

A review of existing measures of retirement well-being

Introduction

Measures of retirement preparedness often suggest a substantial share of U.S. households are not on track to maintain their standard of living in retirement. And many retirees report regret for not saving enough.¹ Yet, when asked about their life satisfaction, the overwhelming majority (92%) of retired households say that they are “very satisfied” or “moderately satisfied.” In fact, gerontologists and psychologists have found a weak correlation between older Americans’ financial circumstances and retirement satisfaction.² These conflicting signals suggest financial or life satisfaction questions do not provide a complete assessment of how retirees are actually doing. While a comprehensive assessment of retirement well-being may be hard to capture in one simple question, it is unclear what a good measure would encompass.

This brief represents the first step toward developing a more comprehensive measure of satisfaction that includes financial and other factors. The analysis begins by assessing the extent to which various measures of well-being are consistent across a variety of public surveys. It then evaluates the extent to which subjective assessments are consistent with objective measures of well-being.

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¹ Hurwitz and Mitchell (2024).

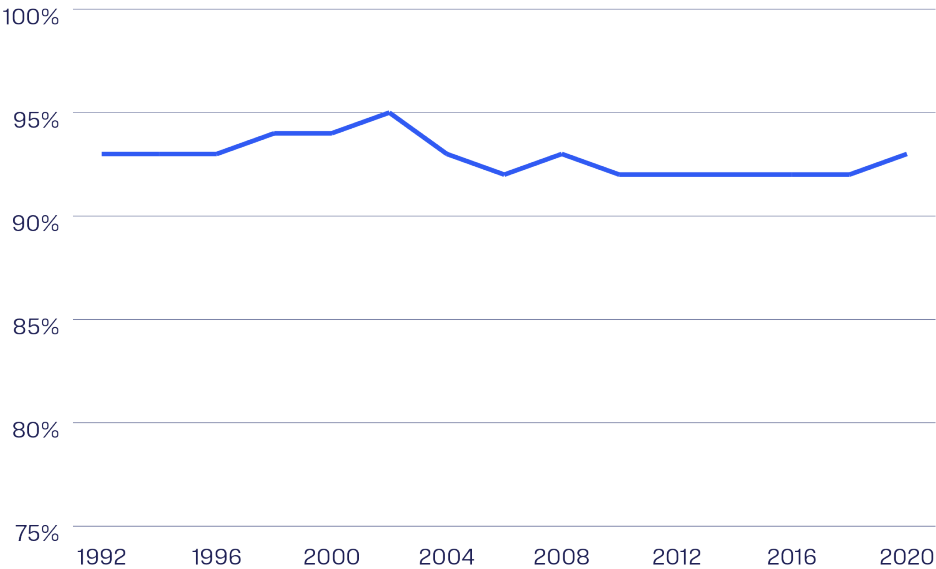
² See Hansen, Slagsvold, and Moum (2008) for an overview of the gerontology literature. Isaacowitz (2022) provides a good overview of the psychology literature.

The discussion proceeds as follows. The first section provides an overview of the existing measures of well-being and the datasets used in the analysis. The second section compares the various subjective well-being measures to see if they are consistent across datasets. The third section examines the relationship between subjective and objective measures of well-being to see if some of the objective measures are better predictors of life satisfaction. The final section concludes that objective physical health is the only moderately good predictor of life satisfaction and the only financial component that matters to satisfaction is non-mortgage debt. But even so, the relationship between both measures and life satisfaction is small.

Existing measures of well-being

Surveys that ask older adults about life satisfaction consistently show that the vast majority of retirees are quite satisfied and happy. This trend has been relatively stable over time (see Figure 1 for an example).

FIGURE 1. PERCENTAGE OF RESPONDENTS MODERATELY OR VERY SATISFIED WITH RETIREMENT, 1992–2020



Notes: Respondents were asked to rate their retirement satisfaction on a 1–3 scale, where 3 = very satisfied, 2 = moderately satisfied, and 1 = not at all satisfied. Those who chose 2 or 3 are considered satisfied.
Source: Authors' calculations from the *Health and Retirement Study* (HRS), 1992–2020.

Objective measures of retirement well-being, however, suggest that a large portion of retirees do not have the resources to maintain their pre-retirement standard of living. Indeed, to maintain their lifestyle, many retirees rely on credit cards and forego any financial buffer for emergencies. One explanation for this disconnect between life satisfaction and objective financial measures is that retirees’ life satisfaction

is not really related to financial measures but rather other aspects of well-being. Fortunately, multiple surveys include an array of questions on different facets of retirement well-being—financial, physical health, mental health and living situation—that go beyond simple self-assessments of life satisfaction. Table 1 shows a sample of these types of questions.³

TABLE 1. TYPES OF WELL-BEING QUESTIONS IN EXISTING SURVEYS

Subjective	Objective
Life satisfaction	
<ul style="list-style-type: none">• General happiness/life satisfaction• Relationships/activities satisfaction• Economic or social sentiment	
Physical health	
<ul style="list-style-type: none">• Self-assessed health	<ul style="list-style-type: none">• Medical diagnoses• Physical limitations• Ability to do specific activities
Mental health	
<ul style="list-style-type: none">• Anxiety, worry, stress• Interest or pleasure in activities• Adequate emotional or social support	<ul style="list-style-type: none">• Medical diagnoses• Substance use
Financial	
<ul style="list-style-type: none">• Income adequacy or satisfaction• Stressed about expenses• Enough money for basic necessities	<ul style="list-style-type: none">• Debts• Income relative to expenses• Forgone food or medicine• Reliance on financial assistance
Living situation	
<ul style="list-style-type: none">• Satisfaction with home or neighborhood• Safety	<ul style="list-style-type: none">• Pests and dwelling conditions• Problems with heat, water, mold

3 Measures only available in one survey were not included in the analysis because they did not allow for cross-survey comparison.

Data

The questions come from a variety of publicly available surveys, including the Health and Retirement Study (HRS), Panel Study of Income Dynamics (PSID), National Health Interview Survey (NHIS), National Health Behavioral Risk Factor Surveillance System (BRFSS), Survey of Consumer Finances (SCF), Understanding America Study (UAS),

Medical Expenditure Panel Survey (MEPS), Survey of Income and Program Participation (SIPP) and the Survey of Household Economic Decisionmaking (SHED).⁴ Table 2 summarizes which measures are available in each dataset. We use the latest available year for each dataset. For a brief description of each survey, see the Appendix.

TABLE 2. MEASURES AVAILABLE IN EACH SURVEY AND YEARS ANALYZED

	HRS 2022	PSID 2021	NHIS 2023	BRFSS 2023	SCF 2022	UAS 2020	MEPS 2021	SIPP 2022	SHED 2023
Happiness and life satisfaction	✓	✓	✓	✓		✓	✓		
Physical health									
Objective	✓	✓	✓	✓		✓	✓	✓	✓
Subjective	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mental health									
Objective	✓	✓	✓	✓		✓	✓	✓	
Subjective	✓	✓	✓	✓		✓	✓		
Financial									
Objective	✓	✓		✓	✓	✓	✓	✓	✓
Subjective	✓	✓	✓		✓	✓			✓
Living situation									
Objective							✓	✓	
Subjective	✓						✓	✓	✓

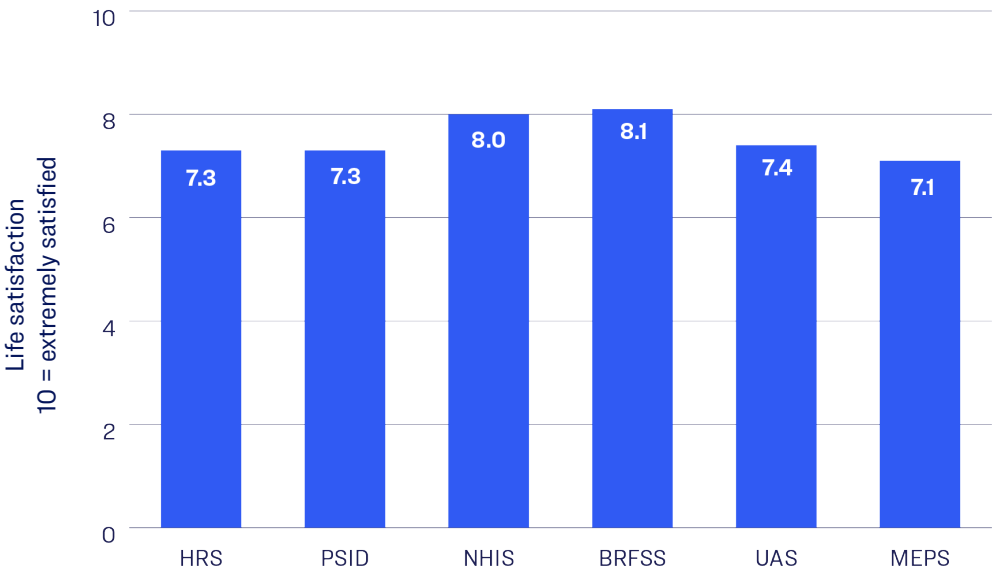
Source: Authors' illustration.

4 Other datasets—such as the American Life Panel and Centers for Disease Control and Prevention Mortality Data—were examined, but not included because they either only had objective or subjective measures but not both or did not have similarly phrased questions as other surveys.

Do different surveys provide consistent measures of well-being?

The first question is whether respondents provide consistent assessments to various measures of well-being across surveys. The broadest measure is life satisfaction, to which older adults provided fairly consistent responses that hovered around 7 or 8 on a 10-point scale, where 10 represents being extremely satisfied.⁵ The lowest rating is 7.1 from the UAS—a relatively new survey conducted by the University of Southern California. The highest is 8.1 in the BRFSS, a survey that tracks health-related risks, chronic conditions and use of preventative services (see Figure 2). Across various surveys, older adults seem to report being fairly satisfied with their lives.

FIGURE 2. AVERAGE LIFE SATISFACTION AMONG RESPONDENTS AGE 60+



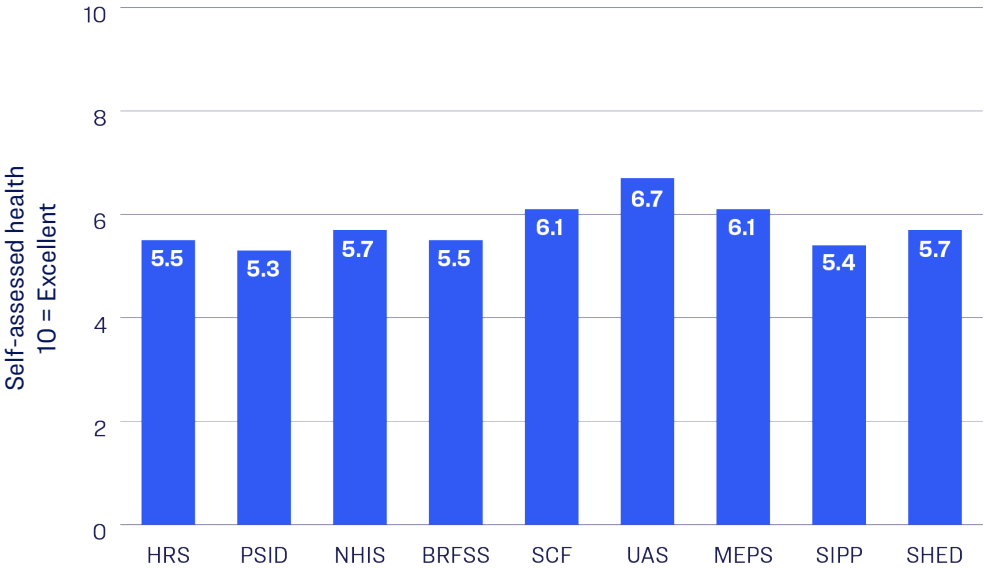
Sources: Authors’ calculations from the various surveys, which were rescaled so responses were between 0 and 10, as needed.

Self-assessed health is another measure of well-being. Similarly, responses are fairly consistent across surveys, hovering between 5.5 and 6.5 on a 10-point scale, where 10 is extremely healthy. The lowest is 5.3 from the *PSID* and the

highest is 6.7 from the UAS (see Figure 3). Across various surveys, older adults seem to report more moderate levels of satisfaction with their health when compared with life satisfaction.

5 When the scale in the survey was different, responses were renormalized to correspond to a 10-point scale for uniformity across surveys.

FIGURE 3. AVERAGE SELF-ASSESSED HEALTH AMONG RESPONDENTS AGE 60+



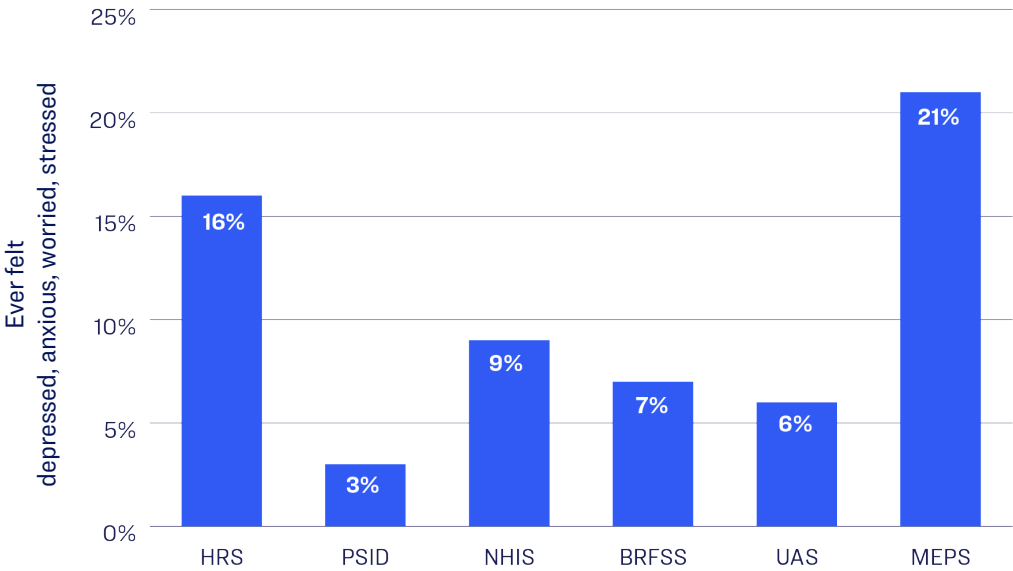
Sources: Authors’ calculations from the various surveys, which were rescaled so responses were between 0 and 10, as needed.

Measures of subjective mental health are a little less consistent across surveys, likely because they ask slightly different questions.⁶ Surveys that ask about the frequency of stress or whether someone felt depressed for two weeks

in a row rather than standard medical assessments—such as the *HRS* and the *MEPS*—show a much higher share of older adults reporting poor mental well-being (see Figure 4).

6 The PSID asks six questions focused on feelings of sadness, nervousness, restlessness, hopelessness, everything being an effort and worthlessness. The UAS uses a scale similar to the Center for Epidemiologic Studies of Depression, but does not go through the full panel of questions. Other surveys (*HRS*, *BRFSS*, *NHIS*, and *MEPS*) ask about any feelings of depression and their frequency.

FIGURE 4. PERCENTAGE OF RESPONDENTS WHO HAVE FELT DEPRESSED, ANXIOUS, WORRIED OR STRESSED, AMONG RESPONDENTS AGE 60+

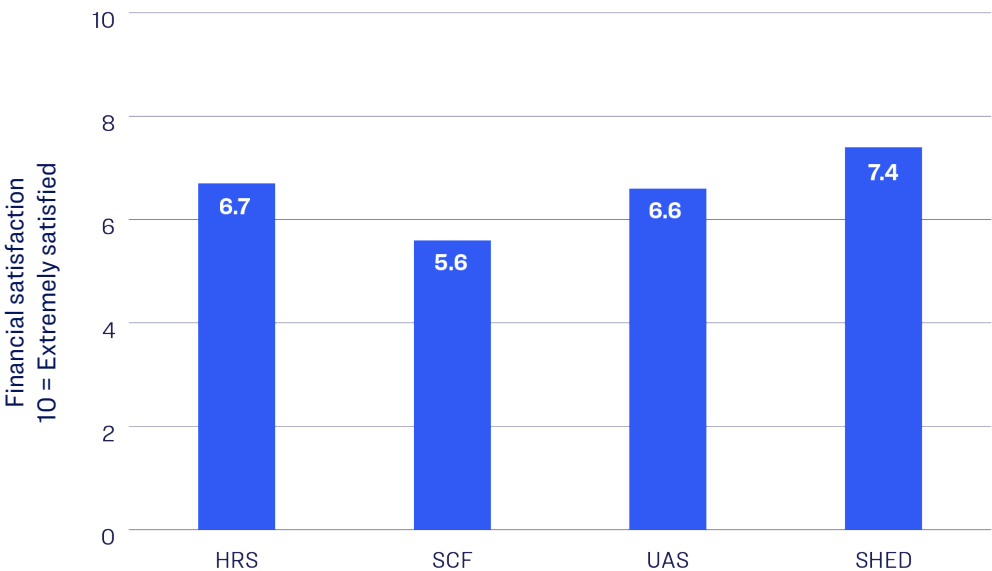


Sources: Authors' calculations from the various surveys.

Shifting to subjective financial satisfaction, responses from older adults are also somewhat consistent—although not as consistent as life satisfaction or self-assessed physical health (see Figure 5). The SCF, which shows lower levels of financial satisfaction, asks if respondents are satisfied with their retirement income whereas the other surveys ask about

their satisfaction with their current household income or financial situation. It is not clear why asking about retirement income might elicit a relatively more pessimistic response. Older adults also are more likely to report lower levels of financial satisfaction than life satisfaction.

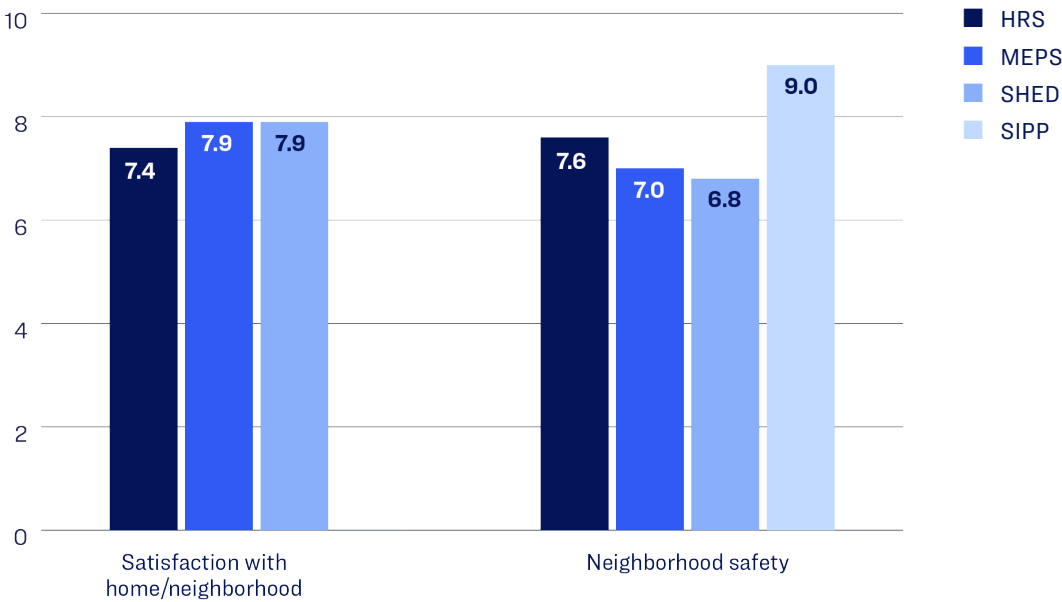
FIGURE 5. AVERAGE FINANCIAL SATISFACTION AMONG RESPONDENTS AGE 60+



Sources: Authors' calculations from the various surveys, which were rescaled so responses were between 0 and 10, as needed.

Several surveys also ask older adults about their satisfaction with their living situation—some ask about their home and neighborhood, while others ask about safety. Once again, the responses are fairly consistent (see Figure 6). The only exception is the SIPP, where respondents are very satisfied (9 on a 10-point scale) with their neighborhood safety.

FIGURE 6. AVERAGE SATISFACTION WITH LIVING CONDITIONS, AMONG RESPONDENTS AGE 60+



Sources: Authors’ calculations from the various surveys, which were rescaled so responses were between 0 and 10, as needed.

A smaller number of surveys ask about family satisfaction and if respondents are worried about running out of food. The satisfaction score for family situation was about 7.5 in the HRS and the UAS. In terms of running out of food, the PSID and the NHIS showed that only 0.5% were concerned.

The results thus far show that older adults’ responses to different categories of well-being questions are fairly consistent across surveys, with most variation attributable to differences in what is being measured or question phrasing.

How do the subjective and objective measures compare?

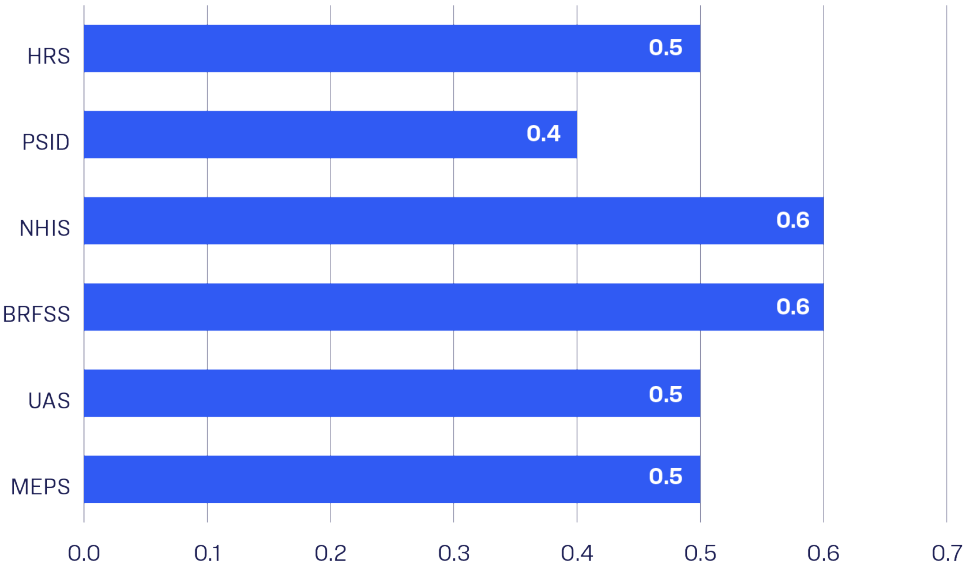
The key question for this study is how the subjective measures of well-being compare with the objective ones. This exercise involves estimating regressions to see how well changes in the objective measures predict different responses for subjective measures.

Life satisfaction

The first group of regressions estimated the relationship between life satisfaction and objective physical health, mental health, financial security, and living situation.

Physical health index. Objective physical health can be captured in a variety of ways, such as whether someone needs help with activities of daily living, has a serious chronic condition such as cancer, had a health shock such as a stroke or heart attack, or has serious issues with eyesight or hearing. We combine a variety of health conditions and diagnoses into a physical health index, using the first principal component of the various conditions to measure older adults’ physical health.⁷ The relationship between individuals’ physical health index and life satisfaction across different surveys is shown in Figure 7.

FIGURE 7. REGRESSION COEFFICIENT OF OBJECTIVE PHYSICAL HEALTH INDEX ON LIFE SATISFACTION, AMONG RESPONDENTS AGE 60+



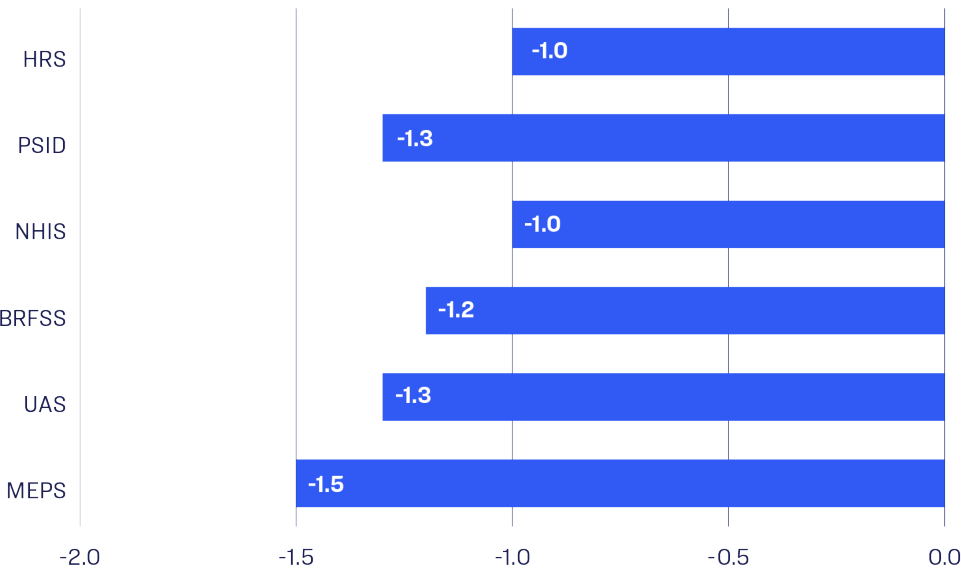
Notes: Solid bars indicate statistical significance at the 0.01% level. Surveys were rescaled so responses were between 0 and 10, as needed.
Sources: Authors’ calculations from the various surveys.

Not surprisingly, the coefficients are all positive—that is, the healthier someone is, the higher their life satisfaction. While the results are all statistically significant, the magnitude is quite modest., as a one-standard-deviation improvement in health is associated with just about a half-point improvement in life satisfaction on a 10-point scale. For example, moving from the 25th percentile of health to the 75th percentile is associated with only a 0.5-point improvement in life satisfaction in the HRS.

7 The index is then standardized so every unit corresponds to a standard deviation of health, and the sign of the index is such that the better the individual’s health, the higher the score.

Mental health. Objective mental health is measured by whether someone was diagnosed with a condition such as depression or anxiety. Not surprisingly, such a diagnosis is negatively correlated with life satisfaction (see Figure 8). The correlation is larger than physical health conditions and is also statistically significant across all surveys. Even so, the results show that a serious mental health diagnosis is only associated with a 1.0-point to 1.5-point reduction in life satisfaction on a 10-point scale.

FIGURE 8. REGRESSION COEFFICIENT OF MENTAL AND PSYCHIATRIC DIAGNOSIS ON LIFE SATISFACTION

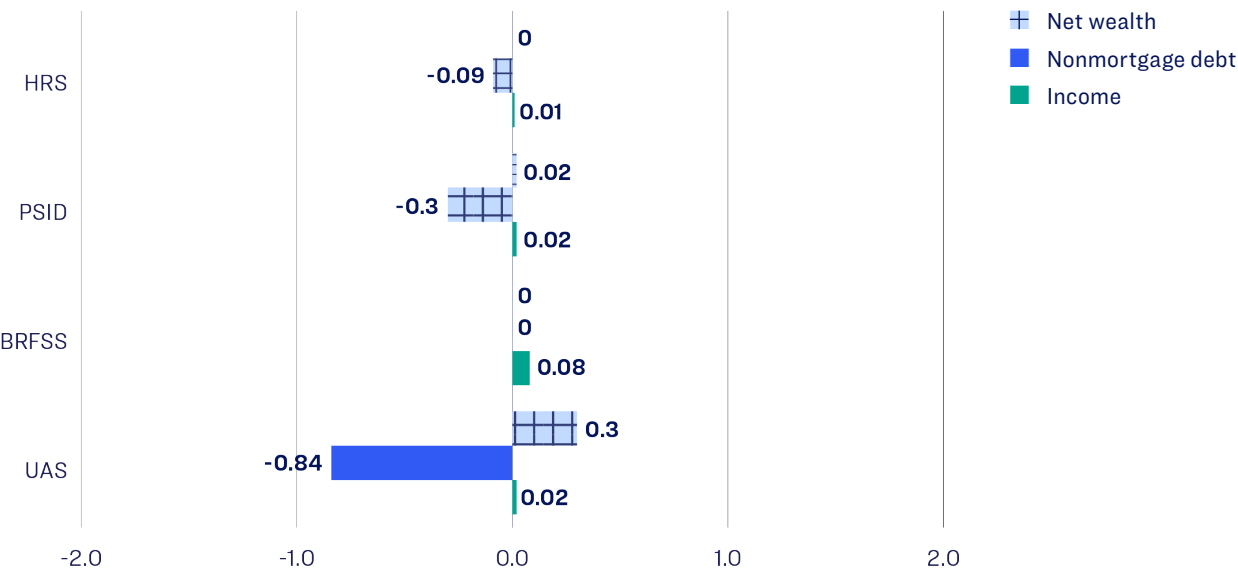


Notes: Solid bars indicate statistical significance at the 0.01% level. Surveys were rescaled so responses were between 0 and 10, as needed.
Sources: Authors' calculations from the various surveys.

Financial. The analysis uses three measures of objective financial well-being: 1) household income; 2) household net wealth; and 3) non-mortgage debt. Both income and wealth are components of retirement income adequacy and non-mortgage debt represents the financial stress a household might be under due to debt payments. Household income is measured in \$10,000 increments, household net wealth in \$1 million increments, and non-mortgage debt in \$100,000 increments. Interestingly, the correlation between various financial measures and life satisfaction is virtually zero and often not significant across most surveys (see Figure 9). The only exception is non-mortgage debt—primarily credit card debt—in the UAS survey.⁸ This weak correlation raises doubts about the suitability of life satisfaction survey responses as a measure of the success or failure of retirement income policy, since the measure seems unresponsive to the objective financial situation of retirees.

8 Chen, Liu, and Munnell (2023) show that over 80% of households with non-secured debt hold revolving credit card debt.

FIGURE 9. REGRESSION COEFFICIENT OF NET WEALTH, NONMORTGAGE DEBT AND INCOME ON LIFE SATISFACTION



Note: Solid bars indicate statistical significance at the 0.01% level.
Sources: Authors' calculations from the various surveys.

Living situation. Objective living conditions can be measured by whether older adults have problems such as mold, pests, or heat and water issues at home. Only one survey, the MEPS, allows us to compare objective living conditions with life satisfaction. The coefficient between the two is small, -0.95, albeit statistically significant.

The simple regressions show that objective health measures—both physical and mental—are more predictive of life satisfaction than financial or living conditions, although none of the different measures are very strongly related to life satisfaction.

Objective versus subjective measures within a category

Objective and subjective well-being questions might have a stronger correlation within categories.

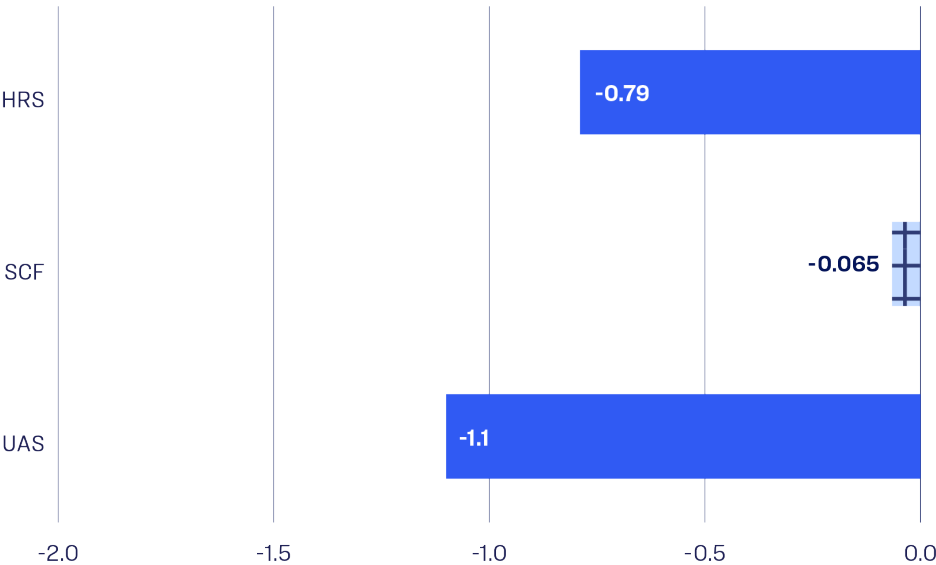
Physical and mental well-being. Not surprisingly, regressions of our physical health index on self-assessed health show that objective physical health is a better predictor of self-assessed health than of life satisfaction, although still moderate.⁹ Interestingly, the effect of having a mental health diagnosis on self-reported subjective mental health is much smaller.¹⁰

Financial well-being. Similarly, the impact of income or wealth on financial satisfaction, although larger than on life satisfaction, is also small. Our regressions show that a \$10,000 increase in annual income only increases financial satisfaction by 0.01 to 0.05 on a 10-point scale. Similarly, a \$1 million increase in wealth is also only associated with a 0.3-point to 0.8-point increase in financial satisfaction on a 10-point scale.¹¹

9 A one-standard deviation increase in the physical health index is associated with a 1.1-point to 1.5-point increase in self-rated health on a 10-point scale. The results are statistically significant at the 0.01% level.
10 Having a mental health diagnosis is associated with an increase of between 0.1 and 0.3 percentage points in self-reports of feelings of depression, anxiety, worry or stress. The results are statistically significant at the 0.01% level.
11 Both results are statistically significant at the 0.01% level.

What is more important to older households' financial satisfaction is how much non-mortgage debt they own (see Figure 10). Households are roughly one point (out of 10) less financially satisfied for every \$100,000 in non-mortgage debt they own.

FIGURE 10. REGRESSION COEFFICIENT OF NONMORTGAGE DEBT ON FINANCIAL SATISFACTION



Note: Solid bars indicate statistical significance at the 0.01% level. Income across all surveys is in \$10,000s, and wealth is in \$100,000s.
Sources: Authors' calculations from the various surveys.

Living situation. Once again, only one survey, the MEPS, allows a comparison of objective and subjective living conditions. Having mold, pest, or water/heating problems reduces a respondent's satisfaction with their living standard by 1.25 on a 10-point scale. The results are statistically significant.

Conclusion

Surveys that ask older adults about life satisfaction have consistently shown that the vast majority of retirees are very satisfied and happy. However, measures of retirement preparedness often suggest that a substantial share of U.S. households will need to cut their spending in retirement and many retirees report regret for not saving enough. This disconnect makes it hard to assess how worried individuals and policymakers should be about households falling short in retirement.

The analysis in this brief shows that the disconnect occurs because objective financial measures—such as income and net wealth—are poor predictors of older adults' self-reported life satisfaction. Objective health and non-mortgage debt

are slightly better predictors of life satisfaction. But even so, each additional \$100,000 in non-mortgage debt is only associated with a one-point decrease in life satisfaction on a 10-point scale, and moving from the 25th percentile of health to the 75th percentile is associated with only a 0.5-point improvement.

The weak relationship between objective financial outcomes, and even health outcomes, and life satisfaction suggests that survey responses on satisfaction are a poor test of retirement income policy. Future research could construct a better measure of well-being in retirement that captures whether households need to make cuts in their spending and how households handle emergencies and expense shocks.

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Appendix

Description of datasets

Behavioral Risk Factor Surveillance System (BRFSS) tracks health-related risk behaviors, chronic health conditions, and use of preventive services among individuals. BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted health survey system in the world. The BRFSS includes objective and subjective measures of physical health, mental health and financial well-being.

Health and Retirement Study (HRS) is a household panel survey, conducted biennially since 1992, that interviews a nationally representative sample of about 20,000 people age 50 or older and their spouses. The survey has a variety of questions, including at least one question in each of the subjective and objective categories found in Table 1, apart from objective living situation. It has the most comprehensive set of questions on various measures of well-being.

Medical Expenditure Panel Survey (MEPS) is a nationally representative, longitudinal dataset from 1996 to the present on health status, healthcare utilization and healthcare expenditures for individuals. In addition to objective and subjective health measures, the MEPS also includes information on objective financial wellness, mental well-being, and respondents' living situation.

National Health Interview Survey (NHIS) has been collecting information on the health status, healthcare access and health behaviors of individuals since 1963. It includes measures of objective and subjective physical and mental health, and subjective financial satisfaction.

Panel Study of Income Dynamics (PSID) is also a household panel survey, conducted biennially since 1968, that collects in-depth information on households and their children over time. Like the HRS, the survey includes a variety of questions on various objective and subjective measures of well-being. The only exception is that it doesn't ask respondents about their subjective or objective satisfaction with their living situation or environment.

Survey of Consumer Finances (SCF) is a triennial survey conducted by the Federal Reserve that provides comprehensive data on household balance sheets, income, pension and other socioeconomic characteristics of households. While the SCF is the most comprehensive public survey on household finance, it only contains questions on retirement income satisfaction and objective financial well-being.

Survey of Household Economics and Decisionmaking (SHED) is an annual survey conducted by the Federal Reserve to gather household-level data on financial well-being and focuses on topics that include income, savings, debt, access to financial services and individuals' experiences with economic hardship. In addition to objective measures of financial well-being, the SHED also includes questions on objective and subjective health and objective living conditions.

Survey of Income and Program Participation (SIPP) is a nationally representative longitudinal survey that interviews individuals monthly, over a three- to four-year period. The SIPP includes measures on subjective and objective health, as well as objective financial wellness. It also asks respondents about the safety of their neighborhood.

Understanding America Study (UAS) is a relatively new nationally representative survey conducted by the University of Southern California to track a wide range of social, economic, and health behaviors across diverse populations. The UAS contains measures of objective and subjective physical health and financial well-being. It also includes questions of subjective mental health.

About the authors

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