities of completion formed the non-response adjustment factor. The non-response adjusted weight was trimmed at the fifth and ninety-fifth percentiles and then post-stratified to the HRS weighted sample by age group, sex and race/ethnicity.

We recommend using the psychosocial weight when analyzing data from the psychosocial questionnaire to account for the complex sample design. The decision to use weights or not, of course, depends on the research question, analysis strategy, and discipline.

Special Methodological Issues to Consider

Response Scales

The Psychosocial and Lifestyle SAQ is comprised of a variety of items and scales that are described in more detail later in this document. The wording of scales is intended to maximize comparability with response scales used in other surveys (e.g., ELSA, SHARE, MIDUS) and with previous research literature. Note that the response categories in the questionnaire vary across scales. It is very important to consult the questionnaire data codebooks available on the HRS website to obtain the code for each item (<https://hrs.isr.umich.edu/documentation>).

Recoding Responses and Negative Wording of Survey Items

Many of the items within measures in the questionnaire will need to be recoded so that higher values correspond with higher levels on a given item or measure. For example, the Positive Affect items in Question 27 (in 2012) are asked using a scale as follows: 1 = Very Much, 2 = Quite a bit, 3 = Moderately, 4 = A little, and 5 = Not at all. By recoding the values so that 1 = Not at all, 2 = A little, etc., higher values will correspond to higher levels of Positive Affect.

Similarly, items vary in terms of being positively and negatively worded. This is a practice frequently employed in the assessment of psychosocial measures to combat response sets (e.g., when a respondent circles the same answer for every question). The values for negatively worded items need to be reversed to obtain a positive composite score. For example, Question 22d (in 2012) to assess control reads “I have little control over the things that happen to me.” The values on this item will need to be recoded in order to be consistent with other items where higher values indicate having more control when creating a composite score. This documentation report provides information on when to reverse-code items.

Who Completed the Questionnaire?

A question (Q51 in 2006, 2008 and 2010; Q85 in 2012; Q77 in 2014 and 2016) was asked at the end of the survey as an indicator of whether or not a proxy respondent was used to complete the questionnaire: “Were the questions in this booklet answered by the person whose name is written on the front cover?” Approximately 1-2% of psychosocial questionnaires are completed by proxy respondents. In many cases where the participant is very old, a caregiver acts as a scribe,

especially if the participant is vision-impaired or finds it difficult to hold a pen due to arthritis. Beginning in 2008, we also ask the survey respondent to identify whether: YES, the person whose name is on the front cover completed the questionnaire by him/herself, YES, the person whose name is on the front cover answered the questions, but someone else assisted by writing in the answers for that person, or NO, the person whose name is on the front cover did not answer/complete the questionnaire. Note that one implication of this is that, if the user does not apply the weight, the sample age distribution will include people who are age-ineligible, e.g., spouse or partners, who completed the questionnaire.

Note on Terminology

The terms used in this report to describe each construct are prevalent in the sociology and psychology literatures and consistent with the original item/scale source. Sometimes you may find papers from researchers who use a different general term to describe a construct built from the same items or who form composite scores from different sets of items. For this reason, we suggest that users search for specific words or items as well as overall topics in the questionnaire.

The Content and Format of this User Guide

This User Guide provides information about the psychosocial constructs included in the waves 2006, 2008, 2010, 2012, 2014, 2016. For each construct, we provide citations for the source(s) of the items, list the items in the questionnaire, report the response coding and inter-item consistency (reliability) information, and as far as possible include citations for several papers to illustrate how the construct has been used in the literature. Note that the 2016 psychometric information is not included because these data were not available when writing this report.

Important Note on Construct Question Numbers Used in the User Guide

While most constructs, scales, and question numbering are the same across waves 2006-2016, there are some differences. Some scales appear in all waves whereas others were omitted after several repeats in order to introduce new measures. One consequence is that question numbers for particular constructs or items may change across waves. We note this in the documentation for each construct. An overview of content concordance across the 2006, 2008, 2010, 2012, 2014, and 2016 waves is provided in **Table 3**.

In order to provide a method for easy comparison across the waves of the psychosocial questionnaires covered in this guide, we adopted the following system:

- each main construct is listed chronologically using the **2012 question numbering** unless otherwise noted;
- documentation of a construct not included in 2012 has a different year before the question number;
- the years (waves) a construct is available appear in parentheses under the construct title/name (see also Table 3 overview);
- cross-wave inconsistencies in question numbers or when a construct was not included in a prior wave are also noted directly below the construct label.

Table 3: Overview of the Cross-Wave Concordance of Constructs in the Psychosocial SAQ

Topic	2006	2008	2010	2012	2014	2016
Social Participation / Engagement	✓	✓	✓	✓	✓	✓
Retrospective Social Participation		✓	✓	✓		
Life Satisfaction	✓	✓	✓	✓	✓	✓
Composition of Social Network	✓	✓	✓	✓	✓	✓
# Close Social Relationships	✓	✓	✓	✓	✓	✓
Contact with Social Network	✓	✓	✓	✓	✓	✓
Perceived Social Support	✓	✓	✓	✓	✓	✓
Family and Friends in Neighborhood					✓	✓
Partner Division of Labor (Bargaining Power)					✓	✓
Cynical Hostility	✓	✓	✓	✓		
Optimism/ Pessimism	✓	✓	✓	✓	✓	✓
Hopelessness	✓	✓	✓	✓	✓	✓
Loneliness	✓	✓	✓	✓	✓	✓
Neighborhood Disorder/ Social Cohesion	✓	✓	✓	✓	✓	✓
Personal Sense of Control: Agency	✓	✓	✓	✓	✓	✓
Domain Specific Control	✓	✓	✓	✓	✓	✓
Change in Control over Financial Situation			✓	✓	✓	✓
Positive and Negative Affect	✓	✓	✓	✓	✓	✓
Religiosity/ Spirituality	✓	✓	✓	✓	✓	✓
Prayer Frequency	✓	✓	✓	✓	✓	✓
Self-Perceptions of Aging		✓	✓	✓	✓	✓

Topic	2006	2008	2010	2012	2014	2016
Everyday Discrimination	✓	✓	✓	✓	✓	✓
Attributions of Everyday Discrimination	✓	✓	✓	✓	✓	✓
Social Effort / Reward Balance	✓	✓	✓	✓		
Risk Attitudes					✓	✓
Quality of Relationships with Parents Early in Life		✓	✓	✓		
Big 5 Personality Traits	✓	✓	✓	✓	✓	✓
Compassion and Self-image Goals						✓
Sub-Facets of Trait Conscientiousness		✓	✓			
Self-Control / Impulsiveness			✓	✓		
Need for Cognition			✓	✓	✓	✓
Purpose in Life (Psychological Well-Being)	✓	✓	✓	✓	✓	✓
Unusual Living Circumstances				✓	✓	✓
Major Experiences of Lifetime Discrimination	✓	✓	✓	✓		
Lifetime Traumas	✓	✓	✓	✓		
Quality of Relationship with Mother Early in Life		✓	✓	✓		
Lifetime Traumas Before Age 18	✓	✓	✓	✓		
Stressful Life Events	✓	✓	✓	✓		
Satisfaction with Life Domains	✓	✓	✓	✓	✓	✓
Financial Strain	✓	✓	✓	✓	✓	✓
Experience of Chronic Stress	✓		✓	✓	✓	✓
Anxiety	✓	✓	✓	✓		
Anger	✓	✓	✓	✓		

Topic	2006	2008	2010	2012	2014	2016
Subjective Social Status (Cantril Ladder)	✓	✓	✓	✓	✓	✓
Experienced Well-being Day reconstruction measure				✓	✓	✓
Work status	✓	✓	✓	✓	✓	✓
Job Lock		✓	✓	✓	✓	✓
Work/Family Priorities	✓					
Perceived Ability to Work		✓	✓	✓	✓	✓
Work/Non-work Interference and Enhancement	✓	✓	✓	✓	✓	✓
Chronic Work Discrimination	✓	✓	✓	✓		
Job Satisfaction and Stressors	✓	✓	✓	✓	✓	✓
Work Environment		✓	✓	✓		
Coworker Support		✓	✓	✓		
Supervisor Support		✓	✓	✓		
Assistance in Survey Completion	✓	✓	✓	✓	✓	✓

Q1. Social Participation - Social Engagement

(2006, 2008, 2010, 2012, 2014, & 2016)

The 20 items included in 2010, 2012, 2014, and 2016 cover a wide range of activities and ask frequency of participation. Earlier questionnaires covered reduced lists of activities: only 18 items of these 20 were in 2008 for example. The activities from the short 2006 list have mostly been integrated into different sections of the 2008, 2010, 2012, 2014, and 2016 questionnaires. Please see section titled “2006 Scales or Specific Items Not Included in Later Survey Content” for documentation of the specific 2006 participation and engagement items. Composite scores for types and frequencies of activities can be constructed using the 2008, 2010, 2012, 2014, 2016 items. However, because some activity wordings differ slightly between 2008 and 2010, and with the addition of 2 new activities in 2010 (namely Q01b activities with grandchildren and Q01j watch TV), please pay close attention to the variable names as they may not match across the surveys. The response categories have also changed across waves: 2006 used Yes/No response categories, 2008 changed to a 6-point Likert scale (Daily to Not in the last month), and 2010, 2012, 2014, and 2016 changed to a 7-point scale adding the category Never/Not relevant.

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Levin, J.S. (2003). Private Religious Practices. In N. W. Group (Ed.), *Multidimensional measurement of religiousness/spirituality for use in health research: A report of the Fetzer Institute/National Institute on Aging Working Group* (2nd ed., pp. 39-42). Kalamazoo, MI: John E. Fetzer Institute.

Parslow, R.A., Jorm, A.F., Christensen, H., & Mackinnon, A. (2006). An instrument to measure engagement in life: Factor analysis and associations with sociodemographic, health, and cognition measures. *Gerontology, 52*, 188-198.

Salthouse, T.A., Berish, D.E., & Miles, J.D. (2002). The role of cognitive stimulation on the relations between age and cognitive functioning. *Psychology and Aging, 17*, 548-557.

2012: 20 items (Q01a-Q01t)

(Please tell us HOW OFTEN YOU DO EACH ACTIVITY.)

Q01a Care for a sick or disabled adult?

Q01b Do activities with grandchildren, nieces/nephews, or neighborhood children?
(2010, 2012, 2014, and 2016)

Q01c Do volunteer work with children or young people? (Q01b in 2008)

Q01d Do any other volunteer or charity work? (Q01c in 2008)

Q01e Attend an educational or training course? (Q01d in 2008)

Q01f Go to a sport, social, or other club? (Q01e in 2008)

Q01g Attend meetings of non-religious organizations, such as political, community, or other interest groups? (Q01f in 2008)

- Q01h Pray privately in places other than a church or synagogue? (Q01g in 2008)
- Q01i Read books, magazines, or newspapers? (Q01h in 2008)
- Q01j Watch television? (2010, 2012, 2014, and 2016)
- Q01k Do word games such as crossword puzzles or Scrabble? (Q01i in 2008)
- Q01l Play cards or games such as chess? (Q01j in 2008)
- Q01m Do writing (such as letters, stories, or journal entries)? (Q01k in 2008)
- Q01n Use a computer for e-mail, Internet or other tasks? (Q01l in 2008)
- Q01o Do home or car maintenance or gardening? (Q01m in 2008)
- Q01p Bake or cook something special? (Q01n in 2008)
- Q01q Make clothes, knit, embroider, etc.? (Q01o in 2008)
- Q01r Work on a hobby or project? (Q01p in 2008)
- Q01s Play sports or exercise? (Q01q in 2008)
- Q01t Walk for 20 minutes or more? (Q01r in 2008)

2014 and 2016:

- Q01u Participate in a local community arts group such as a choir, dance, photography, theatre, or music group?

Coding: 1 = Daily, 2 = Several times a week, 3 = Once a week, 4 = Several times a month, 5 = At least once a month, 6 = Not in the last month, 7 = Never/Not Relevant (2010, 2012, 2014, and 2016). Note regarding Missing responses in 2008: If participants responded to at least 2 activities we suggest recoding missings in other activities as 6 or 7. Note regarding coding in 2006: Response scale was 1 = yes, 5 = no.

Scaling: Depending on topical interest, researchers could count the number and frequency of activities (e.g., physical exercise, volunteering) or create scores for frequency of participation in different categories of activity.

Background:

Agahi, N., & Parker, M.G. (2008). Leisure activities and mortality: Does gender matter? *Journal of Aging and Health, 20*, 855-871.

Levasseur, M., Richard, L., Gauvin, L., & Raymond, E. (2010). Inventory and analysis of definitions of social participation found in the aging literature: Proposed taxonomy of social activities. *Social Science & Medicine, 71*(12), 2141-2149.

Tan, E.J., Rebok, G.W., Yu, Q., Frangakis, Carlson, M.C., Wang, T., et al. (2009). The long-term relationship between high-intensity volunteering and physical activity in older African-American women. *Journal of Gerontology: Social Sciences, 64*, 304-311. Q2. Retrospective Social Participation

Q2. Retrospective Social Participation

(2008, 2010, & 2012 only)

This retrospective self-report item was developed by HRS and was included in the 2008, 2010, and 2012 questionnaires.

2012: 1 item (Q02)

(Think back to the number of activities you did in your life when you were about 30. How does the number you do now compare to back then?)

Coding: 1 = Less now, 2 = The same, 3 = More now

Q3. Life Satisfaction - Subjective Well-being

(2006, 2008, 2010, & 2012; Q2 in 2014 & 2016)

This is Diener's measure of life satisfaction, a well-established measure of self-evaluated life quality that has been used extensively in international comparative studies. Note that the response scale was 6-point in 2006 and changed to a 7-point scale thereafter.

Source:

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49(1), 71-75.

Pavot, W., & Diener, E. (1993). Review of the Satisfaction with Life Scale. *Psychological Assessment*, 5(2), 164-172.

2012: 5 items (Q03a – Q03e)

(Please say how much you agree or disagree with the following statements.)

Q03a In most ways my life is close to ideal.

Q03b The conditions of my life are excellent.

Q03c I am satisfied with my life.

Q03d So far, I have gotten the important things I want in life.

Q03e If I could live my life again, I would change almost nothing.

Coding: 2008, 2010, 2012, 2014, and 2016: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree, 4 = Neither agree nor disagree, 5 = Slightly agree, 6 = Somewhat agree, 7 = Strongly agree

2006: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree, 4 = Slightly agree, 5 = Somewhat agree, 6 = Strongly agree

Scaling: Create an index of life satisfaction by averaging the scores across all 5 items. Set the final score to missing if there are three or more items with missing values.

Psychometrics: 2014 Alpha = .89; 2012 Alpha = .88; 2010 Alpha = .89:

2008 Alpha = .88; 2006 Alpha = .89

Background:

Diener, E., Lucas, R. E., & Scollon, C. (2006). Beyond the hedonic treadmill: Revising the adaptation theory of well-being. *American Psychologist*, 61(4), 305-314.

Diener, E., & Seligman, M. E. P. (2004). Beyond money: Toward an economy of well-being. *Psychological Science in the Public Interest*, 5(1), 1-31.

Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276-302.

Stone, A.A., Schwartz, J.E., Broderick, J.E., Deaton, A. (2010). A snapshot of the age distribution of psychological well-being in the United States. *Proceedings of the National Academy of Sciences of the United States of America*, 107(22), 9985-9990.

Q4. – Q18. Social Network / Social Integration / Relationship Quality / Social Support

(2006, 2008, 2010 & 2012; Q3 -Q17a in 2014 & 2016)

This series of questions assesses several indicators of social integration (number of social ties) and the contact and quality of interaction with those social ties. Separate questions are asked about spouse/partner (Q.4-6), children (Q.7-10), family (Q. 11-14), and friends (Q. 15-18). Equivalent items are included in ELSA. In 2014 and 2016 an additional frequency of communication type was added, “Communicate by Skype, Facebook, or other social media” for each social tie group. Two additional sets of questions were added in 2014 and 2016: Good friends in neighborhood (Q17a) and Partner Division of Labor (Q5a – Q5de).

Sources:

Schuster, T. L., Kessler, R. C., & Aseltine, R. H. Jr. (1990). Supportive interactions, negative interactions, and depressed mood. *American Journal of Community Psychology*, 18, 423-438.

Turner, R. J., Frankel, G., & Levin, D. M. (1983). Social support: Conceptualization, measurement, and implications for mental health. In J. R. Greenley & R. G. Simmons (Eds.), *Research in Community and Mental Health* (pp. 67-111). Greenwich: JAI Press.

Composition of Social Network

Four questions ask respondents if they have spouses/partners, children, family, and friends.

2012: 4 items (Q04, Q07, Q11, Q15)

Q04 Do you have a husband, wife, or partner with whom you live?

Q07 Do you have any living children?

Q11 Do you have any other immediate family, for example, any brothers or sisters, parents, cousins or grandchildren?

Q15 Do you have any friends?

Coding: 1 = Yes, 5 = No

Scaling: Create a sum variable by counting the number of ‘yes’ responses for respondents in order to obtain the composition of social networks. Scores will range from 0-4.

Number of Close Social Relationships

Four questions assess the close relationships within the respondents’ social networks.

One question is used to examine the closeness respondents feel with their spouses (Q06). Three questions ask for the number of close relationships with children, family members, and friends.

2012: 4 items (Q06, Q10, Q14, Q18)

Q06 How close is your relationship with your spouse or partner?

Q10 How many of your children would you say you have a close relationship with?

Q14 How many of these family members would you say you have a close relationship with?

Q18 How many of your friends would you say you have a close relationship with?

Coding: Q06 1 = Very close, 2 = Quite close, 3 = Not very close, 4 = Not at all close

Contact with Social Network

Nine questions assess the extent to which respondents are in contact with their social networks (excluding spouses). Similar questions refer to contact with children (Q 9a-c), other family (Q 13a-c), and friends (Q17a-c).

2012: 9 items (Q9a-c, Q13a-c, Q17a-c)

(On average, how often do you do each of the following? Please check the answer which shows how you feel about each statement.)

a Meet up (include both arranged and chance meetings)

b Speak on the phone

c Write or email

2014 and 2016 only:

d Communicate by Skype, Facebook, or other social media

Coding: 1 = Three or more times a week, 2 = Once or twice a week, 3 = Once or twice a month, 4 = Every few months, 5 = Once or twice a year, 6 = Less than once a year or never

Scaling: Reverse code all items. Depending on your research question, average or sum across items for each specific relation category or across all relation categories for a measure of overall contact with the social network. Set the final score to missing if there is more than one item with missing values.

2014 & 2016 only: *Relatives and Good friends in Neighborhood*

Q13a Besides people living with you, do you have any relatives living in your neighborhood?

Q17a Do you have any good friends living in your neighborhood?

Coding: 1 = Yes, 2 = No

Perceived Social Support (Relationship Quality)

Four sets of 7 items (Q5, Q8, Q12, Q16) examine the perceived support that respondents receive from their spouses (Q5), children (Q8), family (Q12), and friends (Q16). For each relationship category there are 3 positively worded items (items a-c) and 4 negatively worded items (items d-g). Some researchers use these items as indicators of perceived relationship quality rather than support.

2012: 28 items (Q5a-g, Q8a-g, Q12a-g, Q16a-g)
 (Please check the answer which best shows how you feel about each statement.)

Positive Social Support (items a-c)

- a How much do they really understand the way you feel about things?
- b How much can you rely on them if you have a serious problem?
- c How much can you open up to them if you need to talk about your worries?

Negative Social Support (items d-g)

- d How often do they make too many demands on you?
- e How much do they criticize you?
- f How much do they let you down when you are counting on them?
- g How much do they get on your nerves?

Coding: 1 = A lot, 2 = Some, 3 = A little, 4 = Not at all.

Scaling: Reverse code all items. Create an index of positive social support and an index of negative social support for each relationship category by averaging the scores within each dimension [positive (a-c) and negative (d-g)]. Set the final score to missing if there is more than one item with missing values for the positive social support scale, or more than two items with missing values for the negative social support scale.

Psychometrics:

Alpha Reliability in 4 Relationship Categories: 2014, 2012, 2010, 2008, and 2006

	Spouse	Children	Other Family	Friends
Positive Social Support	'14 = .82	'14 = .83	'14 = .86	'14 = .84
	'12 = .80	'12 = .82	'12 = .87	'12 = .84
	'10 = .82	'10 = .82	'10 = .86	'10 = .85
	'08 = .82	'08 = .82	'08 = .86	'08 = .83
	'06 = .81	'06 = .83	'06 = .86	'06 = .84
Negative Social Support	'14 = .79	'14 = .78	'14 = .81	'14 = .77
	'12 = .80	'12 = .79	'12 = .81	'12 = .77
	'10 = .78	'10 = .76	'10 = .78	'10 = .75
	'08 = .79	'08 = .78	'08 = .78	'08 = .76
	'06 = .78	'06 = .78	'06 = .78	'06 = .76

Background:

Birditt, K. S., Newton, N. J., Cranford, J. A., & Ryan, L. H. (2015). Stress and negative relationship quality among older couples: implications for blood pressure. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 71(5), 775-785.

Cohen, S. (2004). Social relationships and health. *American Psychologist*, 59, 676-684.

Rook, K. S. (2015). Social networks in later life: Weighing positive and negative effects on health and well-being. *Current Directions in Psychological Science*, 24, 45–51.

Uchino, B. N. (2009). Understanding the links between social support and physical health: A life-span perspective with emphasis on the separability of perceived and received support. *Perspectives on Psychological Sciences*, 4, 236-255.

2014 and 2016:

Q5a – Q5d. Partner Division of Labor - Bargaining Power

These questions ask provide information about the enjoyment and amount of time spent together as a couple and which partner share in decision making and household tasks. From 1992 to 2010, items Q5a, Q5b, and a general question about major family decisions were asked in the first Core interview with the participant when they entered HRS.

2014: 16 items (Q5a, Q5b, Q5ca-i, Q5da-de)

(Please check the answer which best shows how you feel about each statement.)

Q5a Overall, how enjoyable is the time you spend together with your spouse/partner?

Coding: 1 = Extremely enjoyable, 2 = Very enjoyable, 3 = Somewhat enjoyable,
4 = Not too enjoyable

Q5b In your free time, do you and your spouse mostly do things together or separately?

Coding: 1 = Most or all together, 2 = Some together, some separately,
3 = Most or all separately

Q5c Who has the final say in important decisions in your household?

- a Major family issues?
- b Car purchases?
- c Major appliance purchases?
- d How much to save?
- e How to invest our savings?
- f What health insurance to buy?
- g Which doctors to go to?
- h Which TV shows to watch?
- i Where to go on vacation?

Coding: 1 = I do always, 2 = I do mostly, 3 = We have equal say, 4 = My spouse/partner does mostly, 5 = My spouse/partner does always, 6 = Someone else, 7 = Not Relevant

Q5d Who does these tasks for your household?

- a Manages bills?
- b Files taxes?
- c Fills out medical forms?
- d Grocery shopping?

e Prepares meals?

Coding: 1 = I do always, 2 = I do mostly, 3 = We have equal say, 4 = My spouse/partner does mostly, 5 = My spouse/partner does always, 6 = Someone else, 7 = Not Relevant

Background:

Babiarz, P., Robb, C. A., & Woodyard, A. (2012). Family decision making and resource protection adequacy. *Journal of Consumer Affairs*, 46(1), 1-36.

Friedberg, L. & Webb, A. (2006) Determinants and consequences of bargaining power in households. Report, Boston College, Center for Retirement Research at Boston College. (wp_2006/CRRwp2006-13.pdf) Retrieved from <http://www.bc.edu/centers/crr>

Kamo, Y. (2000). "He said, she said": Assessing discrepancies in husbands' and wives' reports on the division of household labor. *Social Science Research*, 29(4), 459-476.

Manser, M., & Brown, M. (1980). Marriage and household decision-making: A bargaining analysis. *International Economic Review*, 21(1), 31-44. doi: 10.2307/2526238

Q19a - Q19e. Cynical Hostility

(2006, 2008, 2010, & 2012 only)

These five items from the Cook-Medley Hostility Inventory have been used in several important studies evaluating potential health consequences of hostility. Note: Q19a. reads, "Most people inwardly dislike putting themselves out to help other people" in the 2006 questionnaire.

Sources:

Cook, W. W., & Medley, D. M. (1954). Proposed hostility and pharisaic-virtue scales for the MMPI. *The Journal of Applied Psychology*, 38(6), 414-418.

Costa, P. T., Zonderman, A. B., McCrae, R. R., & Williams, R. B. (1986). Cynicism and paranoid alienation in the Cook and Medley HO Scale. *Psychosomatic Medicine*, 48(3/4), 283-285.

2012: 5 items (Q19a-Q19e)

(Please say how much you agree or disagree with the following statements:)

Q19a Most people dislike putting themselves out to help other people

Q19b Most people will use somewhat unfair means to gain profit or an advantage rather than lose it.

Q19c No one cares much what happens to you.

Q19d I think most people would lie in order to get ahead.

Q19e I commonly wonder what hidden reasons another person may have for doing something nice for me.

Coding: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree, 4 = Slightly agree, 5 = Somewhat agree, 6 = Strongly agree

Scaling: Create an index of cynical hostility by averaging the scores across all items. Set the final score to missing if there are more than three items with missing values.

Psychometrics: 2012 Alpha = .78; 2010 Alpha = .80; 2008 Alpha = .79; 2006 Alpha = .79

Background:

Eckhardt, C., Norlander, B., & Deffenbacher, J. (2004). The assessment of anger and hostility: A critical review. *Aggression and Violent Behavior, 9*, 17-43.

Tindle H.A., Chang Y., Kuller, L.H., Manson, J.E., Robinson, J.G., Rosal, M.C., Siegle, G.J., & Matthews, K.A. (2009). Optimism, cynical hostility, and incident coronary heart disease and mortality in the women's health initiative. *Circulation, 120*(8), 656-662.

Q19f - Q19k. Optimism - Pessimism

(2006, 2008, 2010, 2012; Q18a –18f in 2014 & 2016)

A six-item version of the Life Orientation Test – Revised (LOT-R) frequently used to assess dispositional optimism and pessimism.

Source:

Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology, 67*(6), 1063-1078.

2012: 6 items (Q19f-Q19k)

(Please say how much you agree or disagree with the following statements:)

Q19f If something can go wrong for me it will.

Q19g I'm always optimistic about my future.

Q19h In uncertain times, I usually expect the best.

Q19i Overall, I expect more good things to happen to me than bad.

Q19j I hardly ever expect things to go my way.

Q19k I rarely count on good things happening to me.

Coding: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree, 4 = Slightly agree, 5 = Somewhat agree, 6 = Strongly agree

Scaling: Create an index of optimism by averaging the scores across items Q19g, Q19h, and Q19i. Set the optimism score to missing if there is more than one item with missing values. Create an index of pessimism by averaging the scores across items Q19f, Q19j, and Q19k. Set the pessimism score to missing if there is more than one item with missing values. Researchers also recode pessimism to build a 6-item optimism score.

Psychometrics: Optimism: 2014 Alpha = .82; 2012 Alpha = .80; 2010 Alpha = .79;

2008 Alpha = .79; 2006 Alpha = .80

Pessimism: 2014 Alpha = .74; 2014 Alpha = .77; 2010 Alpha = .78;

2008 Alpha = .76; 2006 Alpha = .77

Background:

Carver, C. S., Scheier, M. F., & Segerstrom, S. C. (2010). Optimism. *Clinical Psychology Review, 30*(7), 879-889.

Kim, E. S., Smith, J., & Kubzansky, L. D. (2014). A prospective study of the association between dispositional optimism and incident heart failure. *Circulation: Heart Failure*, 7, 394–400

Peterson, C. (2000). The future of optimism. *American Psychologist*, 55(1), 44-45.

Q19l - Q19o. Hopelessness

(2006, 2008, 2010, 2012; Q18g-18j in 2014 & 2016)

This measure consists of two items from Everson et al. (1997) (Q. 19l-m) and two from Beck et al. (1974) (Q19n-o).

Sources:

Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The hopelessness scale. *Journal of Consulting and Clinical Psychology*, 42(6), 861-865.

Everson, S. A., Kaplan, G. A., Goldberg, D. E., Salonen, R., & Salonen, J. T. (1997). Hopelessness and 4-year progression of carotid atherosclerosis: The Kuopio Ischemic Heart Disease Risk Factor Study. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 17, 1490-1495.

2012: 4 items (Q19l-Q19o)

(Please say how much you agree or disagree with the following statements:)

Q19l I feel it is impossible for me to reach the goals that I would like to strive for.

Q19m The future seems hopeless to me and I can't believe that things are changing for the better.

Q19n I don't expect to get what I really want.

Q19o There's no use in really trying to get something I want because I probably won't get it.

Coding: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree, 4 = Slightly agree, 5 = Somewhat agree, 6 = Strongly agree

Scaling: Create an index of hopelessness by averaging the scores across all items. Set the final score to missing if there are more than two items with missing values.

Psychometrics: 2014 Alpha = .88; 2012 Alpha = .88; 2010 Alpha = .85;
2008 Alpha = .84; 2006 Alpha = .86

Q20. Loneliness

(2006, 2008, 2010, 2012; Q19 in 2014 & 2016)

HRS provides researchers with a 3- and an 11-item scale of loneliness derived from the 20-item Revised UCLA Loneliness Scale (Russell et al., 1980; Russell, 1996). The original measure was shortened to 3 items for use in large-scale population telephone surveys by Hughes, Waite, Hawkley, and Cacioppo (2004). The additional 8 items were selected for the SAQ based on published factor loadings with older adults in order to enhance reliability and to allow researchers to determine potential sub-dimensions of loneliness (Russell, 1996; Hawkley, Browne, & Cacioppo, 2005). The 3-item version appears in the 2006 questionnaire (items a-c).

These 3 items remain in this position in the 11-item scale in 2008, 2010, 2012, 2014 and 2016 surveys.

Source:

Hawkley, L. C., Browne, M. W., & Cacioppo, J. T. (2005). How can I connect with thee? Let me count the ways. *Psychological Science, 16*(10), 798-804.

Hughes, M. E., Waite, L. J., Hawkley, L. C., & Cacioppo, J. T. (2004). A short scale for measuring loneliness in large surveys: results from two population-based studies. *Research on Aging, 17*, 655-672.

Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of personality assessment, 66*(1), 20-40.

2012: 11 items (Q20a-Q20k)

(The next questions are about how you feel about different aspects of your life. HOW MUCH OF THE TIME DO YOU FEEL...)

- Q20a You lack companionship?
- Q20b Left out?
- Q20c Isolated from others?
- Q20d That you are “in tune” with the people around you?
- Q20e Alone?
- Q20f That there are people you can talk to?
- Q20g That there are people you can turn to?
- Q20h That there are people who really understand you?
- Q20i That there are people you feel close to?
- Q20j Part of a group of friends?
- Q20k That you have a lot in common with the people around you?

Coding: 1 = Often, 2 = Some of the time, 3 = Hardly ever or never

Scaling: Create an index of loneliness by reverse-coding items 20a, 20b, 20c, and 20e and averaging the scores across all 11 items. Set the final score to missing if there is more than five items with missing values. To create the original 3-item loneliness index, reverse-code items 20a, 20b, 20c and create an average of these three scores. Set the final score to missing if more than 1 item is missing.

Psychometrics: 2014 Alpha = .87; 2012 Alpha = .87; 2010 Alpha = .88; 2008 Alpha = .88

Background:

Cacioppo, J. T., Hawkley, L. C., Crawford, E., Ernst, J. M., Burleson, M. H., Kowalewski, R. B., et al. (2002). Loneliness and health: potential mechanisms *Psychosomatic Medicine, 64*, 407-417.

Hawkley, L., & Cacioppo, J. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine, 40*(2), 218-227.

Q21. Neighborhood Disorder/Neighborhood Social Cohesion

(2006, 2008, 2010, & 2012; Q20 in 2014 & 2016)

The measure assesses two dimensions of neighborhood context: (i) physical disorder (vandalism/graffiti, rubbish, vacant/deserted houses, crime) and (ii) social cohesion/social trust (I feel part of this area, trust people, people are friendly, people will help you). Most items were included in Wave 3 (2006) of ELSA, and the last item was modified from the Project on Human Development in Chicago Neighborhoods.

Source:

Cagney, K. A., Glass, T. A., Skarupski, K. A., Barnes, L. L., Schwartz, B. S., & Mendes de Leon, C. F. (2009). Neighborhood-level cohesion and disorder: measurement and validation in two older adult urban populations. *Journals of Gerontology: Series B*, 64(3), 415-424.

2012: 8 items (Q21a-Q21h)

(These questions ask how you feel about your local area: that is everywhere within a 20 minute walk or about a mile of your home)

- Q21a I really feel part of this area/I feel that I don't belong in this area
- Q21b There is no problem with vandalism and graffiti in this area/ Vandalism and graffiti are a big problem in this area
- Q21c Most people in this area can be trusted/Most people in this area can't be trusted
- Q21d People feel safe walking alone in this area after dark/ People would be afraid to walk alone in this area after dark
- Q21e Most people in this area are friendly/Most people in this area are unfriendly
- Q21f This area is kept very clean/This area is always full of rubbish and litter
- Q21g If you were in trouble, there are lots of people in this area who would help you/If you were in trouble, there is nobody in this area who would help you
- Q21h There are no vacant or deserted houses or storefronts in this area/There are many vacant or deserted houses or storefronts in this area

Coding: 7-point scale (range 1 – 7)

Scaling: Create an index of **neighborhood physical disorder** (items 21b, d, f, h) by averaging the scores across all 4 items. Set the final score to missing if there are more than two items with missing values.

Create an index of **neighborhood social cohesion** (items 21a, c, e, g) by reverse-scoring all items and averaging the scores across all 4 items. Set the final score to missing if there are more than two items with missing values. Note: In 2006, items 21b, d, and h had to be reverse-coded when creating the index of physical disorder.

Psychometrics: Neighborhood Physical Disorder: 2014 Alpha = .84; 2012 Alpha = .83;
2010 Alpha = .82; 2008 = .83; 2006 = .64
Neighborhood Social Cohesion: 2014 Alpha = .86, 2012 Alpha .86;
2010 Alpha = .86; 2008 = .86; 2006 = .82

Background:

Latham, K., & Clarke, P. J. (2016). Neighborhood disorder, perceived social cohesion, and social participation among older Americans: Findings from the National Health & Aging Trends Study. *Journal of Aging and Health*, DOI: 10.1177/0898264316665933

Mendes de Leon, C.F., Cagney, K.A., Bienias, J.L., Barnes, L.L., Skarupski, K.A., Scherr, P.A., & et al. (2009). Neighborhood social cohesion and disorder in relation to walking in community-dwelling older adults: A multilevel analysis. *Journal of Aging and Health*, 21, 155-171.

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277(5328), 918-924.

Q22. - Q23. Personal Sense of Control - Self-Efficacy - Agency - Mastery

(2006, 2008, 2010 & 2012; Q21-Q22 in 2014 & 2016)

Authors in the literature use a variety of discipline-specific terms for these constructs. The same items are included in MIDUS.

Sources:

Lachman, M. E., & Weaver, S. L. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology*, 74(3), 763-773.

Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior*, 19(1), 2-21.

Perceived Constraints on Personal Control

2012: 5 items for constraints (Q22a-Q22e);

(Please say how much you agree or disagree with the following statements.)

- Q22a I often feel helpless in dealing with the problems of life.
- Q22b Other people determine most of what I can and cannot do.
- Q22c What happens in my life is often beyond my control.
- Q22d I have little control over the things that happen to me.
- Q22e There is really no way I can solve the problems I have.

Perceived Mastery

2012: 5 items for mastery (Q23a-Q23e)

(Please say how much you agree or disagree with the following statements.)

- Q23a I can do just about anything I really set my mind to.
- Q23b When I really want to do something, I usually find a way to succeed at it.
- Q23c Whether or not I am able to get what I want is in my own hands.
- Q23d What happens to me in the future mostly depends on me.
- Q23e I can do the things that I want to do.

Coding: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree,
4 = Slightly agree, 5 = Somewhat agree, 6 = Strongly agree

Scaling: Create an index of Constraints by averaging the scores across items Q22a-Q22e. Set the final score to missing if there are more than three items with missing values.
Create an index of Mastery by averaging the scores across items Q23a-Q23e. Set the final score to missing if there are more than three items with missing values.

Psychometrics: Constraints: 2014 Alpha = .87; 2012 Alpha = .87; 2010 Alpha = .88;
2008 Alpha = .87, 2006 Alpha = .86
Mastery: 2014 Alpha = .91; 2012 Alpha = .91; 2010 Alpha = .90;
2008 Alpha = .89; 2006 Alpha = .89

Background:

Lachman, M. E. (2006). Perceived control over aging-related declines: Adaptive beliefs and behaviors. *Current Directions in Psychological Sciences*, 15, 282-286.

Mirowsky, J., & Ross, C.E. (2007). Life course trajectories of perceived control and their relationship to education. *American Journal of Sociology*, 112, 1339-1382.

Pearlin, L. I., Nguyen, K. B., Schieman, S., Milkie, M. A. (2007). The life-course origins of mastery among older people. *Journal of Health and Social Behavior*, 48, 164-180

Skinner, E. A. (1996). Personality processes and individual differences: A guide to constructs of control. *Journal of Personality and Social Psychology*, 71(3), 549-570.

Q24 -Q26. Domain Specific Control (Efficacy)

(2006, 2008, 2010, 2012; Q23 –Q25 in 2014 & 2016)

Three single-item measures of domain specific control for **health** (Q24), **social life** (Q25), and **finances** (Q26) that come directly from MIDUS are included in 2008 and 2010. In 2006, Q25 was control over **your work situation**.

Source:

Lachman, M. E., & Weaver, S. L. (1998). Sociodemographic variations in the sense of control by domain: findings from the MacArthur Studies of Midlife. *Psychology and Aging*, 13(4), 553.

2012: 3 items (Q24 - Q26)

(Using a 0 to 10 scale where 0 means “no control at all” and 10 means “very much control,”....)

Q24 how would you rate the amount of control you have over your health these days?

Q25 how would you rate the amount of control you have over your social life these days?

Q26 how would you rate the amount of control you have over your financial situation these days?

Coding: 11 point scale (range 0-10)

Q26a. Perceived Change in Control over Financial Situation in the Last Year
(Added in 2010; Q25a in 2014 & 2016)

Source: HRS

2012: 1 item (Q26a)

Q26a Has the amount of control you have over your financial situation changed in the last year?

Coding: 1 = YES, I have less control now; 2 = YES, I have more control now;
3 = NO, the amount of control I have has stayed the same

Q27. Positive and Negative Affect

(2006, 2008, 2010, 2012; Q26 in 2014 & 2016)

These scales assess positive and negative dimensions of emotional (hedonic) well-being. The 2006 questionnaire used a measure of positive and negative affect derived from MIDUS (Mroczek & Kolarz, 1998: See “2006 Scales and Specific Items Not Included in Later Survey Content” at the end of this documentation). Beginning in 2008, most of the 25 items to assess positive and negative affect were chosen from the Positive and Negative Affect Schedule – Expanded Form (PANAS-X; Watson & Clark, 1994). Some items were obtained from the work of other researchers in this area of study.

Source:

Watson, D., & Clark, L.A. (1994). The PANAS-X: Manual for the positive and negative affect schedule – expanded form. University of Iowa.

http://ir.uiowa.edu/psychology_pubs/11/

<https://www2.psychology.uiowa.edu/faculty/clark/panas-x.pdf>

Also:

Carstensen, L. L., Pasupathi, M., Mayr, U., & Nesselroade, J. R. (2000). Emotional experience in everyday life across the adult life span. *Journal of Personality and Social Psychology*, 79(4), 644-655.

Ong, A.D., Edwards, L.M., & Bergeman, C.S. (2006). Hope as a source of resilience in later adulthood. *Personality and Individual Differences*. 41(7), 1263-1273.

2012: 25 items (Q27a – Q27y)

(During the last 30 days, TO WHAT DEGREE DID YOU FEEL ...?)

- Q27a Afraid?
- Q27b Upset?
- Q27c Determined?
- Q27d Enthusiastic?
- Q27e Guilty?
- Q27f Active?
- Q27g Proud?
- Q27h Interested?

Watson, D., Wiese, D., Vaidya, J., & Tellegen, A. (1999). The two general activation systems of affect: structural findings, evolutionary considerations, and psychobiological evidence. *Journal of Personality and Social Psychology*, 76(5), 820-838.

Q28. Religiosity/Spirituality

(2006, 2008, 2010, 2012; Q27 in 2014 & 2016)

These 4 items assess religious beliefs, meaning and values. (*Note: Religious affiliation and attendance are collected in the Demographics section of the core HRS.*)

Source:

Fetzer Institute. (2003). Brief Multidimensional Measure of Religiousness/Spirituality: 1999. In N. W. Group (Ed.), *Multidimensional measurement of religiousness/spirituality for use in health research: A report of the Fetzer Institute/National Institute on Aging Working Group* (2nd ed., pp. 85-88). Kalamazoo, MI: John E. Fetzer Institute.

2012: 4 items (Q28a-Q28d)

(*Please say how much you agree or disagree with each of the following statements*)

Q28a I believe in a God who watches over me.

Q28b The events in my life unfold according to a divine or greater plan.

Q28c I try hard to carry my religious beliefs over into all my other dealings in life.

Q28d I find strength and comfort in my religion.

Coding: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree, 4 = Slightly agree, 5 = Somewhat agree, 6 = Strongly agree

Scaling: Create an index of religiosity by averaging the scores across all 4 items. Set the final score to missing if there are more than two items with missing values.

Psychometrics: 2014 Alpha = .93, 2012 Alpha = .93, 2010 Alpha = .93,
2008 Alpha = .92, 2006 Alpha = .92

Background:

Krause, N. (2003). Religious meaning and subjective well-being in late life. *Journal of Gerontology: Social Sciences*, 58B, S160–S170

McCullough, M. E., & Willoughby, B. L. (2009). Religion, self-regulation, and self-control: Associations, explanations, and implications. *Psychological Bulletin*, 135, 69–93

Q29. Self-Perceptions of Aging: Subjective Age - Satisfaction with Aging – Attitudes Toward Own Aging

Subjective Age

(2008, 2010, 2012; Q28 in 2014 & 2016)

This item reveals the age a person feels regardless of their actual chronological age.

Source:

Kastenbaum, R., Durbin, V., Sabatini, P., Artt, S. (1972). "The ages of me": Toward personal and interpersonal definitions of functional aging. *Aging and Human Development*, 3, 197-211.

2012: 1 item (Q29a)

(Many people feel older or younger than they actually are.)

Q29a What age do you feel?

Coding: Some researchers use the age (years) reported while others make a proportional difference score by subtracting the subjective age from the chronological age and dividing the difference score by the participant's chronological age.

Background:

Rubin, D. C., & Berntsen, D. (2006). People over forty feel 20% younger than their age: Subjective age across the lifespan. *Psychonomic Bulletin & Review*, 13(5), 776-780.

Montepare, J.M. & Lachman, M.E. (1989). "You're only as old as you feel": Self perceptions of age, fears of aging, and life satisfaction from adolescence to old age. *Psychology and Aging*, 4, 73-78.

Stephan, Y., Sutin, A. R., Caudroit, J., & Terracciano, A. (2015). Subjective age and changes in memory in older adults. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 71(4), 675-683.

Self-perceptions of Aging (Satisfaction with Aging; Attitudes Toward Own Aging)

(2008, 2010, 2012; Q28b1-Q28b8 in 2014 & 2016)

These 8 items assess participants' positive and negative evaluation of their experiences of aging. The first 5 items (tagged below*) are derived from the Attitudes Toward Own Aging subscale of the Philadelphia Geriatric Center Morale Scale (Lawton, 1975; Liang & Bollen, 1983). Additional items from the Berlin Aging Study were included to increase reliability for a unidimensional scale and provide users with the potential to derive two dimensions.

Sources:

Lawton, M.P. (1975). The Philadelphia Geriatric Center Morale Scale: A revision. *Journals of Gerontology*, 30, 85-89.

Liang, J. & Bollen, K.A. (1983). The structure of the Philadelphia Geriatric Center (PGC) Morale Scale: A reinterpretation. *Journals of Gerontology*, 38, 181-189.

2012: 8 items (Q29b1 – Q29b8)

(The next statements are about the way people feel about their age and about the things that happen as they get older. Please tell us how much you agree or disagree with each statement for you personally.)

Q29b1 Things keep getting worse as I get older.*

Q29b2 I have as much as pep as I did last year.*

Q29b3 The older I get, the more useless I feel.*

- Q29b4 I am as happy now as I was when I was younger.*
 Q29b5 As I get older, things are better than I thought they would be.*
 Q29b6 So far, I am satisfied with the way that I am aging.
 Q29b7 The older I get, the more I have had to stop doing things that I liked.
 Q29b8 Getting older has brought with it many things that I do not like.

Coding: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree,
 4 = Slightly agree, 5 = Somewhat agree, 6 = Strongly agree

Scaling: Create a unidimensional scale of positive self-perceptions of aging (SPA) by reverse coding items Q29 b1, b3, b7, and b8 and averaging the scores across all 8 items. Set the final score to missing if there are more than four items with missing values. Some users create a unidimensional scale with the first 5 PGC Morale Scale items. Alternatively, separate scores may be created for positive and negative SPA. Average across items Q29 b2, b4, b5, and b6 for a measure of positive SPA. Average across items Q29 b1, b3, b7, and b8 for a measure of negative SPA.

Psychometrics: Unidimensional positive SPA (8 items): 2014 Alpha = .82; 2012 Alpha = .81,
 2010 Alpha = .83; 2008 Alpha = .82
 Two-dimensional scales: Positive SPA: 2014 Alpha = .79; 2012 Alpha = .77,
 2010 Alpha = .78; 2008 Alpha = .78
 Negative SPA: 2014 Alpha = .77, 2012 Alpha = .77,
 2010 Alpha = .77, 2008 Alpha: .78

Background:

Kleinspehn-Ammerlahn, A., Kotter-Gruhn, D., & Smith, J. (2008). Self-perceptions of aging: Do subjective age and satisfaction with aging change during old age? *The Journals of Gerontology*, 63, 377-385.

Kotter-Grühn, D., Kleinspehn-Ammerlahn, A., Gerstorf, D., & Smith, J. (2009). Self-perceptions of aging predict mortality and change with approaching death: 16-year longitudinal results from the Berlin Aging Study. *Psychology and Aging*, 24, 654-667.

Levy, B. R., & Bavishi, A. (2016). Survival Advantage Mechanism: Inflammation as a mediator of positive self-perceptions of aging on longevity. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, <https://doi.org/10.1093/geronb/gbw035>

Levy, B. R. (2009). Stereotype embodiment: A psychosocial approach to aging. *Current Directions in Psychological Science*, 18(6), 332-336.

Sargent-Cox, K. A., Anstey, K. J., & Luszcz, M. A. (2012). The relationship between change in self-perceptions of aging and physical functioning in older adults. *Psychology and Aging*, 27(3), 750-760.

Q30 – Q31. Perceived Everyday Discrimination

(2006, 2008, 2010, 2012; Q29 in 2014 & 2016)

This 6-item scale assesses the experience of hassles and chronic stress associated with perceived everyday discrimination. Q31 (Q30 in 2014 and 2016) is a follow-up question which asks about this reason attributed to the experienced discrimination. Similar questions are in MIDUS. The item Q30f was added in 2008 to include a context relevant for older adults.

Source:

Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health: socio-economic status, stress and discrimination. *Journal of Health Psychology*, 2, 335-351.

2012: 6 items (Q30a-Q30f)

(In your day-to-day life how often have any of the following things happened to you?)

Q30a You are treated with less courtesy or respect than other people.

Q30b You receive poorer service than other people at restaurants or stores.

Q30c People act as if they think you are not smart.

Q30d People act as if they are afraid of you.

Q30e You are threatened or harassed.

Q30f You receive poorer service or treatment than other people from doctors or hospitals.

Coding: 1 = Almost every day, 2 = At least once a week, 3 = A few times a month, 4 = A few times a year, 5 = Less than once a year, 6 = Never

Scaling: Create an index of discrimination by reverse-coding all items and averaging the scores across all six items. Set the final score to missing if there are more than three items with missing values.

Psychometrics: 2014 Alpha = .83, 2012 Alpha = .83, 2010 Alpha = .80, 2008 Alpha = .82

Background:

Sutin, A. R., Stephan, Y., & Terracciano, A. (2016). Perceived discrimination and personality development in adulthood. *Developmental Psychology*, 52(1), 155-163

Rogers, S. E., Thrasher, A. D., Miao, Y., Boscardin, W. J., & Smith, A. K. (2015). Discrimination in healthcare settings is associated with disability in older adults: health and retirement study, 2008–2012. *Journal of General Internal Medicine*, 30(10), 1413.

Williams, D.R., Neighbors, H.W., & Jackson, J.S. (2003). Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health*, 93, 200-208.

Q31. Reasons Attributed for Discrimination

(2006, 2008, 2010, 2012; Q30 in 2014 & 2016)

From 2008 onwards, religion and financial status were added to the attribution categories

Source:

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, 40(3), 208-230.

2012: 11 categories (Q31M1 - Q31M11)

(If any of the above (Q30) have happened to you, what do you think were the reasons why these experiences happened to you? (Mark (X) all that apply.)

- 1 Your ancestry or national origin,
- 2 Your gender,
- 3 Your race,
- 4 Your age,
- 5 Religion,
- 6 Your weight,
- 7 A physical disability,
- 8 Other aspect of your physical appearance,
- 9 Your sexual orientation,
- 10 Your financial status
- 11 Other

Coding: Q31 allows for multiple responses which are delivered in several variables (Q31M1 through Q31M11). When combined, these variables indicate which attributions and how many attributions were checked. Q31M1 gives the code (1 to 11) for the first attribution a participant checked in the order 1 to 11 as listed above: Q31M2 is the code for the second attribution the participant checked. For example, if the first box a participant checked was *age* their response on Q31M1 would be coded 4. If this participant also checked *financial status*, they would have the code 10 for Q31M2.

2008-2016 Coding: 1 = ancestry or national origin, 2 = gender, 3 = race, 4 = age, 5 = religion, 6 = weight, 7 = physical disability, 8 = Other aspect of your physical appearance, 9 = sexual orientation, 10 = financial status, 11 = Other

2006 Coding: 1 = ancestry or national origin, 2 = gender, 3 = race, 4 = age, 5 = weight, 6 = A physical disability, 7 = Other aspect of your physical appearance, 8 = sexual orientation, 9 = Other)

Use the following SPSS syntax to create variables for each type of discrimination. Respondents who indicated each type of discrimination will have a value of “1” in that variable; all other respondents will have a value of “0” (which could be recoded to missing if desired).

COUNT discr_ancestry = Q31M1 to Q31M11(1).
 execute.
 COUNT discr_gender = Q31M1 to Q31M11(2).
 execute.
 COUNT discr_race = Q31M1 to Q31M11(3).
 execute.
 COUNT discr_age = Q31M1 to Q31M11(4).
 execute.
 COUNT discr_religion = Q31M1 to Q31M11(5).
 execute.
 COUNT discr_weight = Q31M1 to Q31M11(6).
 execute.
 COUNT discr_physdis = Q31M1 to Q31M11(7).
 execute.
 COUNT discr_physapp = Q31M1 to Q31M11(8).
 execute.
 COUNT discr_sexorient = Q31M1 to Q31M11(9).
 execute.
 COUNT discr_finstatus = Q31M1 to Q31M11(10).
 execute.
 COUNT discr_other = Q31M1 to Q31M11(11).
 execute.

Background:

Pascoe, E. A., & Richman, L. S. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, 135, 531–554.

Han, J., & Richardson, V. E. (2015). The relationships among perceived discrimination, self-perceptions of aging, and depressive symptoms: A longitudinal examination of age discrimination. *Aging & Mental Health*, 19(8), 747-755.

Harrell, S. P. A. (2000). Multidimensional conceptualization of racism-related stress: implications for the well-being of people of color. *American Journal of Orthopsychiatry*, 70, 42-57.

Sutin, A. R., Stephan, Y., Luchetti, M., & Terracciano, A. (2014). Perceived weight discrimination and C-reactive protein. *Obesity*, 22(9), 1959-1961.

Q32. Social Effort/ Reward Balance

(2006, 2008, 2010, & 2012 only)

This question is referred to as “Balance/Reciprocity” in the 2006 documentation. The three items assess the balance that participants experience in the efforts that they put forth socially (in relationships and activities) and the rewards received from this effort.

Source:

Wahrendorf, M., von dem Knesebeck, O., Siegrist, J. (2006). Social productivity and the well-being of older people: baseline results from the SHARE study. *European Journal of Ageing*, 3, 67-73.

Von dem Knesebeck, O., Siegrist, J. (2003). Reported nonreciprocity of the social exchange and depressive symptoms Extending the model of effort-reward imbalance beyond work. *Journal of Psychosomatic Research*, 55, 209-214.

2012: 3 items (Q32 in the questionnaire; Q32a-Q32c in the data)

(The following statements are about people's expectations of each other. Please tell us how much you agree or disagree with each statement for you personally.)

Q32a I have always been satisfied with the balance between what I have given my partner and what I have received in return

Q32b I have always received adequate appreciation for providing help in my family

Q32c In my current major activity (job, looking after home, voluntary work) I have always been satisfied with the rewards I received for my efforts

Coding: 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = Does not apply

Scaling: Create an index by averaging responses across items where responses range from 1-5. It may be useful to code the "does not apply" responses as missing. Set the final score to missing if there is more than one item with missing values.

Psychometrics: 2012 = .77, 2010 Alpha = .77, 2008 Alpha = .78, 2006 Alpha = .73

2014:

Q32. Risk Attitudes

(2014 & 2016 only.)

These items assess individuals' attitudes about risk across 5 different life domains, including while driving, in financial matters, during sport and leisure activities, in your occupation, and with health.

Source:

Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., & Wagner, G. G. (2011). Individual risk attitudes: Measurement, determinants, and behavioral consequences. *Journal of the European Economic Association*, 9, 522 – 550. DOI: 10.1111/j.1542-4774.2011.01015.x

2014: 5 items (Q32a-Q32e)

(People behave differently in different situations. We'd like to know how willing you are to take risks in the following areas. Using a 0 to 10 scale where 0 means "unwilling to take any risks" and 10 means "fully prepared to take risks" please mark one box (X) in each row.)

How willing are you to take risks.....

Q32a While driving?

Q32b In financial matters?

Q32c During leisure and sport?

Q32d In your occupation?

Q32e With your health?

Coding: 0 (Not at all willing) – 10 (Very willing)

Q32a. Quality of Relationships with Parents Early in Life

(2008, 2010, & 2012 only)

These two items tap into the quality of relationships early in life with mothers (Q32d) and with fathers (Q32e). A modified version also appears in MIDUS. These items were only collected in 2008, 2010, and 2012.

Source:

Rossi, A.S. (2001). *Caring and doing for others: Social responsibility in the domains of family, work, and community*. Ch. 7. Developmental Roots of Adult Social Responsibility. Chicago: University of Chicago Press.

2012: 2 items (Q32d-32e)

(The next statements are about people's relationships with their parents early in life (before age 18). Please tell us how much you agree or disagree with each statement for you personally.)

Q32d I had a good relationship with my mother before age 18.

Q32e I had a good relationship with my father before age 18.

Coding: 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = Does not apply

Q33. The "Big 5" Personality Traits

(2006, 2008, 2010, 2012; Q31 in 2014 & 2016)

These 31 (26 in 2006-2008) items from MIDUS and the International Personality Item Pool (IPIP) were designed for survey use to assess the 'Big 5' personality traits: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. The original 26 items were drawn from MIDUS. In 2010, 5 items from IPIP were added to expand coverage of sub-facets of conscientiousness.

Sources:

Lachman, M. E., & Weaver, S. L. (1997). *The Midlife Development Inventory (MIDI) Personality Scales: Scale construction and scoring*. Retrieved from <http://www.brandeis.edu/departments/psych/lachman/pdfs/midi-personality-scales.pdf>

International Personality Item Pool Retrieved from: <http://ipip.ori.org/>.

2012: 31 items (Q33a-Q33z_6)

(Please indicate how well each of the following describes you.)

Q33a Outgoing

Q33b Helpful

Q33c Reckless (added in 2010)
 Q33d Moody (Q33c in 2008 and 2006)
 Q33e Organized (Q33d in 2008 and 2006)
 Q33f Friendly (Q33e in 2008 and 2006)
 Q33g Warm (Q33f in 2008 and 2006)
 Q33h Worrying (Q33g in 2008 and 2006)
 Q33i Responsible (Q33h in 2008 and 2006)
 Q33j Lively (Q33i in 2008 and 2006)
 Q33k Caring (Q33j in 2008 and 2006)
 Q33l Nervous (Q33k in 2008 and 2006)
 Q33m Creative (Q33l in 2008 and 2006)
 Q33n Hardworking (Q33m in 2008 and 2006)
 Q33o Imaginative (Q33n in 2008 and 2006)
 Q33p Softhearted (Q33o in 2008 and 2006)
 Q33q Calm (Q33p in 2008 and 2006)
 Q33r Self-disciplined (added in 2010)
 Q33s Intelligent (Q33q in 2008 and 2006)
 Q33t Curious (Q33r in 2008 and 2006)
 Q33u Active (Q33s in 2008 and 2006)
 Q33v Careless (Q33t in 2008 and 2006)
 Q33w Broad-minded (Q33u in 2008 and 2006)
 Q33x Impulsive (added in 2010)
 Q33y Sympathetic (Q33v in 2008 and 2006)
 Q33z Cautious (added in 2010)
 Q33z_2 Talkative (Q33w in 2008 and 2006)
 Q33z_3 Sophisticated (Q33x in 2008 and 2006)
 Q33z_4 Adventurous (Q33y in 2008 and 2006)
 Q33z_5 Thorough (Q33z in 2008 and 2006)
 Q33z_6 Thrifty (added in 2010)

Table 4: Cross-wave Concordance for Conscientiousness Items

2006	2008	2010	2012	2014*	2016*
Q33d Organized	Q33d Organized	Q33e Organized	Q33e Organized	Q31e Organized	Q31e Organized
Q33h Responsible	Q33h Responsible	Q33i Responsible	Q33i Responsible	Q31i Responsible	Q31i Responsible
Q33m Hardworking	Q33m Hardworking	Q33n Hardworking	Q33n Hardworking	Q31n Hardworking	Q31n Hardworking

Q33t Careless	Q33t Careless	Q33v Careless	Q33v Careless	Q31v Careless	Q31v Careless
Q33z Thorough	Q33z Thorough	Q33z_5 Thorough	Q33z_5 Thorough	Q31z_5 Thorough	Q31z_5 Thorough
		Q33c Reckless	Q33c Reckless	Q31c Reckless	Q31c Reckless
		Q33r Self- disciplined	Q33r Self- disciplined	Q31r Self- disciplined	Q31r Self- disciplined
		Q33x Impulsive	Q33x Impulsive	Q31x Impulsive	Q31x Impulsive
		Q33z Cautious	Q33z Cautious	Q31z_1 Cautious	Q31z_1 Cautious
		Q33z_6 Thrifty	Q33z_6 Thrifty	Q31z_6 Thrifty	Q31z_6 Thrifty

** Note: Question number change in 2014 and 2016*

Coding: 1 = A lot, 2 = Some, 3 = A little, 4 = Not at all

Scaling: Reverse-code all items EXCEPT Q33c, Q33q, Q33v, and Q33x and average the scores for items within sub-dimensions for
 Neuroticism (Q33d, Q33h, Q33l, Q33q)
 Extraversion (Q33a, Q33f, Q33j, Q33u, Q33z_2)
 Openness to Experience (Q33m, Q33o, Q33s, Q33t, Q33w, Q33z_3, Q33z_4)
 Agreeableness (Q33b, Q33g, Q33k, Q33p, Q33y)
 Conscientiousness (Q33c, Q33e, Q33i, Q33n, Q33r, Q33v, Q33x, Q33z, Q33z_5, and Q33z_6)
 Set the final score to missing if more than half of the items have missing values within each sub-dimension.

Psychometrics:

Neuroticism: 2014 Alpha = .71, 2012 Alpha = .71, 2010 Alpha = .71,
 2008 Alpha = .72, 2006 Alpha = .70
 Extraversion: 2014 Alpha = .76, 2012 Alpha = .75, 2010 Alpha = .75,
 2008 Alpha = .74, 2006 Alpha = .75
 Openness: 2014 Alpha = .81, 2012 Alpha = .80, 2010 Alpha = .80,
 2008 Alpha = .79, 2006 Alpha = .79
 Agreeableness: 2014 Alpha = .79, 2012 Alpha = .79, 2010 Alpha = .79,
 2008 Alpha = .78, 2006 Alpha = .78
 Conscientiousness (5 items): 2014 Alpha = .67, 2012 Alpha = .68,

2010 Alpha = .68, 2008 Alpha = .66, 2006 Alpha = .67
10 items: 2014 Alpha = .72, 2012 Alpha = .73, 2010 Alpha = .73

Background:

Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality development: Stability and change. *Annual Review of Psychology*, 56, 453-484.

Roberts, B., Kuncel, N.R., Shiner, R., Caspi, A., & Goldberg, L.R. (2007). The power of personality: The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives on Psychological Science*, 2, 313-345.

Shanahan, M. J., Hill, P. L., Roberts, B. W., Eccles, J., & Friedman, H. S. (2014). Conscientiousness, health, and aging: the life course of personality model. *Developmental Psychology*, 50(5), 1407-1425.

Stephan, Y., Sutin, A. R., Bosselut, G., & Terracciano, A. (2017). Sensory functioning and personality development among older adults. *Psychology and aging*, 32(2), 139-147.

Zimprich, D., Allemand, M., & Lachman, M. E. (2012). Factorial structure and age-related psychometrics of the MIDUS personality adjective items across the life span. *Psychological assessment*, 24(1), 173-186.

2016:

Q33a. Compassionate and Self-Image Goals

Most research on compassionate and self-image goals has been based almost exclusively on young adults—college students and community members aged 18-35. The scale was included in HRS in order to test whether these goals can be measured reliably in older adults, how they differ by age group, and relate to health and well-being in older adults.

Source

Crocker, J., & Canevello, A. (2008). Creating and undermining social support in communal relationships: the role of compassionate and self-image goals. *Journal of Personality and Social Psychology*, 95(3), 555.

Canevello, A., & Crocker, J. (2010). Creating good relationships: Responsiveness, relationship quality, and interpersonal goals. *Journal of Personality and Social Psychology*, 99(1), 78-106.

2016: 6 items (Q33a – Q33f)

(The next items describe goals you may have in your relationships with other people. Please indicate how much each goal describes you. How much do you want to try to...)

- Q33a Have compassion for others' mistakes and weaknesses.
- Q33b Avoid appearing unattractive, unlovable, or undesirable.
- Q33c Be supportive of others.
- Q33d Get others to see your positive qualities.
- Q33e Avoid being selfish or self-centered
- Q33f Get others to respect or admire you.

Coding: 1 = Not at all, 2 = A little, 3 = Somewhat, 4 = A lot, 5 = Extremely

Scaling: Compassionate Goals: Reverse code and calculate mean of items Q33a, Q33c, Q33e
Self-image Goals: Reverse code and calculate mean of items Q33b, Q33d, Q33f

Q34. Self-Control/ Impulsiveness

(2010 & 2012 only; Q34y-Q34z_5 in 2010)

These items were selected from the Multidimensional Personality Questionnaire (MPQ) developed by Tellegen (1982) to assess individual differences in tendencies to impulsive behavior and decision-making.

Source:

<http://www.upress.umn.edu/test-division/mpq>

2012: 6 items (Q34x_2 – Q34x_7)

Q34x_2 I keep close track of where my money goes.

Q34x_3 I often stop one thing before completing it and start another. (-)

Q34x_4 I often act without thinking. (-)

Q34x_5 Before I get into a new situation, I like to find out what to expect from it.

Q34x_6 I am often not as cautious as I should be. (-)

Q34x_7 I often prefer to “play things by ear” rather than to plan ahead. (-)

Coding: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree,
4 = Slightly agree, 5 = Somewhat agree, 6 = Strongly agree

Scaling: Reverse code the negatively phrased items (-) and then average the scores across items to create an index of conscientiousness for each facet with a high score indicating high conscientiousness. Set the final score to missing for each facet if there are more than two items with missing values.

Psychometrics: Self-Control/Impulsiveness: 2012 Alpha = .60, 2010 Alpha = .63

Background:

Caspi, A., Begg, D., Dickson, N., Harrington, H., Langley, J., Moffitt, T.E. & Silva, P.A. (1997). Personality differences predict health-risk behaviors in young adulthood: Evidence from a longitudinal study. *Journal of Personality and Social Psychology*, 73, 1052 – 1063.

2010:

Q34. Personality Sub-Facet Traits: Conscientiousness and Impulsiveness

(2008 & 2010 only)

These scales were included to expand the assessment of conscientiousness. Four items each tap into each of the six facets of conscientiousness: Self-Control, Order, Industriousness, Traditionalism, Virtue, and Responsibility. This measure was only included in 2008 and 2010.

Source:

Roberts, B.W., Chernyshenko, O.S., Stark, S., & Goldberg, L.R. (2005). The structure of conscientiousness: An empirical investigation based on seven major personality questionnaires. *Personnel Psychology*, 58, 103-139.

2012: 30 items (Q34a- Q34z_5)

(Please say how much you agree or disagree with the following statements.)

Self-Control Facet (Q34a-Q34d)

- Q34a I am easily talked into doing silly things. (-)
- Q34b I often rush into action without thinking about potential consequences. (-)
- Q34c I rarely jump into something without first thinking about it.
- Q34d I am careful with what I say to others.

Order Facet (Q34e-Q34h)

- Q34e I hardly ever lose or misplace things.
- Q34f Most of the time my home is a complete mess. (-)
- Q34g Every item in my home has its own particular place.
- Q34h For me, being organized is unimportant. (-)

Industriousness Facet (Q34i-Q34l)

- Q34i I do not work as hard as the majority of the people around me. (-)
- Q34j I do what is required, but rarely anything more. (-)
- Q34k I have high standards and work toward them.
- Q34l I make every effort to do more than what is expected of me.

Traditionalism Facet (Q34m-Q34p)

- Q34m I do not intend to follow every little rule that others make up. (-)
- Q34n When I was in school, I used to break rules regularly. (-)
- Q34o I support long-established rules and traditions.
- Q34p Even if I knew how to get around the rule without breaking them, I would not do it.

Virtue Facet (Q34q-Q34t)

- Q34q If I could get away with it, I would not pay taxes. (-)
- Q34r I could be insincere and dishonest if the situation required me to do so. (-)
- Q34s If the cashier forgot to charge me for an item, I would tell him/her.
- Q34t When I was in school, I would rather get a bad grade than copy someone else's homework.

Responsibility Facet (Q34u-Q34x)

- Q34u I carry out my obligations to the best of my ability.
- Q34v I go out of my way to keep my promises.
- Q34w Sometimes it is too much of a bother to do exactly what is promised. (-)

Q34x If I am running late for an appointment, I may decide not to go at all. (-)

Coding: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree,
4 = Slightly agree, 5 = Somewhat agree, 6 = Strongly agree

Scaling: Reverse code the negatively phrased items (-) and then average the scores across items to create an index of conscientiousness for each facet with a high score indicating high conscientiousness. Set the final score to missing for each facet if there are more than two items with missing values.

Psychometrics:

Self-Control:	2010 Alpha = .52 (2008 Alpha = .52)
Traditionalism:	2010 Alpha = .44 (2008 Alpha = .44)
Order:	2010 Alpha = .45 (2008 Alpha = .48)
Virtue:	2010 Alpha = .51 (2008 Alpha = .49)
Industriousness:	2010 Alpha = .63 (2008 Alpha = .63)
Responsibility:	2010 Alpha = .54 (2008 Alpha = .53)
Overall Conscientiousness (items from all 6 dimensions combined)	2010 Alpha = .78 (2008 Alpha = .78)

Background:

Bogg, T., & Roberts, B.W. (2004). Conscientiousness and health-related behaviors: A meta-analysis of the leading behavioral contributors to mortality. *Psychological Bulletin*, 130, 887-919.

Chopik, W. J. (2016). Age differences in conscientiousness facets in the second half of life: Divergent associations with changes in physical health. *Personality and Individual Differences*, 96, 202-211.

Jackson, J. J., Bogg, T., Walton, K. E., Wood, D., Harms, P. D., Lodi-Smith, J., ... & Roberts, B. W. (2009). Not all conscientiousness scales change alike: a multimethod, multisample study of age differences in the facets of conscientiousness. *Journal of Personality and Social Psychology*, 96(2), 446.

Q34a. Need for Cognition

(2010, 2012; Q32a in 2014 & 2016)

These items are selected from the "Need for Cognition" scale based on extensive psychometric analyses in the CogUSA project (Willis, McArdle). In that study, two dimensions were determined: Cognitive Enjoyment and Cognitive Effort and these subscales were associated with cognitive performance.

Source

Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition, *Journal of Personality and Social Psychology*, 42, 116-131.

2012: 6 items (Q34a_a – Q34a_f)

Q34a_a I like to have the responsibility of handling a situation that requires a lot of thinking.

Q34a_b I really enjoy a task that involves coming up with new solutions to problems.

- Q34a_c The notion of thinking abstractly is appealing to me.
- Q34a_d I would rather do something that requires little thought than something that is sure to challenge my thinking abilities. (-)
- Q34a_e I try to anticipate and avoid situations where there is likely a chance I will have to think in depth about something. (-)
- Q34a_f I only think as hard as I have to. (-)

Coding: 1 = Not at all like me, 2 = Somewhat like me, 3 = Uncertain,
4 = Somewhat like me, 5 = Very much like me

Scaling: The Cognitive Enjoyment subscale is created by averaging across three items: 34a_a, 34a_b, and 34a_c. To create the Cognitive Effort subscale, reverse-code items 34a_d, 3a_e, and 34a_f then average across ratings.

Psychometrics: Cognitive Enjoyment: 2014 Alpha = .83, 2012 Alpha = .81, 2010 Alpha = .80
Cognitive Effort: 2014 Alpha = .80, 2012 Alpha = .79, 2010 Alpha = .80

Q35. Purpose in Life (Psychological Well-Being – Eudaimonic Well-being)

(2006, 2008, 2010, & 2012; Q33 in 2014 & 2016)

These items to assess Purpose in Life are one subscale of the Ryff Measures of Psychological Well-being (1989). Two additional subscales were included in 2006: Personal Growth and Self-Acceptance (see below section “2006 Scales / Specific Items Not Included in Later Surveys”)

Sources:

Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82(6), 1007-1022.

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719-727.

2012: 7 items (Q35a-Q35g)

(Please read the statements below and decide the extent to which each statement describes you.)

- Q35a I enjoy making plans for the future and working to make them a reality.
- Q35b My daily activities often seem trivial and unimportant to me.
- Q35c I am an active person in carrying out the plans I set for myself.
- Q35d I don't have a good sense of what it is I'm trying to accomplish in life.
- Q35e I sometimes feel as if I've done all there is to do in life.
- Q35f I live life one day at a time and don't really think about the future.
- Q35g I have a sense of direction and purpose in my life.

Coding: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree,
4 = Slightly agree, 5 = Somewhat agree, 6 = Strongly agree

Scaling: Reverse-code items 35 b, d, e, and f and then average the scores across items to create an index of well-being (ranging from 1-6), with a high score indicating positive well-being. Set the final score to missing if there are more than three items with missing values.

Psychometrics: 2014 Alpha = .77, 2012 Alpha = .77, 2010 Alpha = .78,
2008 Alpha = .76, 2006 Alpha = .74

Background:

Kim, E S.; Strecher, V J.; Ryff, C D., (2014) Purpose in life and use of preventive health care services, *Proceedings of the National Academy of Sciences of the United States of America* 111:46

Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, 4, 99-104.

Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, 9(1), 1-28.

Q35a – Q35c. Unusual Living Circumstances

(Added in 2012; Q33a – Q33c in 2014 & 2016)

These 3 items capture ever having experienced three unusual living circumstances, including living in a shelter or in a jail/prison/juvenile detention center. These three items were first added in 2012.

2012: 3 items (Q35a_a – Q35a_c)

(For each of the following events, please indicate whether the event occurred AT ANY POINT IN YOUR LIFE.)

Q35a_a Have you ever been homeless or lived in a shelter?

Q35a_b Have you ever been an inmate in a jail, prison, juvenile detention center, or other correctional facility?

Q35a_c In your entire life, how much time in total have you been detained in a jail, prison, juvenile detention center, or other correctional facility?

Coding: Q35a_a, Q35a_b.: 1 = Yes, 2 = No

Q35a_c.: 1 = Less than one month, 2 = Less than on year, 3 = Between 1-5 years,
4 = More than 5 years, 6 = Don't know

Q36. Major Experiences of Lifetime Discrimination

(2006, 2008, 2010, 2012 only)

These 7 items capture major experiences of unfair treatment. The 2006 questionnaire consisted of six items. Q. 36g was added to the 2008 questionnaire. After 2012, these items will be collected once from each new cohort in an off-year mail survey.

Sources:

Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health: socio-economic status, stress and discrimination. *Journal of Health Psychology*, 2, 335-351.

2012: 14 items (Q36a-Q36gy)

(For each of the following events, please indicate whether the event occurred AT ANY POINT IN YOUR LIFE. If the event did happen, please indicate the year in which it happened most recently.)

- Q36a At any time in your life, have you ever been unfairly dismissed from a job?
Q36ay If yes, what year?
Q36b For unfair reasons, have you ever not been hired for a job?
Q36by If yes, what year?
Q36c Have you ever been unfairly denied a promotion?
Q36cy If yes, what year?
Q36d Have you ever been unfairly prevented from moving into a neighborhood because the landlord or a realtor refused to sell or rent you a house or apartment?
Q36dy If yes, what year?
Q36e Have you ever been unfairly denied a bank loan?
Q36ey If yes, what year?
Q36f Have you ever been unfairly stopped, searched, questioned, physically threatened or abused by the police?
Q36fy If yes, what year?
Q36g Have you ever been unfairly denied health care or treatment?
Q36gy If yes, what year?

Coding: Q36a, Q36b, Q36c, Q36d, Q36e, Q36f, Q36g: 1 = Yes, 5 = No
Q36ay, Q36by, Q36cy, Q36dy, Q36ey, Q36fy, Q36gy: Numeric, 4-digit Year

Scaling: A count of major discrimination is constructed by summing the number of affirmative responses.

Background:

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, 40(3), 208-230.

Q37a. Lifetime Traumas

(2006, 2008, 2010, 2012 only)

These 7 items come from a longitudinal study of the health consequences of trauma in older adults (Krause, et al., 2004). After 2012, these items will be collected once from each new cohort in an off-year mail survey

Sources:

Krause, N., Shaw, B. A., & Cairney, J. (2004). A descriptive epidemiology of lifetime trauma and the physical health status of older adults. *Psychology and Aging, 19*(4), 637-648.

2012: 7 items (Q37a-Q37g)

(For each of the following events, please indicate whether the event occurred AT ANY POINT IN YOUR LIFE. If the event did happen, please indicate the year (age?) in which it happened most recently.)

- Q37a Has a child of yours ever died?
- Q37b Have you ever been in a major fire, flood, earthquake, or other natural disaster?
- Q37c Have you ever fired a weapon in combat or been fired upon in combat?
- Q37d Has your spouse, partner, or child ever been addicted to drugs or alcohol?
- Q37e Were you the victim of a serious physical attack or assault in your life?
- Q37f Did you ever have a life-threatening illness or accident?
- Q37g Did your spouse or a child of yours ever have a life-threatening illness or accident?

Coding: 1 = Yes, 5 = No

Scaling: Use single items or create an index by calculating a simple unweighted sum of all traumatic events across the life course. In combination with Q37c, a second set of measures can be derived by focusing on trauma arising during developmental age periods (Krause, et al., 2004).

Background:

Turner, J. R., & Lloyd, D. A. (1995). Lifetime traumas and mental health: The significance of cumulative adversity. *Journal of Health and Social Behavior, 36*(4), 360-376.

Q37b. Quality of Relationship with Mother Early in Life

(2008, 2010, & 2012 only)

These 3 items tap into the quality of relationships with mothers early in life. A modified version also appears in MIDUS.

Source:

Rossi, A.S. (2001). *Caring and doing for others: Social responsibility in the domains of family, work, and community*. Chicago: University of Chicago Press. Ch. 7. Developmental Roots of Adult Social Responsibility.

2012: 3 items (Q37h-Q37j)

(For this next set of events, please think about your childhood growing up, BEFORE YOU WERE 18 YEARS OLD.)

Q37h How much time and attention did your mother give you when you needed it?

Q37i How much effort did your mother put into watching over you and making sure you had a good upbringing?

Q37j How much did your mother teach you about life?

Coding: 1 = A lot, 2 = Some, 3 = A little, 4 = Not at all

Scaling: Reverse-code all items and average the scores across all items to get a measure of the quality of relationship. Set the final score to missing if more than one item has a missing value.

Psychometrics: 2012 Alpha = .89, 2010 Alpha = .90, 2008 Alpha = .88

Q37c. Lifetime Traumas before the Age of 18

(2006, 2008, 2010, 2012 only)

These 4 items come from a longitudinal study of the health consequences of trauma in older adults (Krause, et al., 2004). Q. 371 was added in the 2008. After 2012, these items will be collected once from each new cohort in an off-year mail survey

Sources:

Krause, N., Shaw, B. A., & Cairney, J. (2004). A descriptive epidemiology of lifetime trauma and the physical health status of older adults. *Psychology and Aging, 19*(4), 637-648.

2012: 4 items (Q37a-Q37d)

(For the next set of events, please think about your childhood growing up, BEFORE YOU WERE 18 YEARS OLD.)

Q37a Before you were 18 years old, did you have to do a year of school over again?

Q37b Before you were 18 years old, were you ever in trouble with the police?

Q37c Before you were 18 years old, did either of your parents drink or use drugs so often that it caused problems in the family?

Q37d Before you were 18 years old, were you ever physically abused by either of your parents?

Coding: 1 = Yes, 5 = No

Scaling: The measure can be scored by calculating a simple unweighted sum of all traumatic events across the life course. A second set of measures can be derived by focusing on trauma arising during developmental age periods (Krause, et al., 2004).

Background:

Turner, J. R., & Lloyd, D. A. (1995). Lifetime traumas and mental health: The significance of cumulative adversity. *Journal of Health and Social Behavior, 36*(4), 360-376.

Q38. Stressful Life Events

(2006, 2008, 2010, 2012 only)

These 6 items tap major stressful life events. Information related to Q38a-Q38c is collected in the core interview (Section J).

Source:

Turner, R. J., Wheaton, B., & Lloyd, D. A. (1995). The epidemiology of social stress. *American Sociological Review*, 60(1), 104-125.

2012: 6 items (Q38a-Q38f)

(Now please think about the LAST 5 YEARS and indicate whether each of the events below occurred. If “Yes,” indicate a year).

Q38a Have you involuntarily lost a job for reasons other than retirement at any point in the past five years?

Q38ay If yes, what year?

Q38b Have you been unemployed and looking for work for longer than 3 months at some point in the past five years?

Q38by If yes, what year?

Q38c Was anyone else in your household unemployed and looking for work for longer than 3 months in the past five years?

Q38cy If yes, what year?

Q38d Have you moved to a worse residence or neighborhood in the past five years?

Q38dy If yes, what year?

Q38e Were you robbed or did you have your home burglarized in the past five years?

Q38ey If yes, what year?

Q38f Have you been the victim of fraud in the past five years?

Q38fy If yes, what year?

Coding: 1 = Yes, 5 = No

Scaling: Use single items or create and index by summing the number of positive responses to items Q38a, Q38b, Q38c, Q38d, Q38e, and Q38f.

Background:

McEwen, B. S., & Stellar, E. (1993). Stress and the individual: mechanisms leading to disease. *Archives of Internal Medicine*, 153(18), 2093-2101.

Slavich, G. M., & Irwin, M. R. (2014). From stress to inflammation and major depressive disorder: A social signal transduction theory of depression. *Psychological Bulletin*, 140(3), 774-815.

Q39. Satisfaction with Life Domains and Life-as-a-Whole

(Most not included in 2006; 2008, 2010, 2012; Q34 in 2014 & 2016)

These 8 items capture subjective evaluations of well-being in important domains of life: housing, city, non-work, family life, financial situation, health, and overall life satisfaction. In 2014 and 2016, Q39h was excluded: It is however available in Section B (XB000) of the Core interview

Source:

Campbell, A., Converse, P.E., & Rodgers, W. (1976). *The quality of American life: Perceptions, evaluations, and satisfactions*. New York: Russell Sage Foundation.

2012: 7 items (Q39a-Q39g)

(Please think about your life and situation RIGHT NOW. HOW SATISFIED ARE YOU WITH...?)

Q39a The condition of the place where you live (house or apartment)? (2008 - 2016)

Q39b The city or town you live in? (2008 - 2016)

Q39c Your daily life and leisure activities? (2008 - 2016)

Q39d Your family life? (2008 - 2016)

Q39e Your present financial situation? (Included in 2006 - 2016)

Q39f The total income of your household (2010 - 2016)

Q39g Your health? (in 2010, 2012, & 2014, 2016)

Q39h Your life as a whole these days? (2008, 2010 & 2012)

Coding: 1 = Completely satisfied, 2 = Very satisfied, 3 = Somewhat satisfied,
4 = Not very satisfied, 5 = Not at all satisfied

Scaling: Reverse score each item so that a higher score corresponds to more satisfaction in each domain (housing Q39a, city Q39b, nonwork Q39c, family life Q39d, financial situation Q39e, health Q39f, overall life satisfaction Q39g).

NOTE: Q39a in 2006 should not be reversed scored.

Q40. Experience of Financial Strain

(Q39b in 2006; Q 40 in 2008, 2010, & 2012; Q35 in 2014 & 2016)

Source:

Campbell A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life: Perceptions, evaluations, and satisfactions*. New York: Russell Sage Foundation.

2012: 1 item (Q40)

Q40 How difficult is it for (you/your family) to meet monthly payments on (your /your family's) bills?

Coding: 1 = Not at all difficult, 2 = Not very difficult, 3 = Somewhat difficult, 4 = Very difficult, 5 = Completely difficult

Background:

Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior*, 22(4), 337-356.

Q40a. Ongoing Chronic Stressors

(Q. 40 in 2006; not included in 2008; Q40a in 2010 & 2012; Q35a in 2014 and 2016)

These items capture the subjective experience of chronic stress in 8 areas of life.

Source:

Troxel, W. M., Matthews, K. A., Bromberger, J. T., & Sutton-Tyrrell, K. (2003). Chronic stress burden, discrimination, and subclinical carotid artery disease in African American and Caucasian women. *Health Psychology, 22*(3), 300-309.

2012: 8 items (Q35a-Q35h)

(Please read the list below and indicate whether or not any of these are current and ongoing problems that have lasted twelve months or longer. If the problem is happening to you, indicate how upsetting it has been. Check the answer that is most like your current situation.)

- Q40a_a Ongoing health problems (in yourself)
- Q40a_b Ongoing physical or emotional problems (in spouse or child)
- Q40a_c Ongoing problems with alcohol or drug use in family member
- Q40a_d Ongoing difficulties at work
- Q40a_e Ongoing financial strain
- Q40a_f Ongoing housing problems
- Q40a_g Ongoing problems in a close relationship
- Q40a_h Helping at least one sick, limited, or frail family member or friend on a regular basis

Coding: 1 = No, didn't happen, 2 = Yes, but not upsetting, 3 = Yes, somewhat upsetting, 4 = Yes, very upsetting

Scaling: Use single items or calculate a simple unweighted sum of all ongoing problems.

Psychometrics: 2014 Alpha = .71, 2012 Alpha = .69, 2010 Alpha = .64, 2006 Alpha = .67. Note that these items are not intended to have a high degree of internal consistency.

Background:

Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior, 22*(4), 337-356.

Pearlin, L. I. (2010) The life course and the stress process: Some conceptual comparisons. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 65B*, 207-215.

Q41. Anxiety

(2006, 2008, 2010, 2012 only)

Five items were selected from the widely used Beck Anxiety Inventory (BAI). The Beck Inventory has been shown to distinguish symptoms of anxiety from depression and to be valid for use in older populations. This scale was not included after 2012.

Sources:

Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, 56(6), 893-897.

Wetherell, J. L., & Areán, P. A. (1997). Psychometric evaluation of the Beck Anxiety Inventory with older medical patients. *Psychological Assessment*, 9(2), 136-144.

2012 Items: 5 items (Q41a-Q41e)

(Please read the statements below. How often did you feel that way DURING THE PAST WEEK. The best answer is usually the one that comes to your mind first.)

Q41a I had fear of the worst happening.

Q41b I was nervous.

Q41c I felt my hands trembling.

Q41d I had a fear of dying.

Q41e I felt faint.

Coding: 1 = Never, 2 = Hardly ever, 3 = Some of the time, 4 = Most of the time

Scaling: Responses to the 5 items are averaged to form an index of anxiety ranging from 1-4. Set the final score to missing if more than two of the items have missing values.

Psychometrics: 2012 Alpha = .82, 2010 Alpha = .82, 2008 Alpha = .82,
2006 Alpha = .81

Background:

Brenes, G. A., Guralnik, J. M., Williamson, J., Fried, L. P., & Penninx, B. W. J. H. (2005). Correlates of anxiety symptoms in physically disabled older women. *American Journal of Geriatric Psychiatry*, 13(1), 15-22.

Q42. Anger

(2006, 2008, 2010, 2012 only)

The Spielberger Anger Expression Scale (STAX) measures anger along two dimensions: state anger and trait anger. Trait anger (anger-in) refers to a more stable predisposition to respond to a range of situations with an angry response; while state anger (anger-out) represents a more temporary angry reaction usually expressed through behavior. This scale was not included after 2012.

Source:

Forgays, D. K., Spielberger, C. D., Ottaway, S. A., & Forgays, D. G. (1998). Factor structure of the state-trait anger expression inventory for middle-aged men and women. *Assessment*, 5, 141-155.

2012: 4 items for the Anger-In scale (items 42a-42d), 7 items for the Anger-Out scale (items 42e-42k)

(Here are some statements that describe how people react or behave when they are feeling angry or mad. Thinking of the times you feel angry, for each statement please indicate how often you react or behave this way. Respond quickly to these without thinking much, as your first impulse is usually the best answer.)

Q42a When I am feeling angry or mad, I keep things in.

Q42b When I am feeling angry or mad, I withdraw from people.

Q42c When I am feeling angry or mad, I am irritated more than people are aware.

Q42d When I am feeling angry or mad, I am angrier than I am willing to admit.

Q42e When I am feeling angry or mad, I argue with others.

Q42f When I am feeling angry or mad, I strike out at whatever infuriates me.

Q42g When I am feeling angry or mad, I say nasty things.

Q42h When I am feeling angry or mad, I lose my temper.

Q42i I am quick tempered.

Q42j I have a fiery temper.

Q42k I fly off the handle.

Coding: 1 = Almost never, 2 = Sometimes, 3 = Often, 4 = Almost always

Scaling: Create an index of Anger-In by averaging the scores for items 42a-42d (range 1-4).
Set the final score to missing if more than two of the items have missing values.

Create an index of Anger-Out by averaging the scores for items 42e-42k (range 1-4).
Set the final score to missing if more than three of the items have missing values.

Psychometrics: Anger In: 2012 Alpha = .81, 2010 Alpha = .79, 2008 Alpha = .78,
2006 Alpha = .78

Anger Out: 2012 Alpha = .89, 2010 Alpha = .87, 2008 Alpha = .87,
2006 Alpha = .88

Background:

Eckhardt, C., Norlander, B., & Deffenbacher, J. (2004). The assessment of anger and hostility: A critical review. *Aggression and Violent Behavior, 9*, 17-43.

Matthews, K. A., Owens, J. F., Edmundowicz, D., Lee, L., & Kuller, L. H. (2006). Positive and negative attributes and risk for coronary and aortic calcification in healthy women. *Psychosomatic Medicine, 68*, 355-361.

Q43- Q44. Subjective Social Status – Cantril Ladder

(2006, 2008, 2010, & 2012; Q36 - Q37 in 2014 & 2016)

The ladder is designed to measure how respondents perceive their social status. This also appears in ELSA.

Source:

Cantril, H. (1965). *The pattern of human concerns*. New Brunswick, NJ. Rutgers University Press.

MacArthur Scale of Subjective Social Status. (1999). Retrieved from <http://www.macses.ucsf.edu/Research/Psychosocial/notebook/subjective.html>

2012:

2 items (Q43 & Q44)

(Think of this ladder as representing where people stand in our society. At the top of the ladder are the people who are the best off - those who have the most money, most education, and best jobs. At the bottom are the people who are the worst off - who have the least money, least education, and the worst jobs or no jobs. The higher up you are on this ladder, the closer you are to the people at the very top and the lower you are, the closer you are to the people at the very bottom.)

Q43 Please mark an X on the rung on the ladder where you would place yourself.

Q44 Has your position on the ladder changed within the last two years?

Coding: Q43: Continuous measure (1-10)

Q44: 1 = Yes, I have moved up, 2 = Yes, I have moved down,
3 = No, my position has not changed

Background:

Andrews, F.M., & Withey, S.B. (1974). Developing measures of perceived life quality: Results from several national surveys. *Social Indicators Research*, 1, 1-26.

Ghaed, S.G., & Gallo, L.C. (2007). Subjective social status, objective socioeconomic status, and cardiovascular risk in women. *Health Psychology*, 26, 668-674.

Singh-Manoux, A., Adler, N.E., & Marmot, M.G. (2003). Subjective social status: Its determinants and its association with measures of ill-health in the Whitehall II study. *Social Science & Medicine*, 56, 1321-1333.

Q45 – Q78. Experienced Well-being (ExWB) – Day Reconstruction Measure

(Added in 2012; Q38-71 in 2014 & 2016)

This self-administered day reconstruction measure was included in HRS to complement other the measures of subjective well-being included in the questionnaire (i.e., evaluations of life satisfaction, satisfaction with life domains, positive and negative affect, and eudaimonic well-being- purpose in life). The initiative is linked to research by Kahneman and colleagues (2004), Gallup-Healthways, a module in the American Time Use Survey (ATUS), and the UK Office of National Statistics. The HRS self-administered day reconstruction measure was developed in various NIA-funded projects (RC1AG035576; R21 AG041359; R01 AG040635) and in collaboration with ELSA. Items assess the respondent's affective and somatic experiences yesterday overall and in the context of targeted activities. A 2009 pilot of the 2012 HRS day reconstruction measure was included in the Health and Well-being Questionnaire, an off-wave self-administered questionnaire sent to a sub-sample of the 2008 HRS core sample.

Background:

Kahneman, D., Krueger, A., Schkade, D. A., Schwarz, N., & Stone, A. A. (2004). A survey method for characterizing daily life experience: The Day Reconstruction Method. *Science*, 306 (5702), 1776-1780.

Kahneman, D., & Krueger, A. B. (2006). Developments in the measurement of subjective well-being. *The Journal of Economic Perspectives*, 20(1), 3-24.

National Research Council. (2013). *Subjective Well-Being: Measuring Happiness, Suffering, and Other Dimensions of Experience*, Panel on Measuring Subjective Well-Being in a Policy Relevant Framework. A. A. Stone and C. Mackie, Editors. Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

Smith, J., Ryan, L. H., Queen, T. L., Becker, S., & Gonzalez, R. (2014). Snapshots of mixtures of affective experiences in a day: Findings from the Health and Retirement Study. *Journal of Population Ageing*, 7, 55 – 79.

Characteristics of the Day and Self-Reported Health Yesterday

This series of questions provide information about the overall context of the experience of well-being for the day participants report. Questions ask about the day-of-the week, date, wake and sleep times, sleep quality, health yesterday, and if something special happened on the day.

2012 : 7 items (Q45 - Q48, Q51 - Q53; 2014 & 2016 Q38 -Q41, Q44-Q46)

(Now please pause briefly to think about YESTERDAY, from the morning until the end of the day. Think about where you were, what you were doing, who you were with, and how you felt.)

Q45 What day of the week was it yesterday?

Q46 What was the date yesterday?

Q47 What time did you wake up yesterday?

Q48 What time did you go to sleep at the end of the day yesterday?

Q51 Did you feel well-rested yesterday morning (that is you slept well the night before)?

Q52 How was your health yesterday?

Q53 Was yesterday a normal day for you or did something unusual happen?

Coding: Q45: 1 = Monday, 2 = Tuesday, 3 = Wednesday, 4 = Thursday, 5 = Friday, 6 = Saturday, 7 = Sunday

Q46_MO: Numeric, 1 = January, 2 = February, etc.

Q46_DA: Numeric, Day of month

Q47_AP: 1 = AM, 2 = PM

Q47_HR: Numeric, Hour

Q47_MI: Numeric, Minute

Q48_AP: 1 = AM, 2 = PM

Q48_HR: Numeric, Hour

Q48_MI: Numeric, Minute

Q51: 1 = Yes, 2 = No

Q52: 1 = Excellent, 2 = Very Good, 3 = Good, 4 = Fair, 5 = Poor

Q53: 1 = Yes, just a normal day, 2 = No, my day included unusual bad (stressful) things, 3 = No, my day included unusual good things

Overall Experienced Well-being Yesterday (HWB-12)

This 12-item HWB-12 scale used to assess overall affective and somatic experiences was developed in 2011 by Jacqui Smith and Arthur Stone during a collaborative meeting in Ann Arbor with the HRS psychosocial team.

2012: 12 items (Q49a - Q49k, Q50; 2014 & 2016 Q42a - Q42k, Q43)

(The next questions are about your experiences yesterday. Yesterday, did you feel..)

Q49a Frustrated

Q49b Sad

Q49c Enthusiastic

Q49d Lonely

Q49e Content

Q49f Worried

Q49g Bored

Q49h Happy

Q49i Angry

Q49j Tired

Q49k Stressed

Q50 Yesterday, did you feel any pain?

Coding: Q49a-k: 1 = Not at all, 2 = A little, 3 = Somewhat, 4 = Quite a bit, 5 = Very
Q50: 1 = None, 2 = A little, 3 = Some, 4 = Quite a bit, 5 = A lot

Scaling: Create an index of Experienced Positive Affect Overall Yesterday by averaging the scores for items Q49c, Q49e, and Q49h (range 1 – 5). Set the final score to missing if more than one of the items have missing values.
Create an index of Experienced Negative Affect Overall Yesterday by averaging the scores for items Q49a, Q49b, Q49d, Q49f, Q49g, and Q49i (range 1 – 5). Set the final score to missing if more than 2 of the items have missing values.
Create an index of Experienced Psychosomatic Symptoms Overall Yesterday by averaging the scores for items Q49j, Q49k, and Q50 (range = 1 – 5). Set the final score to missing if more than one of the items is a missing value.

Psychometrics: Positive Affect Overall Yesterday: 2012 Alpha = .79, 2014 Alpha = .79
Negative Affect Overall Yesterday: 2012 Alpha = .84, 2014 Alpha = .83
Psychosomatic Symptoms Yesterday: 2012 Alpha = .65, 2014 Alpha = .64

Background:

Christodoulou, C., Schneider, S., & Stone, A. A. (2014). Validation of a brief yesterday measure of hedonic well-being and daily activities: Comparison with the Day Reconstruction Method. *Social Indicators Research, 115*(3), 907-917.

Diener, E., & Tay, L. (2013). Review of the Day Reconstruction Method (DRM). *Social Indicators Research, 116*(1), 255-267.

Kapteyn, A., Lee, J., Tassot, C., Vonkova, H., & Zamarro, G. (2015). Dimensions of subjective well-being. *Social Indicators Research, 123*(3), 625-660.

Activity Participation Yesterday

Participants were asked about their participation in a series of eight activities and the time they allocated yesterday to these activities. The 8 activities were targeted because of their known frequency in the daily lives of older adults and relevance to health and subjective well-being (see Smith, Ryan, Queen, Becker, & Gonzalez, 2014). ELSA included a similar list of activities (with the exception of running errands)

2012: 8 activities (Q 54 – Q77; 2014 & 2016 Q47 – Q70)

(Please think now about THINGS YOU DID YESTERDAY. How did you spend your time and how did you feel?)

Q54 Yesterday, did you **watch TV**?

Q55 How much time did you spend watching TV yesterday (hours, minutes)?

Q57 Yesterday, did you **work or volunteer**?

Q58 How much time did you spend work or volunteering yesterday (hours, minutes)?

Q60 Where did you work or volunteer yesterday?

Q61 Yesterday, did you **walk or exercise**?

Q62 How much time did you spend walking or exercising yesterday (hours, minutes)?

Q64 Yesterday, did you do **health-related activities** other than walking or exercising (e.g., visiting a doctor, taking medications, doing treatments)?

Q65 How much time did you spend doing health-related activities yesterday (hours, minutes)?

Q67 Yesterday, did you **travel or commute** (e.g., by car, train, bus)?

Q68 How much time did you spend travelling or commuting yesterday (hours, minutes)?

Q70 Yesterday, did you **socialize** with friends, neighbors, or family (not counting your spouse or partner)?

Q71 How much time did you spend socializing with friends, neighbors, or family yesterday (hours, minutes)?

Q73 Yesterday, did you spend time **at home by yourself** (without your spouse, partner, or someone else)?

Q74 How much time did you spend at home by yourself yesterday (hours, minutes)?

Q76 Yesterday, did you **run errands**?

Q77 How much time did you spend running errands yesterday (hours, minutes)?

Coding: *Activities done yesterday* (Q54, Q57, Q61, Q64, Q67, Q70, Q73, Q76)
1 = Yes, 5 = No

Hours and Minutes doing activities yesterday

Q55_HR, Q55_MI Q58_HR, Q58_MI, Q62_HR, Q62_MI, Q65_HR, Q65_MI,
Q68_HR, Q68_MI, Q71_HR, Q71_MI, Q74_HR, Q74_MI, Q77_HR, Q77_MI:
Continuous for total number of hours and minutes per each activity in which a
respondent engaged yesterday.

Place of Work/Volunteering yesterday

1 – away from home; 2 = at home; 3 = both at and away from home

Scaling: Create a count of activities yesterday by summing the number of “1” responses to the following items: Q54, Q57, Q61, Q64, Q67, Q70, Q76 (range 0 – 7). Note that “Spend time at home by yourself” is not included in this count of activities. It can be used as a separate variable

Activity-related Affective Experience Yesterday

After questions about participation and time for each activity, participants were asked to rate the intensity of three positive and three negative affective experiences during the activity and also if they had experience pain while doing the activity. The first 4 affects were asked in the same order used in a 2012 UK Office of National Statistics survey and in ELSA.

2012: 7 items asked for each activity (Q56a – Q56g, Q59a – Q59g, Q63a – Q63g, Q66a – Q66g, Q69a – Q69g, Q72a – Q72g, Q75a – Q75g, Q78a – Q78g; 2014 & 2016 Q49a – Q49g, Q52a – Q52g, Q56a – Q56g, Q59a – Q59g, Q62a – Q62g, Q65a – Q65g, Q68a – Q68g, Q71a – Q71g)

(How did you feel when you were _____ yesterday? Rate each experience on a scale from 0 - did not experience at all - to 6 – the feeling was extremely strong. I felt...)

- a. Happy
- b. Interested
- c. Frustrated
- d. Sad
- e. Content
- f. Bored
- g. Pain

Coding: Q56a – Q56g, Q59a – Q59g, Q63a – Q63g, Q66a – Q66g, Q69a – Q69g, Q72a – Q72g, Q75a – Q75g, Q78a – Q78g
7-point Likert scale where 0 = “Did not experience the feeling at all” to 6 = “Feeling was extremely strong”

Scaling: Create an index of Activity-related Positive Affect for each activity. Considering Watching TV as an example, if a Respondent reports s/he did watch TV yesterday (Q54 = 1), then average items Q56a, Q56b, and Q56e (range = 0 – 6). Set the final score to missing if more than one item is missing.

Create an index of Activity-related Negative Affect for each activity. Considering Watching TV as an example, if a Respondent reports s/he did watch TV yesterday (Q54 = 1), then average items Q56c, Q56d, and Q56f Q56e (range = 0 – 6). Set the final score to missing if more than one item is missing.

The item about pain could be used separately for each activity or count the number of activities for which pain is reported and calculate the mean rating for pain

Background:

Freedman, VA, FG Conrad, JC Cornman, N Schwarz, FP Stafford. (2013). Does time fly when you are having fun? A day reconstruction method analysis. *Journal of Happiness Studies*, 15 (3), 639-655

Newton, N, Pladevall-Guyer, J., Gonzalez, R., & Smith, J. (2016). Activity Engagement and Activity-related Experiences: The Role of Personality. *Journal of Gerontology Series B: Psychological and Social Sciences*. doi: 10.1093/geronb/gbw098

Queen, T. L., Stawski, R. S., Ryan, L. H., & Smith, J. (2014). Loneliness in a day: Activity engagement, time alone, and experienced emotions. *Psychology and Aging*, 29, 297-305. doi: 10.1037/a0036889

Q79. Currently Working

(Q 45 in 2006, 2008, 2010; Q72 in 2014 & 2016)

This item is used to filter participants into or out of the series of questions about work experiences.

2012: Are you currently working?

Coding: 1 = Yes, 5 = no

Q80. Job Lock

(Not included in 2006; Q46 in 2008 & 2010; Q73 in 2014 & 2016)

Asked only to participants who are currently working, these two items tap into the reasons behind working, and are designed to help identify individuals who work because they have to in order to earn money or obtain health insurance coverage. These items were developed in consultation with Glenn Pransky of Liberty Mutual and Jim Grosch at the National Institute for Occupational Safety and Health.

2012: 2 items (Q80a-Q80b)

(Right now, would you like to leave work altogether, but plan to keep working because...?)

Q80a You need the money?

Q80b You need health insurance?

Coding: 1 = Yes, 5 = No

Background:

Cutler, N. E. (2002). Job lock and financial planning: The impact of health insurance on the retirement decision. *Journal of Financial Service Professionals*, 56(6), 29-32.

Fisher, G. G., Ryan, L. H., Sonnega, A., & Naude, M. (2016). Job lock, work and psychological well-being in the U.S. *Work, Aging and Retirement*, 2, 345 – 358. doi: 10.1093/workar/waw004

Wilkie, R., Cifuentes, M., & Pransky, G. (2011). Exploring extensions to working life: job lock and predictors of decreasing work function in older workers. *Disability and rehabilitation*, 33(19-20), 1719-1727.

Q81. Perceived Ability to Work

(Not included in 2006; Q47 in 2008 & 2010; Q74 in 2014 & 2016)

These questions are only asked of participants who are currently working. The 4 items tap into the perceived ability to work with respect to a job's physical, mental, and interpersonal demands.

2012: 4 items (Q81a-Q81d)

(For the following questions, please think about your work on *YOUR CURRENT MAIN JOB*. Assume that your work ability at its best has a value of 10 points. How many points would you give your *CURRENT ABILITY TO WORK*? (0 means that you cannot currently work at all; 10 means your work ability is currently at its lifetime best))

Q81a How many points would you give your current ability to work?

Q81b Thinking about the *physical demands* of your job, how do you rate your current ability to meet those demands?

Q81c Thinking about the *mental demands* of your job, how do you rate your current ability to meet those demands?

Q81d Thinking about the *interpersonal demands* of your job, how do you rate your current ability to meet those demands?

Scoring: 11 point, continuous measure (0-10).

Scaling: Sum the items to create an index of work ability.

Psychometrics: 2014 Alpha = .96, 2012 Alpha = .95, 2010 Alpha = .96, 2008 Alpha = .96

Background:

Ilmarinen, J., & Rantanen, J. (1999). Promotion of Work Ability During Ageing. *American Journal of Industrial Medicine*, 1, 21-23.

Q82. Work/Non-work Interference and Enhancement

(Q48 in 2006, 2008 & 2010; Q75 in 2014 & 2016)

Asked only among respondents who are currently working, this set of items assesses the extent to which work has a positive and negative effect on one's personal life and vice-versa.

Source:

MacDermid, SM, Barnett, R, Crosby, F, Greenhaus, J, Koblenz, M, Marks, S, Perry-Jenkins, M, Voydanoff, P, Wethington, E, Sabbatini-Bunch, L. (2000). The measurement

of work/life tension: Recommendations of a virtual think tank. Boston, MA: Alfred P Sloan Foundation.

2012: 12 items (Q82a-Q82l)

(Please use the scale below to answer the next set of questions.)

- Q82a My work schedule makes it difficult to fulfill personal responsibilities.
- Q82b Because of my job, I don't have the energy to do things with my family or other important people in my life.
- Q82c Job worries or problems distract me when I am not at work.
- Q82d My home life keeps me from getting work done on time on my job.
- Q82e My family or personal life drains me of the energy I need to do my job.
- Q82f I am preoccupied with personal responsibilities while I am at work.
- Q82g My work leaves me enough time to attend to my personal responsibilities.
- Q82h My work gives me energy to do things with my family and other important people in my life.
- Q82i Because of my job, I am in a better mood at home.
- Q82j My personal responsibilities leave me enough time to do my job.
- Q82k My family or personal life gives me energy to do my job.
- Q82l I am in a better mood at work because of my family or personal life.

Coding: 1 = Rarely, 2 = Sometimes, 3 = Often, 4 = Most of the time

Scaling: There are four separate dimensions to assess the work/non-work interface: Items should be averaged for each of the four dimensions by combining items as follows:
Work interference with personal life (Q82a, Q82b, Q82c),
Personal life interference with work (Q82d, Q82e, Q82f)
Work enhancement of personal life (Q82g, Q82h, Q82i)
Personal life enhancement of work (Q82j, Q82k, Q82l).

Psychometrics:

Work → Personal Life Interference/Conflict	2014 Alpha =.73, 2012 Alpha =.71, 2010 Alpha =.70, 2008 Alpha =.75, 2006 Alpha =.70
Personal Life → Work Interference/Conflict	2014 Alpha =.75, 2012 Alpha =.71, 2010 Alpha =.77, 2008 Alpha =.74, 2006 Alpha =.68)
Work → Personal Life Facilitation	2014 Alpha =.78, 2012 Alpha =.79, 2010 Alpha =.78, 2008 Alpha =.78, 2006 Alpha =.78)
Personal Life → Work Facilitation	2014 Alpha =.82, 2012 Alpha =.81, 2010 Alpha =.85, 2008 Alpha =.84, 2006 Alpha =.81

Q83. Chronic Work Discrimination

(Q49 in 2006, 2008 & 2010; 2012 only)

These items are designed to assess chronic discrimination experienced at work. These questions are only asked of respondents who are currently working. This scale was not included after 2012.

Source:

Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health: socio-economic status, stress and discrimination. *Journal of Health Psychology*, 2, 335-351.

2012: 6 items (Q83a-Q83f)

(Here are some situations that can arise at work. Please tell me how often you have experienced them during the LAST 12 MONTHS.)

- Q83a How often are you UNFAIRLY given the tasks at work that no one else wants to do?
- Q83b How often are you watched more closely than others?
- Q83c How often are you bothered by your supervisor or coworkers making slurs or jokes about women or racial or ethnic groups?
- Q83d How often do you feel that you have to work twice as hard as others at work?
- Q83e How often do you feel that you are ignored or not taken seriously by your boss?
- Q83f How often have you been unfairly humiliated in front of others at work?

Coding: 1 = Never, 2 = Less than once a year, 3 = A few times a year, 4 = A few times a month, 5 = At least once a week, 6 = Almost every day

Scaling: Create an index of perceived work discrimination by averaging the scores across all items (range 1-6). Set the final score to missing if more than three of the items have missing values.

Psychometrics: (2012 Alpha = .85, 2010 Alpha = .83, 2008 Alpha = .83, 2006 Alpha = .81)

Background:

Harrell, S. P. (2000). A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *American Journal of Orthopsychiatry*, 70(1), 42-57.

Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health*, 93(2), 200-208.

Q84a – Q84o. Job Satisfaction and Job Stressors

(Q50a – Q50o in 2006, 2008, & 2010; Job Satisfaction is Q76 in 2014 & 2016)

These 15 items capture job stress and job satisfaction. These questions are only asked of respondents who are currently working. Based on the demand/control model of stress (Karasek, 1979) and items like those contained in the Quinn and Staines Quality of Employment Survey (1977), items were chosen and adapted to assess multiple facets of job satisfaction and multiple

work stressors. Psychometric analysis of data on these items in the 2004 pilot study indicated that these items do show two factors: job satisfaction and job stressors. After 2012, only the single item on Job Satisfaction was retained in the questionnaire (Q76 in 2014 and 2016).

Source:

Karasek, R. (1979). Job demands, job decision latitude, and mental strain: Implications for job re-design. *Administrative Science Quarterly*, 24, 285-306.

Quinn, R. P. & Staines, G. L. The 1977 quality of employment survey. Ann Arbor, MI: Institute for Social Research.

2012: 15 items (Q84a-Q84o)

(Please say how much you agree or disagree with each of the following statements)

- Q84a All things considered I am satisfied with my job.
- Q84b My job is physically demanding.
- Q84c I receive the recognition I deserve for my work.
- Q84d My salary is adequate.
- Q84e My job promotion prospects are poor.
- Q84f My job security is poor.
- Q84g I am under constant time pressure due to a heavy workload.
- Q84h I have very little freedom to decide how I do my work.
- Q84i I have the opportunity to develop new skills.
- Q84j I receive adequate support in difficult situations.
- Q84k At work, I feel I have control over what happens in most situations.
- Q84l Considering the things I have to do at work, I have to work very fast.
- Q84m I often feel bothered or upset in my work.
- Q84n In my work I am free from conflicting demands that others make.
- Q84o The demands of my job interfere with my personal life.

Coding: 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree

Scaling: Items are scored on a 4 point scale and averaged to produce an index ranging from 1-4 for job satisfaction (items Q84a, Q84c, Q84d, Q84e, Q84f, Q84i, Q84j, Q84k, Q84n, reverse coding items Q84e and Q84f) and job stress (items Q84b, Q84g, Q84h, Q84l, Q84m, Q84o).

Psychometrics:

Job satisfaction:	2012 Alpha = .85, 2010 Alpha = .80, 2008 Alpha = .80, 2006 Alpha = .80
Job Stress:	2012 Alpha = .80, 2010 Alpha = .74, 2008 Alpha = .70, 2006 Alpha = .75

Q84p – Q84t. Work Environment

(2008, 2010, & 2012 only; Q50p – Q50t in 2008 & 2010)

These 5 items are intended to provide additional data concerning the working environment of the respondent. These items are taken from the 2002 General Social Survey, conducted by the National Opinion Research Center. This scale was only assessed in 2008, 2010, and 2012.

2012: 5 items (Q84p-Q84t)

(Please say how much you agree or disagree with each of the following statements)

Q84p I have too much work to do everything well.

Q84q I have a lot to say about what happens on my job.

Q84r Promotions are handled fairly.

Q84s I have the training opportunities I need to perform my job safely and competently.

Q84t The people I work with can be relied on when I need help.

Coding: 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree,
5 = Does not apply

Scaling: Reverse code item 84p and then average the scores across all items to obtain an overall rating of the work environment. It is suggested to recode all '5' responses as missing. Set the final score to missing if there are three or more items with missing values.

Psychometrics: (2012 Alpha = .77, 2010 Alpha = .69, 2008 Alpha = .70)

Q84u- Q84w. Coworker Support

(2008, 2010, & 2012 only; Q50u – Q50w in 2008 & 2010)

These 3 items are intended to measure the support that respondents receive from their coworkers. This scale was only assessed in 2008, 2010, and 2012.

Source:

Haynes, C.E., Wall, T.D., Bolden, R.I., Stride, C., & Rick, J.E. (1999). Measures of perceived work characteristics for health services research: Test of a measurement model and normative data. *British Journal of Health Psychology*, 4, 257-275.

2012: 3 items (Q84u-Q84w)

(Please say how much you agree or disagree with each of the following statements)

Q84u My coworkers listen to me when I need to talk about work-related problems.

Q84v My coworkers help me with difficult tasks.

Q84w My coworkers help me in crisis situations at work.

Coding: 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree, 5 = Does not apply

Scaling: Average the scores across all items. It is suggested to recode all of the '5' responses as missing. Set the final score to missing if there is one or more items with missing values.

Psychometrics: 2012 Alpha = .92, 2010 Alpha = .91, 2008 Alpha = .90

Q84x – Q84z1 Supervisor Support

(2008, 2010, & 2012 only; Q50x – Q50za in 2008 & 2010)

These 4 items are intended to measure the support that respondents receive from their work supervisors. This scale was only assessed in 2008, 2010, and 2012.

Source:

Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87, 565-573.

2012: 4 items (Q84x-Q84z1)

(Please say how much you agree or disagree with each of the following statements)

Q84x My supervisor is helpful to me in getting the job done.

Q84y My supervisor is willing to extend himself/herself to help me perform my job.

Q84 My supervisor takes pride in my accomplishments at work.

Q84z1 My supervisor tries to make my job as interesting as possible.

Coding: 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree, 5 = Does not apply

Scaling: Average the scores across all items. It is suggested to recode all '5' responses as missing. Set the final score to missing if there are two or more items with missing values.

Psychometrics: (2012 Alpha = .95, 2010 Alpha = .93, 2008 Alpha = .93)

Q85. Assistance in Survey Completion

(Q51 in 2006, 2008, & 2010; Q85 in 2014 & 2016)

This item is used to determine if the respondent had any assistance in completing the questionnaire. In 2006 this question had only two response options, whereas starting in 2008 the response categories were expanded to three.

2012: 1 item (Q85)

Q85. Were the questions in this booklet answered by the person whose first name is written on the front cover?

Coding: 1 = YES, the person whose name is on the front cover completed the questionnaire by him/herself., 2 = YES, the person whose name is on the front cover answered the questions, but someone else assisted by writing in the answers for that person, 3 = NO, the person whose name is on the front cover did not answer/complete the questionnaire.

Q86. Anything Else

(Q52 in 2006, 2008, & 2010; Q78 in 2014 & 2016)

This item is used to allow the respondent to cover anything that the survey might not have mentioned.

2012: 1 item (Q86)

Q86. If there is anything else you would like to tell us, please write in the space below. We are very interested to read what you have to say.

Coding: (string) Not released in public file.

2006 Scales or Specific Items Not Included in Later Survey Content

Q2. Community Meeting Attendance

This question captures the degree of embeddedness in social networks (clubs, groups, etc.) in terms of the frequency of social interaction within this network.

2006: 1 item (Q02)

(Not including attendance at religious services, how often do you attend meetings or programs of groups, clubs, or organizations that you belong to?)

Coding: 1 = More than once a week, 2 = Once a week, 3 = 2 or 3 times a month, 4 = About once a month, 5 = Less than once a month, 6 = Never. (Note that unless you recode the scale, higher values will correspond to less social integration.)

Q27. Positive and Negative Affect (MIDUS)

These 12 items are used in MIDUS.

Source:

Mroczek, D. K., & Kolarz, C. M. (1998). The effect of age on positive and negative affect: a developmental perspective on happiness. *Journal of Personality and Social Psychology*, 75(5), 1333-1349.

2006: 6 items for positive affect (Q.27a-f) and 6 items for negative affect (Q.27i-n).
(During the last 30 days, about how often did you feel...?)

Positive Affect

- Q27a cheerful?
- Q27b in good spirits?
- Q27c extremely happy?
- Q27d calm and peaceful?
- Q27e satisfied?
- Q27f full of life?

Negative Affect

- Q27i so depressed that nothing could cheer you up?
- Q27j hopeless?
- Q27k restless or fidgety?
- Q27l that everything was an effort?
- Q27m worthless?
- Q27n nervous?

Coding: 1 = All of the time, 2 = Most of the time, 3 = Some of the time, 4 = A little of the time, 5 = None of the time

Scaling: Create an index of positive affect by reverse-coding items Q27a-Q27f and averaging the scores across all 6 items. Set the final score to missing if there are more than three items with missing values.

Create an index of negative affect by reverse-coding items Q27i-Q27n and averaging the scores across all 6 items. Set the final score to missing if there are more than three items with missing values.

Psychometrics: Positive affect: 2006 Alpha = .92

Negative affect: 2006 Alpha = .88

Additional items in Q27 correspond to the same CES-D items in the core HRS that assess depressive symptoms. The eight psychosocial questionnaire items that map to the HRS core depressive symptoms items are as follows: Q27g, Q27h, Q27i, Q27l, Q27o, Q27p, Q27q, Q27r.

Background:

Watson, D., Wiese, D., Vaidya, J., & Tellegen, A. (1999). The two general activation systems of affect: structural findings, evolutionary considerations, and psychobiological evidence. *Journal of Personality and Social Psychology*, 76(5), 820-838.

Watson, D. (1988). The vicissitudes of mood measurement: effects of varying descriptors, time frames, and response formats on measures of positive and negative affect. *Journal of Personality and Social Psychology*, 55(1), 128-141.

Q29. Frequency of Prayer

(This is in question 1 in 2008 and 2010, but the scales have changed)

Item: Q29 How often do you pray privately in places other than at church or synagogue?

Coding: 1 = More than once a day, 2 = Once a day, 3 = A few times a week, 4 = Once a week
5 = A few times a month, 6 = Once a month, 7 = Less than once a month, 8 = Never

Scaling: Reverse-code the score to create a measure of the frequency of prayer.

Q35. Psychological Well-Being: Personal Growth and Self Acceptance

(Q6f – Q6i in 2004; 2006)

These items come from the Ryff Measures of Psychological Well-being (1989). Items tap each of the dimensions of well-being: Personal Growth, and Self Acceptance.

Sources:

Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82(6), 1007-1022.

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719-727.

Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, 4, 99-104.

Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, 9(1), 1-28.

Personal Growth Dimension (2006 Items Q35h-Q35n)

(Please read the statements below and decide the extent to which each statement describes you.)

Q35h I am not interested in activities that will expand my horizons. (-)

Q35i I think it is important to have new experiences that challenge how I think about myself and the world.

Q35j When I think about it, I haven't really improved much as a person over the years(-)

Q35k I have the sense that I have developed a lot as a person over time.

Q35l I do not enjoy being in new situations that require me to change my old familiar ways of doing things. (-)

Q35m I gave up trying to make big improvements in my life a long time ago. (-)

Q35n For me, life has been a continuous process of learning, changing, and growth.

Self Acceptance Dimension (2006 Items Q35o-Q35u)

Q35o I feel like many of the people I know have gotten more out of life than I have. (-)

Q35p In general, I feel confident and positive about myself.

Q35q When I compare myself to friends and acquaintances, it makes me feel good about who I am.

Q35r My attitude about myself is probably not as positive as most people feel about themselves. (-)

Q35s In many ways, I feel disappointed about my achievements in life. (-)

Q35t When I look at the story of my life, I am pleased with how things have turned out.

Q35u I like most parts of my personality

Coding: 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Slightly disagree, 4 = Slightly agree, 5 = Somewhat agree, 6 = Strongly agree

Scaling: Reverse-code the negatively phrased items (-) and then average the scores across items to create an index of well-being for each dimension (ranging from 1-6), with a high score indicating positive well-being. Set the final score for each dimension to missing if there are more than three items with missing values within each dimension.

Psychometrics:

Personal Growth: 2006 Alpha = .76

Self Acceptance: 2006 Alpha = .81

Q46-47. Work/Family Priorities

Asked only among respondents who are currently working, these questions tap the balance between work and family.

Source: Families and Work Institute. 2002 National Study of the Changing Workforce.
<http://www.familiesandwork.org/site/work/workforce/2002nscw.html>

Q.46 How often do you feel that you put your JOB before your FAMILY?

Q.47 How often do you feel that you put your FAMILY before your JOB?

Coding: 1 = Very often, 2 = Sometimes, 3 = Rarely, 4 = Never

Background:

Bond, J. T., Thompson, C., Galinsky, E., & Prottas, D. (2003). *Highlights of the National Study of the Changing Workforce*. New York: Families and Work Institute.