

APPENDIX D.4

Retirement Module Phase 2 Final Report

FINAL REPORT

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Developing Retirement Modules for NCSES Workforce Surveys: Phase 2

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Introduction

The Survey of Doctorate Recipients (SDR) and National Survey of College Graduates (NSCG) collect data on the highly educated sectors of the U.S. workforce from receipt of the doctorate or baccalaureate, respectively, until age 76. These workforce surveys focus on employment including employment sectors and occupations, work activities, earnings, and work satisfaction, as well as continuing education and training experiences. Demographic data are also collected to enable reporting on differences and similarities in workforce experiences by sex, race-ethnicity, and disability status. Since their inceptions in 1973 (SDR) and 1993 (NSCG) the surveys have also included questions about the timing of retirement, and retired status as a possible reason for not working (A3), for being employed part time (A40), or having changed employers or jobs since the prior survey (B3). However, these retirement items do not explore retirement further and result in a limited set of measures.

NCSES is developing survey content to be included in a new retirement module for the SDR and NSCG. In Phase 1 research, a retirement module was developed with the aim of providing a nuanced picture of how individuals approach retirement, recognizing the partial and phased approach people may take to decreasing and eventually breaking off from workforce participation. The new question module seeks to obtain information on the circumstances and reasons for retirement, as well as various behaviors and activities people may do during retirement. As part of Phase 2 of this research, NORC is assisting NCSES in cognitive testing of the newly developed retirement module.

Three rounds of cognitive interviewing were conducted. Round 1 interviews were conducted August 22 - September 8, 2022. On November 11, NORC delivered a memo summarizing the 12 t interviews conducted in Round 1. Round 2 interviews were conducted November 1 - 16, 2022. On November 18, NORC delivered a memo summarizing the 11 interviews conducted in Round 2. Round 3 interviews were conducted February 8 - March 9, 2023. This final report presents the methodology from Round 3 cognitive interviews, as well as findings and recommendations encompassing all testing to date.

Methodology

Prior to beginning recruitment and interviewing for the study, OMB review and clearance was granted. In addition, the NORC Institutional Review Board reviewed and approved the study.

Recruitment. Study participants for Rounds 1 and 2 were recruited through NORC's AmeriSpeak Omnibus panel and through dissemination of study information through NORC staff networks. Omnibus respondents answered screening questions and were asked to indicate interest in participating in a one-hour interview. A total of 85 Omnibus respondents answered the screening questions, were eligible based on screening, and expressed interest in completing an interview. From this initial list, respondents were categorized by employment status, retirement status, and a set of respondents was

selected, screened, and recruited to cover a range of demographic characteristics within these employment/retirement statuses. Additional study participants with PhDs were recruited through personal and professional networks.

For Round 3, NORC recruited participants through the NORC Foresight 50+ panel, a nationally representative panel of Americans aged 50 or older, and through NORC staff networks. A total of 312 panelists answered the screening questions, were eligible based on screening, and expressed interest in completing an interview. From this list, respondents were categorized by employment status, retirement status, and a set of respondents was selected, screened, and recruited to cover a range of demographic characteristics within these employment/retirement statuses. Additional study participants with PhDs were recruited through personal and professional networks. Exhibit 1 displays the characteristics of the 17 respondents who completed a Round 3 interview, as well as those who completed interviews in previous rounds.

Exhibit 1. Cognitive Interview Respondent Characteristics – Rounds 1-3

Characteristic	Categories	Number of Respondents Round 1 (n=12)	Number of Respondents Round 2 (n=11)	Number of Respondents Round 3 (n=17)	Total Respondents (n=40)
Gender	Female	7	4	9	20
	Male	5	7	8	20
Race	Black	2	1	2	5
	White	9	9	13	31
	Hispanic/Latinx	1	1	2	4
	Asian	0	0	0	0
	2+ races/ethnicities	0	0	0	0
	Other	0	0	0	0
Age	50-59	6	1	4	11
	60-69	1	9	9	19
	70-75	5	1	4	10
Highest Degree	Bachelor's or post-graduate degree (not U.S. PhD)	8	7	8	23
	U.S. PhD	4	4	9	17
Retirement Status	Fully retired	3	4	9	16
	Semi-retired	3	4	5	12
	Never retired	6	3	3	12

During the Rounds 1 and 2, recruitment of low incidence populations (e.g., later career U.S. PhD holders in different retirement paths) was challenging. To increase the number of U.S. PhD holders, the NORC team utilized the Foresight 50+ panel and expanded networking approaches to include personal and professional networks of NORC staff outside of the project. This yielded more than 50% U.S. holders in Round 3. With additional time and funds, there are other recruitment avenues NORC could have tapped into, such as alumni associations, universities, or external recruitment vendors. External recruitment vendors would likely produce a greater number of low incidence population respondents, but NORC's experience shows that the cost per recruit and incentive payments would also need to increase.

Materials. NORC prepared a self-administered web version of the retirement module. For Round 3 testing, the retirement module was integrated into the full SDR. Due to the need to keep interview length under an hour, some items from the full SDR that were not required to provide context for the retirement items were omitted from the testing instrument. A copy of the questionnaire used in Round 3 is included in Attachment A. A spreadsheet showing the Round 3 Survey Paths by Retirement Groups is presented in Attachment C. The survey was programmed in Qualtrics for administration in the cognitive interviews. Interviewers used a cognitive interview protocol to conduct the interview. This protocol included steps for obtaining consent and probing and debriefing procedures. A copy of the Round 3 protocol is presented in Attachment B. The protocol was updated between rounds to include probes on revised or new items. Some probes for questions that were deemed to be working well were dropped to focus on the more cognitively challenging items.

Interview Procedures. Round 3 interviews took an average of 43 minutes to complete, with interviews ranging from 22 minutes to 64 minutes. Interviews were conducted over Zoom. To begin the interview, the interviewer obtained consent and launched the online survey. After launching the survey, the interviewer gave the participant control of the screen. AmeriSpeak respondents received 40,000 AmeriPoints (equivalent to \$40) for completing the cognitive interview. Respondents recruited through personal and professional networks received \$40 paid by check.

Findings and Recommendations

This section presents key findings from the Round 3 cognitive interviews and recommendations for revising the module. After completing Round 1, NORC substantially revised the content and flow of the early questions in the module with the goal of improving respondents' ability to route to the appropriate questions for their retirement group. Round 2 results show that the revisions were effective in solving routing issues. However, Round 2 identified areas where language could be revised to ensure accurate and useful measurement of retirement concepts. After Round 2, NORC streamlined the module by removing items deemed unnecessary and combining items that overlapped. NORC tested the revised module in Round 3 cognitive interviews.

Employment Status and Fully Retired Status (A1-A3PROBE)

Question A1 asks whether the respondent was working for pay or profit during the reference week of the survey. Round 1 cognitive testing revealed that some respondents who were employed but did not work during the reference week had difficulty interpreting A1 and misclassified their status as not working. We did not observe any difficulties with A2 or A3. In Round 2, we added language in the instruction text in A1 to clarify that intermittent work for which the respondent was not paid during the reference week should be included. We also added the SDR A3PROBE question with the intent of capturing those who were working during the reference week but had misclassified themselves in A1. Intermittent worker was added to the A3PROBE list. Cognitive interviews in Round 2 showed that these changes were effective in helping respondents accurately report their employment status. A1, A3, and A8 worked to classify respondents. The Round 3 version of A1, A2, A3, and A3PROBE are featured below, with item-specific findings identified after each item.

A1

A1. During the week of December 1, 2022, were you working for pay or profit?

Working for pay or profit also includes being self-employed and not getting paid that week, an intermittent worker not working that week (e.g., consultant, freelancer, independent contractor), on a postdoctoral appointment, traveling while employed, or on any type of paid or unpaid leave, including vacation or during a government shutdown.

Yes

No

A1 was shown to all respondents. All but one correctly answered A1. The one respondent that misidentified herself sings in a jazz quartet on a seasonal basis. She received a small amount of pay for singing during the reference week and deliberated how to answer, eventually choosing “No.” This respondent later identified her reason for not working as “Retired” in A3, a selection that pushed her down the fully retired path. As a result, she was not shown A3PROBE and was unable to be recoded as working. This example demonstrates the possibility of the SDR undercounting gig workers’ involvement in the labor force, especially those that have previously retired.

Recommendation: No change is recommended since this is an existing SDR question and the issue observed is not specific to the retirement module.

A2

A2. Did you look for work during the four weeks preceding December 1, 2022 (that is, between November 4 and December 1)?

Yes

No

A2 was shown to nine fully retired respondents. We did not observe any cognitive difficulties with A2.

Recommendation: No change.

A3

A3. During the week of December 1, 2022, what were your reasons for not working?

Select Yes or No for each item.

	Yes	No
Retired	<input type="radio"/>	<input type="radio"/>
On layoff from a job	<input type="radio"/>	<input type="radio"/>
Student	<input type="radio"/>	<input type="radio"/>
Family responsibilities	<input type="radio"/>	<input type="radio"/>
Chronic illness or permanent disability	<input type="radio"/>	<input type="radio"/>
Suitable job not available	<input type="radio"/>	<input type="radio"/>
Did not need or want to work	<input type="radio"/>	<input type="radio"/>
Other reason	<input type="radio"/>	<input type="radio"/>

A3 was shown to nine fully retired respondents. We did not observe any cognitive difficulties with A3.

Recommendation: No change.

A3PROBE

A3PROBE. During the week of January 1, 2022, were you not working but still employed for any of the following reasons?

- Intermittent worker, not working that week (e.g., consultant, freelancer, independent contractor)
- Self-employed and not getting paid that week
- On a postdoctoral appointment including medical residencies or internship
- On vacation from work or traveling while employed
- On paid sick leave, personal leave or other temporary leave
- On a job that did not pay but had other benefits
- On a sabbatical

Yes

No

A3PROBE is only shown to respondents who select “No” for all items in A3. This did not occur in Round 3, so we do not have data for this question.

Recommendation: No change.

Past Job Details for Fully Retired Respondents (A3YY-A4_A27)

The SDR collects data on the last job of respondents who are not currently working (A4, A5, A6, A7¹). In Round 1, NORC observed that these questions capture information about the job from which the respondent retired if they did not work again after retirement. However, the questions were more difficult for those who worked after retiring. Some were unsure whether to report their job before retirement or job after retirement.

¹ A7 was not included in cognitive testing to reduce respondent burden and to simplify programming.

For Round 2, NORC added new questions (JOBMATCH, A3JOB, A3DESC, N_R1, and N_R1OS) after the last job questions to collect data on the job respondents held at the time they retired, if different from the job last held. The Round 2 questions were generally clear to respondents (except for N_R1 and N_R1OS), but the placement of the new questions was problematic given the great distance between A3 and questions asking for details about the job from which respondents retired.

For Round 3, NORC changed the question order so that questions about the job from which the respondent retired come right after A3. We also replaced N_R1 and N_R1OS with A3_A27_SDR/A3_A27_NSCG and added A4_A27_SDR/A4_A27_NSCG to collect similar information about the last job worked. The items and the order in which they were displayed in Round 3 are included below, with item-specific findings included below each item.

A3YY

A3YY. In what year did you retire?

A3YY was shown to nine fully retired respondents. Most respondents correctly reported the year they retired from their career job. However, 2 respondents had difficulty determining what we meant by retired. Both reported a retirement year other than the year they retired from their career job:

- PHD3 said the question was confusing and asked: “what do you mean by retired?” He formally retired in 2021 but continued to work intermittently on certain projects until 2022. He reported 2022 as it was the last time he worked for pay or profit.
- R317 said “I don’t know how you’re defining retirement.” He reported 2020 as that was when his side work (map making) dried up because of COVID-19. However, he had retired from job working for the city many years prior. For questions that followed (A3JOB, A3DESC, and A3_A27_NSCG), he switched to talking about his job working for the city.

Recommendation: Respondents may enter retirement in many ways, including reducing their hours at same employer or going to a different kind of work. To reduce confusion for these respondents, we recommend a discussion to identify which transitions are important for NCSES to measure and then determine how best to collect that data from respondents. Some types of information may be best collected by collecting job history data.

A3JOB

A3JOB. What was the title of the job you retired from?

Example: Physics professor

A3JOB was shown to nine fully retired respondents. All but one respondent correctly reported their pre-retirement job title in A3JOB. PHD3, who continued to do intermittent work for his same employer after retiring, incorrectly provided the title of his intermittent position.

Recommendation: No change. The error observed for this question originated in the previous item A3YY.

A3DESC

A3DESC. What kind of work were you doing on the job you retired from – that is, what were your duties and responsibilities? Please be as specific as possible, including any area of specialization.

Example: Taught physics and conducted research. Specialized in high energy physics.

All but one respondent correctly reported a description of their pre-retirement job in A3DESC. One answered incorrectly, providing the description of what he did on intermittent status.

Recommendation: No change. The error observed for this question originated in the previous item A3YY.

A3_A27

Round 3 tested two new questions to replace N_R1 and N_R1OS. A3_A27_SDR was shown to respondents who held a PhD from a U.S. institution, while A3_A27_NSCG was shown to respondents who did not have a U.S. PhD. These questions would be included in the SDR and NSCG, respectively. Both questions are modeled off SDR question A27.

A3_A27_SDR. To what extent was your work on the job you retired from related to your first U.S. doctoral degree? Was it...

Closely related

Somewhat related

Not related

A3_A27_NSCG. To what extent was your work on the job you retired from related to your highest degree? Was it...

Closely related

Somewhat related

Not related

A3_A27_NSCG was shown to three fully retired respondents who do not have U.S. PhDs. No cognitive issues were observed. Respondents interpreted the question to mean “how useful or relevant my degree was to my work,” “how helpful my degree was in doing my job,” and “how correlated my degree was with what I did at my job.”

A3_A27_SDR was shown to six fully retired respondents with PhDs. The item posed some difficulty for doctorate recipients that was not observed with the non-U.S. PhD sample. Probing revealed that doctorate recipients were thinking about a variety of things when answering – whether the academic discipline they studied was the same one they worked in, whether their doctorate degree was a required credential or prerequisite to their job, and whether they used the things they learned in their doctorate degree in their work. For two of the six respondents, some of these elements were conflicting, causing difficulty in selecting a response:

- PHD4 noted that he thought it was asking about two things: an education credential needed to get the job; and 2) whether he used what he learned- in the course of the job. The education credential was needed, but he didn’t necessarily use what he learned in school in his day-to-day job.
- PHD6 said her doctorate was closely related to the subject she taught in terms of subject matter, but her job teaching at the college required a lot of other skills not involved in her doctorate.

Recommendation: No change is recommended since this is modeled on an existing SDR question (A27) and the issue observed is not specific to the retirement module.

A4

A4. Prior to the week of December 1, 2022, when did you last work for pay or profit?

(Month/Year)

Never worked for pay or profit

In Round 3, A4 was shown to nine fully retired respondents. We did not observe any cognitive difficulties with A4.

Recommendation: No change.

JOBMATCH

JOBMATCH was added in Round 2 but used different wording: “Is the job you just reported the same job you retired from?” When we reordered the questions in this section, we adjusted the wording, replacing “job you just reported” with “last job. The Round 3 wording is included below.

JOBMATCH. Is your last job the same as the job you retired from?

Yes

No

JOBMATCH was shown to nine fully retired respondents. The majority of respondents had no cognitive issues with JOBMATCH. Three respondents noted that the term “job” was confusing, though two of them answered correctly.

- PHD3 found this question to be confusing because he had already reported his last job in the preceding questions. He noted “a job is simply an activity whereas occupation is career.” He said his

last job was advising a federal survey, but this job was part of his occupation or career at a research organization.

- R317 had no difficulty answering for himself but noted that the phrase “last job” was weird to him since he does many jobs as side work.
- R598 had no difficulty answering for himself, but said consultants who have many jobs could find it confusing.

Recommendation: No change.

A5

A5. Prior to the week of December 1, 2022, what was the title of the last job you held?

Example: Physics professor

In Round 3, A5 was only shown to one respondent who selected “No” in JOBMATCH. This respondent correctly reported the title of the last job he worked.

Recommendation: No change.

A6

A6. What kind of work were you doing on this last job – that is, what were your duties and responsibilities? Please be as specific as possible, including any area of specialization.

Example: Taught physics and conducted research. Specialized in high energy physics.

In Round 3, A6 was only shown to one respondent who selected “No” in JOBMATCH. This respondent correctly reported the duties and responsibilities of the last job he worked.

Recommendation: No change.

A4_A27

Round 3 included two new questions to measure the relevance of the respondent’s highest degree to the last job they worked. A4_A27_SDR was shown to respondents who held a PhD from a U.S. institution, while A4_A27_NSCG was shown to respondents who did not have a U.S. PhD. These questions would be included in the SDR and NSCG, respectively. Both questions are modeled off SDR question A27.

A4_A27_SDR. To what extent was your work on your last job related to your first U.S. doctoral degree? Was it...

Closely related

Somewhat related

Not related

A4_A27_NSCG. To what extent was your work on your last job related to your highest degree? Was it...

Closely related

Somewhat related

Not related

A4_A27_SDR was only shown to one U.S. PhD respondent who selected “No” in JOBMATCH. This respondent correctly described the part-time job he held in November 2022 (private security officer).

A4_A27_NSCG was only shown to one non-U.S. PhD respondent who selected “No” in JOBMATCH. This respondent correctly described the temporary job he held in November 2022 (election worker).

Recommendations: No change.

Semi-Retired Status (A40, A40YY, B3, A8-A8_A27)

Rounds 1 and 2 tested the retirement module on its own. During these rounds, A8 was the only question used to determine previously/semi-retired status. For Round 3, NORC integrated the retirement module into the full SDR. This integration meant that Round 3 included three places where a respondent could be classified as semi-retired:

- **A40**, which asks why a respondent worked less than 35 hours a week. “Previously retired or semi-retired” is a response option. Those who select “Retired” are also asked for the date when they retired (A40YY).
- **B3**, which asks respondents why they changed employers or jobs between the reference week and two years prior. “Retired” is a response option.
- **A8**, which asks working respondents if they have previously retired from a position. In Round 3, A8 was only shown to respondents who did not choose “Retired” in A40 or B3.

A40 & A40YY

A40 and A40YY were only tested in Round 3 after the retirement module had been integrated into the full SDR.

A40. Why did you usually work fewer than 35 hours?

Select Yes or No for each item.

	Yes	No
Previously retired or semi-retired	<input type="radio"/>	<input type="radio"/>
Student	<input type="radio"/>	<input type="radio"/>
Family responsibilities (e.g., childcare, eldercare)	<input type="radio"/>	<input type="radio"/>
Full-time job not available	<input type="radio"/>	<input type="radio"/>
Hours of work reduced	<input type="radio"/>	<input type="radio"/>
Held more than one job	<input type="radio"/>	<input type="radio"/>
Did not need or want to work more hours	<input type="radio"/>	<input type="radio"/>
Other reason	<input type="radio"/>	<input type="radio"/>

A40YY. In what year did you previously retire or semi-retire?

In Round 3, A40 was shown to 12 respondents who worked less than 35 hours per week at their principal job. Seven of them answered that they worked less than 35 hours per week because they were previously retired or semi-retired. Interviewers did not probe on A40 since it is an existing SDR question, but two respondents who chose previously/semi-retired shared that they weren't sure what it meant. We also observed one error: a respondent in the 50-59 age range chose previously/semi-retired because they were let go from their job as a CPA before they were in a position to fully retire. This

respondent was currently working as a receptionist. This suggests that they considered themselves retired from their career job.

All respondents who selected “Retired” in A40 were asked to provide the year in which they previously retired or semi-retired in A40YY. We did not observe any cognitive difficulties with A40YY.

Recommendations: No change.

B3

B3 was only tested in Round 3 after the retirement module had been integrated into the full SDR.

B3. Why did you change your employer or your job between the week of January 1, 2021, and the week of January 1, 2023?

Select Yes or No for each item.

	Yes	No
Pay, promotion opportunities	<input type="radio"/>	<input type="radio"/>
Working conditions (e.g., hours, equipment, working environment)	<input type="radio"/>	<input type="radio"/>
Job location	<input type="radio"/>	<input type="radio"/>
Change in career or professional interests	<input type="radio"/>	<input type="radio"/>
Family-related reasons (e.g., childcare, eldercare)	<input type="radio"/>	<input type="radio"/>
School-related reasons (e.g., returned to school, completed a degree)	<input type="radio"/>	<input type="radio"/>
Laid off or job terminated (includes company closings, mergers, buyouts, grant or contract ended)	<input type="radio"/>	<input type="radio"/>
Retired	<input type="radio"/>	<input type="radio"/>
Some other reason	<input type="radio"/>	<input type="radio"/>

In Round 3, six respondents who indicated that they had changed their employer or their job between the reference week and two years prior saw B3. Four of them selected Yes for “Retired,” indicating that they changed their employer or job because they had retired. Interviewers did not probe on B3 since it is an existing SDR question but did not observe any cognitive difficulties.

Recommendation: No change.

A8

A8. Although you were working during the week of December 1, 2022, had you previously retired from any position?

Examples of retirement include mandatory retirement, early retirement, or voluntary retirement.

Yes

No

A8 was tested in Rounds 1-3. Though the question wording did not change between rounds, the display logic changed between Rounds 2 and 3 because the integration of the retirement module into the full SDR added questions A40 and B3 where a respondent could indicate previous retirement. In Rounds 1 and 2, A8 was shown to all respondents who indicated they were working in A1. In Round 3, A8 was only shown to 5 respondents who indicated they were working in A1 and did not select “previously retired or semi-retired” in A40 or “Retired” in B3. All five respondents were able to answer the question accurately. However, they shared that they were not clear on the definitions of each of the types of retirement listed: mandatory, early, and voluntary retirement. Only 2 of the 5 respondents who saw A8 had previously retired.

Past Job Details for Semi-Retired Respondents (A8YY, A8JOB, A8DESC, A8_A27)

In Round 2, items A8YY, A8JOB, A8DESC, A8EXP and A8EXPOS were added after A8 to collect details about the job from which semi-retired respondents had retired. While we observed no cognitive issues with these questions, we chose to replace A8EXP and A8EXPOS with A8_A27 to match other sections of the survey. The items tested in Round 3 are included below.

A8YY. In what year did you retire?

A8JOB. What was the title of the job you retired from?

Example: Physics professor

A8DESC. What kind of work were you doing on the job you retired from – that is, what were your duties and responsibilities? Please be as specific as possible, including any area of specialization.

Example: Taught physics and conducted research. Specialized in high energy physics.

A8_A27_SDR. To what extent was your work on the job you retired from related to your first U.S. doctoral degree? Was it...

Please refer to the job you retired from.

Closely related

Somewhat related

Not related

In Round 3, only two respondents saw these items as they answered Yes in A8. These respondents had no cognitive issues with A8YY, A8JOB, A8DESC, or A8_A27_SDR. A8_A27_NSCG was not shown to any respondents.

Recommendation: No change.

Retirement Benefits

Round 3 included two new questions about retirement benefits, BENEFITS and BENEFITS.1. These questions were developed by NORC. BENEFITS was shown to all respondents with the goal of using the question to identify individuals who may not have self-identified as previously/semi-retired or fully retired. BENEFITS.1 was added to collect more information on the types of benefits received by respondents.

BENEFITS

BENEFITS. Are you currently receiving any retirement benefits?

Please include receiving money from retirement accounts (IRAs or Keogh plans), tax deferred retirement savings plans, pensions, 401(k) plans, or other defined benefit plans and defined contribution plans.

Do not include Social Security.

Yes

No

All Round 3 respondents saw the BENEFITS question. The question was answered correctly by 15 of 16 respondents. The three respondents who had never retired correctly answered No. All nine fully retired respondents answered correctly – eight were receiving retirement benefits, while 1 retired early and was not yet receiving benefits. Three of the four semi-retired respondents answered correctly. The respondent who answered incorrectly misunderstood the question as asking about what benefits he had; he was not receiving any money from these accounts. When giving feedback on these questions, two respondents predicted this potential issue, noting that some people might confuse having retirement accounts and receiving money from them.

Testing results show that BENEFITS was not necessary to catch respondents who failed to identify as retired. All respondents with retirement experience were identified by A3, A40, B3, or A8.

BENEFITS.1

BENEFITS.1. Which retirement benefits are you currently receiving?

Select Yes or No for each item.

	Yes	No
Pension or other defined benefit plan (you receive a recurring payment in retirement based on your earnings and years on the job)	<input type="radio"/>	<input type="radio"/>
401(k) or other defined contribution plan (you and/or your employer made contributions to a personal account at a financial services organization that you draw on in retirement)	<input type="radio"/>	<input type="radio"/>
IRA or Keogh plan	<input type="radio"/>	<input type="radio"/>
Other benefit: <input type="text"/>	<input type="radio"/>	<input type="radio"/>

BENEFITS.1 was seen by the twelve respondents who answered Yes in BENEFITS. While most respondents were able to answer the question accurately, four had difficulty classifying the benefits they receive:

- R317 was unsure how to classify his retirement benefit. He knew it was a pension, but both he and his employer paid into it, which sounded like the definition we provided for “401(k)...”
- PHD6 said “I don’t know what to classify my benefits as.” She receives a TIAA retirement plan and an annuity from her late husband which she thinks comes from her TIAA plan. She chose “Pension...” because her payments are recurring and “401(k)” because her employer made contributions to her TIAA plan.
- PHD1 had difficulty remembering the benefits he receives. He had to ask his wife.
- R4001 selected IRA and shared that she receives her IRA as a retirement benefit but chooses to reinvest it in another account. She was not certain how to show this.

Other smaller issues observed include:

- Two respondents thought about Social Security when answering BENEFITS.1, even though BENEFITS asked them to exclude it. R927 typed Social Security in the “Other benefit” field, while PHD5 asked if he should add it or not.
- R1096 interpreted the question to be about how retired people support themselves. She noted that we were missing savings accounts, trusts, and inheritances.

When asked for feedback on our list of retirement benefits, three respondents suggested we add “403(b)” and four respondents noted “annuity” was missing.

Recommendations:

- Remove BENEFITS and BENEFITS.1. BENEFITS does not appear necessary to catch respondents who do not identify as retired. Further, BENEFITS.1 does not collect accurate data about respondents’ retirement benefits because some respondents do not know which benefits they are receiving.
- If the questions are kept, consider:
 - Replacing “receiving retirement benefits” with something more active that implies drawing funds from these accounts.
 - Adding 403(b) to the 401(k) item and adding annuity as its own item
 - Add the instruction to exclude Social Security to BENEFITS.1

Reasons for Retirement

Fully and semi-retired respondents were asked questions R3 and R4 to provide information on the employment situations and personal factors that led to retirement.

R3

In Round 1, R3 was phrased as: “Please indicate whether these employment conditions are important for your retirement decision.” Testing showed that semi-retired respondents found the wording confusing and were unsure whether to answer about their past or future retirement. For Round 2, we attempted to fix this by adjusted the wording to focus on conditions that “would be important” and restricted the question to only be shown to respondents who were currently working. Round 2 testing found continued confusion among semi-retired respondents, as well as wider difficulty with the response scale. Several respondents noted that some conditions did not apply to them so they did not know how to rate their importance.

For Round 3, we revised the question wording to focus on past retirement and changed the response format to a forced choice yes/no for each item. Additionally, since this round was the first to test this question within the full context of the SDR, we added the following transition text to help semi-retired

respondents focus on their past retirement: “Please think about the retirement situation you reported previously when answering the following questions.” The version of R3 tested in Round 3 is included below.

R3. Did any of the following employment situations encourage you to retire?

Select Yes or No for each item.

	Yes	No
Wage reduction	<input type="radio"/>	<input type="radio"/>
Increase or decrease in hours	<input type="radio"/>	<input type="radio"/>
Job location change	<input type="radio"/>	<input type="radio"/>
Change in job duties or responsibilities	<input type="radio"/>	<input type="radio"/>
Organizational change at work	<input type="radio"/>	<input type="radio"/>
Experiencing age discrimination	<input type="radio"/>	<input type="radio"/>
Receiving early retirement incentive offer	<input type="radio"/>	<input type="radio"/>
Becoming eligible for pension	<input type="radio"/>	<input type="radio"/>
Receiving pension buy-out	<input type="radio"/>	<input type="radio"/>
Other employment situation: <input type="text"/>	<input type="radio"/>	<input type="radio"/>

In Round 3, R3 was shown to 14 respondents (nine fully retired and five semi-retired respondents). The question was well understood by all. We did not observe any difficulties with the transition text shown to semi-retired respondents.

However, two respondents wondered what to do with factors that encouraged their retirement but were not employment conditions:

- R598 said his personal situation allowed him to not have to have employment. He wondered if he should write this in “other employment condition.” When he saw R4, he understood it belonged there.
- R1096 asked if she should add factors not related to her job in other. She decided not to since it was not an employment condition. When she saw R4, most of the factors she was thinking of were captured there.

Two respondents added text to “Other employment situation:”

- R317 added “bad boss,” saying bad work environment was missing. After he saw R4, he felt this could be covered in that question’s “job satisfaction” item.
- PHD4 added “maxxed out retirement benefit” because he had worked the number of years needed to earn the highest retirement benefit. Continuing to work would not have added to his pension, so he retired.

Recommendations:

- Consider adding some introduction text before R3 and R4 to let respondents know that there are two questions on this subject. This may reduce confusion and the number of personal factors reported in “Other employment situation.”
- After the 2023 SDR fields, review what respondents write in “Other employment situation” and revise response options as necessary.

R4

In Round 1, respondents who were fully retired, semi-retired, or working and planned to retire in the next five years were shown this version of R4: “Please indicate whether these factors are important for your retirement decision.” Like R3, we found that semi-retired respondents were confused about which retirement to report. For Round 2, we split the question into two versions. Fully retired respondents were shown R4.1 about their past retirement decision, while semi-retired respondents and those who had never retired were shown R4.2 about their future retirement decision. We did not make adjustments to the listed items, as we did not feel we had sufficient data to make recommendations. As with R3, Round 2 testing found that some semi-retired respondents still had difficulty with the question and were looking for “not applicable” as an answer choice. For Round 3, we reverted to one question shown to semi-retired and fully retired respondents. We also revised the question wording to focus on past retirement, revised several items in the list that respondents noted were unclear, and changed the response format to a forced choice yes/no for each item. The version of R4 tested in Round 3 is included below.

R4. Did any of the following factors encourage you to retire?

Select Yes or No for each item.

	Yes	No
My personal health	<input type="radio"/>	<input type="radio"/>
The health of other family members	<input type="radio"/>	<input type="radio"/>
Job satisfaction	<input type="radio"/>	<input type="radio"/>
Lack of work available	<input type="radio"/>	<input type="radio"/>
Having sufficient income to retire	<input type="radio"/>	<input type="radio"/>
My spouse/partner retiring	<input type="radio"/>	<input type="radio"/>
Desire to spend more time with family and friends	<input type="radio"/>	<input type="radio"/>
Desire to spend more time on personal pursuits and leisure	<input type="radio"/>	<input type="radio"/>
Other factor: <input style="width: 150px; height: 15px;" type="text"/>	<input type="radio"/>	<input type="radio"/>

R4 was shown to 14 respondents (nine fully retired and five semi-retired). The question was well understood by all. However, one respondent felt that “job satisfaction” would be better phrased as “job dissatisfaction” since being satisfied with your job would not encourage retirement. This respondent also felt that it fit better in R3 with other employment situations.

Several respondents noted missing items, including:

- Desire to pursue other professional interests – PHD6 retired to pursue other professional interests/passions and do her own research. PHD2 retired to pursue a PhD. They felt “Desire to spend more time on personal pursuits and leisure” did not apply because their activities were not leisure.
- Discrimination not related to age – PHD5 noted that discrimination related to race and gender could also be reasons to retire, in addition to age discrimination.
- Age-related benefits eligibility – R4073 noted that becoming eligible for Social Security was her main reason, while PHD5 noted that becoming eligible for Medicare was his main reason.
- Maxxed out Social Security – PHD6 noted that she selected “Having sufficient income to retire” but the real reason she had income was that she had maxxed out her Social Security benefit.

Recommendations:

- Move “Job satisfaction” to R3 because it is a job-related condition and reword to “Job dissatisfaction.”
- Add “Became eligible for Social Security or Medicare” as a new item.
- Change “Desire to spend more time on personal pursuits and leisure” to “Desire to spend more time on personal pursuits or leisure” (Change “and” to “or”).
- After the 2023 SDR fields, review what respondents write in “Other factor” and revise response options as necessary.

Reasons for Working After Retirement

Semi-retired respondents were asked Rw1 to provide information on their reasons for working after retirement.

Rw1

In Round 1, we asked: “Please indicate the importance of these reasons in your decision to begin working again after retiring.” We included a not applicable option for items related to one’s spouse/partner. Testing found that the question did not fit semi-retired respondents who had not stopped working but had merely reduced hours or taken a less demanding role. In Round 2, we updated the wording to replace the words “begin working” with “work.” Round 2 testing found that respondents were inconsistent in how they were reporting factors that were not important to them. Some respondents used “not applicable,” while others selected “not important at all.” For Round 3, we added some additional text (“You reported working after retiring”) to the beginning of the question, revised the wording to remove the term “decision,” revised the health insurance item that a respondent

noted was not inclusive of dependents, and changed the response format to a forced choice yes/no for each item. The version of Rw1 tested in Round 3 is included below.

Rw1. You reported working after retiring. What were your reasons for working after retiring?

Select Yes or No for each item.

	Yes	No
Health insurance for me	<input type="radio"/>	<input type="radio"/>
Health insurance for my spouse/partner or dependents	<input type="radio"/>	<input type="radio"/>
Needed additional income	<input type="radio"/>	<input type="radio"/>
Wanted additional income	<input type="radio"/>	<input type="radio"/>
Did not enjoy retirement	<input type="radio"/>	<input type="radio"/>
Missed being in the workforce	<input type="radio"/>	<input type="radio"/>
Able to contribute to the workforce	<input type="radio"/>	<input type="radio"/>
Was asked to return to work	<input type="radio"/>	<input type="radio"/>
My spouse/partner changed their work status	<input type="radio"/>	<input type="radio"/>

In Round 3, Rw1 was shown to five semi-retired respondents. All respondents were able to answer accurately. One respondent noted that this was a funny question because she never intended to stop working. In reflecting on this comment, we realized that some of the response options assume the respondent stopped working and then went back to work (e.g., missed being in the workforce, did not enjoy retirement). We know some respondents never stopped working, they just reduced their hours and/or responsibilities.

Recommendation: The current wording may undercount those who transitioned to retirement without leaving the workforce because some of the items do not apply (e.g., “Missed being in the workforce”). In examining these items, it does not appear possible to revise them to make them apply to semi-retired respondents in all situations. To fix this measurement error, we would need to improve the measurement of where people are in the transition of retirement so that questions and items can be tailored appropriately.

Plans to Retire

Respondents who were working during the reference week were asked whether they planned to retire in the next five years. Semi-retired respondents were asked whether they planned to fully retire (Rw3a), while those who had never retired were asked whether they planned to fully or semi-retire (Rw3a.1).

Rw3a.1

In Rounds 1 and 2, respondents who had never retired were asked a two-step question to determine if they were considering retirement in the next five years, and if so, whether they were considering semi- or full retirement. The question defined full retirement as “completely stopping work for pay or profit” and semi-retirement as “transitioning to part-time work or changing your employer after retirement from your principal job.” Round 1 testing revealed that the definition of “semi-retirement” did not work for all respondents, especially the term “principal job.” For Round 2, we modified the definition of semi-retirement and this improved understanding. However, we found that some respondents who were considering semi-retirement were not counted because they misunderstood the filter question to be asking only about full retirement. For Round 3, we combined the two questions into the question shown below. We also changed “considering” to the more active “planning.”

Rw3a1. In the next five years, are you planning to fully retire (completely stop working for pay or profit) or semi-retire (reduce working hours or job responsibilities)?

Semi-retirement could be at your same or a different employer.

Yes, fully retire

Yes, semi-retire

No

I don't know

In Round 3, three respondents who had never retired were shown *Rw3a.1*. The definitions of fully retired and semi-retired worked well for two of the three respondents who saw this question. They gave accurate examples of semi-retired status (e.g., faculty who are in an early retirement program and are able to work half time; someone who works reduced hours at the same employer or somewhere else like as a Walmart greeter.) However, R3138 said she did not know what semi-retired meant after reading the definition. She said, "Either you're retired or not retired in teaching." She said she "glossed over" the response option "Yes, semi-retire."

Recommendation: No change.

Rw3a

In Rounds 1 and 2, respondents were shown a slightly version of *Rw3a*: "In the next five years, are you considering fully retiring (completely stopping work for pay or profit)?" For Round 3, we replaced "considering" with the more active "planning" in an attempt to reduce "I don't know" answers.

Rw3a. In the next five years, are you planning to fully retire (completely stop working for pay or profit)?

Yes

No

I don't know

In Round 3, five semi-retired respondents were shown Rw3a. The question was well understood and the definition of fully retired worked well for all respondents. Respondents were asked how they interpreted “planning” to fully retire. They said it meant having decided you will stop working and taking some steps to get ready (e.g., making a timeline, making sure you are ready financially, moving).

Recommendation: No change.

Activities in Retirement

Respondents who were fully retired were asked questions about their retirement experience. This section includes questions about satisfaction with retirement, involvement in unpaid help or professional activities, social activities, personal health, and financial security.

R5

In Rounds 1 and 2, we tested a slightly different version of R5: “How satisfied are you with your retirement?” In Round 2, one respondent had great difficulty choosing an answer, explaining she was looking for more granularity since some aspects of retirement were satisfying and others were not. Before Round 3, we added “All in all” (which was in the original source question) to the beginning of the question and adjusted the response scale from a bipolar scale to unipolar scale according to best practices. The version of R5 tested in Round 3 is shown below.

R5. All in all, how satisfied are you with your retirement?

Very satisfied

Somewhat satisfied

Not too satisfied

Not at all satisfied

In Round 3, R5 was shown to nine fully retired respondents. Seven of the nine answered with no difficulty. Two demonstrated some difficulty:

- R1096 said “I don't know what this question means. Satisfied with what about retirement? Satisfied with not working? Satisfied with what I thought retirement would be?” She explained that “retirement” is constantly being redefined as things change in her life.
- PHD1 consulted his wife before answering.

Recommendation: Interviewers noticed that the R5 response scale differs from SDR question A35 which asks about the respondent's satisfaction with their principal job. While the unipolar scale of R5 is better according to survey research best practices, we recommend that all satisfaction questions use the same scale. As a result, we feel the scale of R5 should be adjusted to “very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied.”

Unpaid Help (Rs5 & Rs6)

Across Rounds 1 and 2, we found that the questions in Rs5 and Rs6 were clear to respondents. For Round 3, we refined the list of activities in Rs6 slightly to improve understanding.

Rs5. In the last 12 months, did you provide unpaid help to any groups? Consider charitable, political, and social organizations, churches, other non-profits, and clubs.

Yes

No

Rs6. What kind of unpaid help did you provide?

Select Yes or No for each item.

	Yes	No
Fundraising	<input type="radio"/>	<input type="radio"/>
Participating in a working group or committee	<input type="radio"/>	<input type="radio"/>
Organizing or helping to run an activity or event	<input type="radio"/>	<input type="radio"/>
Educating/teaching/coaching/mentoring people	<input type="radio"/>	<input type="radio"/>
Providing information/counseling/consulting	<input type="radio"/>	<input type="radio"/>
Secretarial, administrative, or clerical work	<input type="radio"/>	<input type="radio"/>
Providing transport/driving	<input type="radio"/>	<input type="radio"/>
Campaigning/representing an organization	<input type="radio"/>	<input type="radio"/>
Serving on a non-profit board	<input type="radio"/>	<input type="radio"/>
Conducting research/producing academic or other professional writing/reviewing research publications	<input type="radio"/>	<input type="radio"/>
Public service work such as cleaning parks or roadsides	<input type="radio"/>	<input type="radio"/>
Other unpaid help: <input type="text"/>	<input type="radio"/>	<input type="radio"/>

In Round 3, Rs5 and Rs6 were shown to nine fully retired respondents. Rs5 was well understood by all respondents. While many respondents interpreted the question as asking if they volunteer, one respondent noted that volunteering and unpaid help are different. To her volunteering implies choosing to do something, while unpaid help makes no such assumption. This suggests that “unpaid help” may capture more activities than “volunteer.”

Seven of the nine respondents indicated they had provided unpaid help to groups in the past 12 months. These respondents were shown Rs6. Though Rs6 was generally well understood, we observed three small issues:

- PHD6 noted it was difficult to remember when some of her activities occurred if they were things she only does sporadically.
- Two respondents included unpaid help they provided to individuals, not groups. R1096 talked about driving older people who ask for rides. PHD6 discussed reviewing academic papers for professional contacts.
- PHD3 needed to go back to Rs5 to confirm the reference period and the types of groups that were included.

Recommendation: Include the reference period in Rs6 and specify that the unpaid help was for groups. Consider revising “Conducting research/producing academic or other professional writing/reviewing research publications” so that it is clear the work is for a group (e.g., “Grant writing or research activities for an organization”).

Professional Activities (Rs7 & Rs8)

In Rounds 1 and 2, we tested a version of Rs7: “Within the last 12 months, have you participated in research, public policy, government, or other professional activities? Please include paid and unpaid work.” We observed that this wording led to false positives. For Round 3, we created two versions of the question, one for SDR respondents and one for NSCG respondents. SDR respondents were asked about professional activities related to their “first U.S. doctoral degree,” while NSCG respondents were asked about their “highest degree.”

We also created two versions of Rs8, one for SDR and one for NSCG respondents. We integrated response options from Rw6 (eliminated in Round 2 due to overlap with this question) and collapsed items in the NSCG version to make them more relevant for a non-PhD audience.

Rs7_SDR. Within the last 12 months, have you participated in research, public policy, government, or other professional activities related to your first U.S. doctoral degree? Please consider paid and unpaid work.

Yes

No

Rs8_SDR. Please indicate the professional activities related to your first U.S. doctoral degree that you have done in the last 12 months.

Select Yes or No for each item.

	Yes	No
Held speaking engagements	<input checked="" type="radio"/>	<input type="radio"/>
Completed freelance or consulting work	<input type="radio"/>	<input type="radio"/>
Worked as a subcontractor	<input type="radio"/>	<input type="radio"/>
Authored a published work (manuscript, book, journal article)	<input type="radio"/>	<input type="radio"/>
Served as an editor for a book, edited volume, or academic journal	<input type="radio"/>	<input type="radio"/>
Served on a committee related to academic or policy research	<input type="radio"/>	<input type="radio"/>
Presented a paper at a professional conference (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Served as a reviewer for a research publication or grant	<input type="radio"/>	<input type="radio"/>
Advised a social or research organization (policy-oriented organizations, advocacy organizations, research institutes)	<input type="radio"/>	<input type="radio"/>
Advised a government entity (federal agencies, state or local government)	<input type="radio"/>	<input type="radio"/>
Served as an expert witness	<input type="radio"/>	<input type="radio"/>
Provided professional mentorship to a doctoral candidate, post-doc, or early career researcher	<input type="radio"/>	<input type="radio"/>
Taught a course or given a lecture at a college or university (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Gave a lecture or made a formal research presentation (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Other professional activity: <input type="text"/>	<input type="radio"/>	<input type="radio"/>

Six fully retired respondents with U.S. PhDs were shown Rs7_SDR. None had cognitive issues with this question but five had not engaged in these activities in the past 12 months. Despite not engaging in these activities, they provided examples that demonstrated their understanding, including “being in a professional association,” “conducting research,” and “participating in government or civil society work” related to their doctorate degree.

The one respondent who answered Yes to Rs7_SDR was shown Rs8_SDR. He did not have difficulty answering the question, but noted that two response options “served on a committee related to academic/policy research” and “advised a government entity” were not mutually exclusive. He answered Yes to both items because he was on an advisory committee for a federal survey.

*Rs7_NSCG. Within the last 12 months, have you participated in research, public policy, government, or other professional activities related to your highest degree?
Please consider paid and unpaid work.*

Yes

No

Rs8_NSCG. Please indicate the professional activities related to your highest degree that you have done in the last 12 months.

Select Yes or No for each item.

	Yes	No
Completed freelance or consulting work	<input type="radio"/>	<input type="radio"/>
Worked as a subcontractor	<input type="radio"/>	<input type="radio"/>
Authored or edited a published work (manuscript, book, journal article)	<input type="radio"/>	<input type="radio"/>
Presented at a professional conference (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Advised a social or research organization (policy-oriented organizations, advocacy organizations, research institutes)	<input type="radio"/>	<input type="radio"/>
Advised a government entity (federal agencies, state or local government)	<input type="radio"/>	<input type="radio"/>
Provided professional or academic mentorship	<input type="radio"/>	<input type="radio"/>
Taught a course or given a lecture at a college or university (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Other professional activity: <input type="text"/>	<input type="radio"/>	<input type="radio"/>

Three fully retired respondents who did not have U.S. PhDs saw *Rs7_NSCG*. Though two of the three respondents remarked that some of the listed types of professional activities did not feel relevant given their degrees, they understood the question and responded accurately.

- R598 did not know what “public policy” or “government” professional activities would look like for someone with his background (information technology).
- R1096 did not know what “research” or “public policy” professional activities would look like for someone with her background (accounting)

Only one respondent saw Rs8_NSCG. He understood the question well. The interviewer probed on his understanding of the new item “Provided professional or academic mentorship.” The respondent said it made him think about a program he knows that connects mentors in the IT field with recent college graduates. This respondent added “attended webinars” in the “Other professional activity” field and explained that he attended these webinars while he was still employed since he had retired within the past 12 months. This example shows that the reference period used in Rs7 and Rs8 has the potential to capture activities done pre-retirement, not just post-retirement activities.

Recommendation: Consider if the potential overcounting of professional activities occurring pre-retirement is concerning enough to warrant a change to the question. Instruction text could be added, such as *“If you retired within the last 12 months, please exclude professional activities done before retirement.”*

Social Activities (Rs4)

Rs4 was intended to measure the frequency of meetings and communication with friends and family. In Rounds 1 and 2, the question used a different response scale: “daily, weekly, monthly, annually, and never.” It was difficult for some respondents to choose from the response options and they often rounded down. They also gave feedback on the items, suggesting that we add other platforms and texting to our list. For Round 3, we changed the response scale and included additional social activities as seen below.

Rs4. On average, how often do you do each of the following with any of your close family and friends (not counting anyone that lives with you)?

	Three or more times a week	Once or twice a week	Once or twice a month	Every few months	Once or twice a year	Less than once a year or never
Meet up in person (chance and arranged meetings)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speak on the phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Text message	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write or email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicate by Zoom, Skype, or similar platforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interact through Facebook or other social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Nine fully retired respondents saw Rs4. Five of them had no cognitive difficulties and reported that the question was easy to answer.

Two respondents commented on the question:

- R1096: "Who is 'close family' referring to? My sister, my mom? Does it mean close in proximity or emotionally close? Why is 'close' necessary?"
- PHD3 other asked if he should answer each item "cumulatively" thinking about all of his close family and friends or answer for a specific close family member or friend.

Two respondents experienced some difficulty with the response scale, noting that it was difficult to determine if they did something "three or more times a week" or "once or twice a week." One said it was because his weeks vary, while the other said it was hard to remember. They were made their best guesses.

Recommendation: Rephrase the question for clarity: "On average, how often do you do each of the following with family and friends (not counting anyone who lives with you)?"

Health

Fully retired respondents were shown several questions about their physical health – Rh1, Rh6, Rh7, and Rh8.

Rh1

Rh1 did not present any cognitive difficulties in Rounds 1 or 2 and remained unchanged going into Round 3.

Rh1. How is your physical health?

Excellent
Very good
Good
Fair
Poor

Rh1 was seen by nine fully retired respondents. None experienced any cognitive difficulty with the question.

Recommendation: No change.

Rh6

Rh6 did not present any cognitive difficulties in Rounds 1 or 2 and remained unchanged for Round 3.

Rh6. Do you have health insurance?

Yes

No

Rh6 was seen by nine fully retired respondents. None experienced any cognitive difficulty.

Recommendation: No change.

Rh7

In Rounds 1 and 2, Rh6 was a single select question. Before Round 3, we adjusted the question to allow for multiple responses.

Rh7. What kind of health insurance do you have? Select all that apply.

Medicare health insurance

Medicaid health insurance

Private insurance (self-paid)

Health insurance through my spouse's/partner's employer

In Round 3, Rh6 was seen by nine fully retired respondents who indicated they had health insurance in Rh6. We observed two cognitive difficulties on this question.

Three respondents selected “Private insurance (self-paid),” but did not feel it described their insurance well:

- R598 described his insurance as “obtained on the healthcare marketplace” and did not feel it was “private” since it was from the government. PHD5 did not personally have this insurance but wondered if people who had “government-provided plans like Obamacare” would be able to choose from our list.
- R1096 has health insurance as a former government employee. She said, “It's not private. It's through the government, it's through me.” She wanted to see “Health insurance through my previous employer.”
- PHD4 was confused about how to document insurance through his former employer (Government Insurance Health Association). He was expecting to see “Health insurance through my previous employer” since we had “Health insurance through my spouse's/partner's employer.”

Two respondents confused Medicare and Medicaid. One chose Medicare but should have chosen Medicaid as he named a state Medicaid plan. The other respondent chose Medicaid but upon probing the interviewer learned he meant to choose Medicare and had been reading too fast.

Recommendation: To make this question easier to answer, we suggest considering adapting a validated health insurance coverage question such as the example below from the American Community Survey. This question references current and former employers and includes brief definitions of Medicare and Medicaid to help respondents differentiate between them. An adapted version of this question could replace both Rh6 and Rh7:

Is this person currently covered by any of the following types of health insurance or health coverage plans? Mark yes or no for each type of coverage.

1. Insurance through a current or former employer or union (of this person or another family member)
2. Insurance purchased directly from an insurance company (by this person or another family member)
3. Medicare, for people 65 or older, or people with certain disabilities
4. Medicaid, Medical Assistance, or any kind of government assistance plan for those with low incomes or a disability
5. TRICARE or other military health care
6. VA (enrolled for VA health care)
7. Indian Health Service
8. Any other type of health insurance or health coverage plan (specify)

Rh8

Rh8 did not present any cognitive difficulties in Rounds 1 or 2 and remained unchanged going into Round 3.

Rh8. Are you covered by or enrolled in a Medicare prescription drug plan (Medicare Part D or as part of Medicare Part C [Advantage Plan])?

Yes

No

Rh8 was seen by nine fully retired respondents. Eight of them understood the question well, while one was not sure what kind of plan she had. She grabbed her insurance card and read off “Medicare PDP Prescription Plan.” She was not sure if this was the same as Medicare Part C or Part D, so she selected No. She should have selected Yes as she is covered by Part D.

Recommendation: No change.

Financial Security

Fully retired respondents were shown two questions about their financial security in retirement – Rf1 and Rf3.

Rf1

In Rounds 1 and 2, we tested a slightly shorter version of Rf1 that did not include the examples of basic needs. While this question appeared to work well enough, interviewer probing revealed that respondents were not thinking about all needs featured in the original source question (e.g., medical and prescription drug bills). For Round 3, we reverted back to the below wording which matches the source question.

Rf1. Were there times in the last year when you (including your spouse/partner) did not have enough money to meet your basic needs, such as paying your rent or mortgage, paying utility bills, paying medical or prescription drug bills, or buying food for everyone in your household?

Yes

No

In Round 3, Rf1 was shown to nine fully retired respondents. The question was well understood by respondents who rephrased it in ways such as “now that I’m retired, do we not have enough money to live on or tap into?” “Do we not have enough money to sustain ourselves?” and “Have I been short on money?”

Recommendation: No change.

Rf3

Rf3 was a new question in Round 3. This question took the place of Rf2 in previous rounds which asked respondents about their assets. We observed that Rf2 was difficult to answer and respondents reported that the question was subjective.

Rf3. Overall, how confident are you that you (and your spouse/partner) will have enough money to live comfortably throughout your retirement years?

Very confident

Somewhat confident

Not too confident

Not at all confident

Rf3 was shown to nine fully retired respondents. We did not observe any cognitive issues and respondents were all able to make a selection without difficulty. They understood the question as asking how confident they were that they would have enough money to cover basic needs until they died. When asked how they interpreted “live comfortably,” many respondents referenced the basic needs listed in Rf1:

- R598: “It means having enough money to pay for basic needs like food, shelter, etc.”
- R1096: It means being able to meet daily needs listed in the previous question and be content, not need to rely on other sources like the government.”
- PHD5 – “It means taking care of basic needs, food, shelter, clothing, living where you want to live, taking a trip every now and then”

Recommendation: No change.

Conclusions and Future Research

Following the Round 3 cognitive interviews, NORC and NCSES hosted a meeting to collect feedback on the module from retirement experts (March 22, 2023) and reviewed the module for content that could be potentially challenging for non-U.S. residing respondents. NORC then prepared item-level recommendations for revising the module prior to the 2023 SDR implementation test. NORC and NCSES reviewed the item-level recommendations together and finalized the module.

In addition, NORC identified areas of future research related to the retirement module. This section summarizes those recommendations by topic area.

- **Definition of retirement** – Respondents enter retirement through many pathways, including reducing their hours at same employer or moving to a different kind of work. Some cognitive testing respondents had difficulty understanding what was meant by “retirement” and struggled to provide a date of retirement. To reduce confusion for future respondents, additional work could be done to identify which transitions are most important for NCSES to measure and how best to collect that data. It may be that some types of information are best collected by through job history data.
- **Plans to retire** – Items Rw3a and Rw3a.1 ask respondents about plans to retire in the next five years. These items were removed from the module based on NCSES’s recommendation because longitudinal data from the SDR can be used to ascertain sample member transitions in labor force status.
- **Factors encouraging retirement** – Items R3 and R4 measure the employment conditions and personal factors that encouraged retirement. In the meeting, retirement experts provided extensive feedback on these items and noted that the literature makes the distinction between push and pull factors for retirement. NORC and NCSES revised the questions to include much of the feedback but did not adopt the lens of push/pull factors for the 2023 SDR. Future research is recommended to ensure these questions adequately capture factors leading to retirement, including whether items should be separated into work/personal factors, push/pull factors, or some other arrangement. There may also be additional factors to add. NORC recommends reviewing what 2023 SDR respondents write in the “other employment situation” and “other factor” fields and considering factors suggested by the retirement experts, including decreased funding, lack of flexibility, devaluation of their work, remote work, and discrimination. If changes are made to these items, NORC recommends testing before use in future rounds of the SDR and NSCG.
- **Volunteering** – Items Rs5 and Rs6 ask about unpaid help respondents had provided to groups in the previous 12 months. During the Expert Meeting, retirement experts noted that the questions were trying to address both the groups to whom respondents provided help, as well as the types of unpaid help activities provided to those groups. The experts recommended replacing these items with validated questions from the Health and Retirement Study (HRS) about formal and informal volunteering. NORC and NCSES took this recommendation and replaced the items with the HRS questions. As a result, NCSES is now collecting data on whether respondents have done formal and informal volunteering in the prior year, and if so, how much time they spent on each type of volunteering. However, NCSES no longer collects

data on the groups respondents volunteered for or the types of volunteer activities they do. Future research could identify sources of potential items on these topics or construct new items and test them for future rounds of the SDR and NSCG.

- **Professional activities** – Items Rs7 and Rs8 ask about the types of professional activities respondents had done in the previous 12 months. During the Expert Meeting, retirement experts reported that while it was important to capture a continuation of intellectual pursuits, retired people should not be asked about their participation in a list of things that they would have done while working. NORC and NCSES decided to replace these items with two new items modeled off the HRS volunteering questions (described above). These items allow NCSES to collect data on whether a respondent participated in professional activities in the prior year, and if so, how much time they spent doing so. However, the removal of the original items means that NCSES no longer collects data on the types of professional activities in which respondents are engaged. Future research could identify sources of potential items on these topics or construct new items and test them for future rounds of the SDR and NSCG.
- **Financial security** – While the retirement module includes items Rf1 and Rf3 to collect information about the financial security of retirees, experts suggested adding items to measure a respondent's ability to manage unexpected expenses. Future research could explore which elements of financial security are most important to measure, identify sources of potential items on these topics or construct new items, and test them for future rounds of the SDR and NSCG.
- **Retirement benefits** – These questions were originally added to the module to provide an additional marker of retirement for respondents who may not identify as such. However, testing showed that respondents were not able to provide accurate information about the retirement benefits they receive. As a result, NORC and NCSES dropped these questions for 2023. If collecting data on retirement benefits is of interest to NCSES, future research could explore which data on retirement benefits would be most important to collect, identify sources of potential items on these topics or construct new items, and test them for future rounds of the SDR and NSCG.
- **Health insurance** – Items Rh6-8 on health insurance and Medicare were included in the retirement module in a section on health. However, cognitive interview respondents were not able to provide accurate information about their health insurance coverage and experts noted that these questions were less important than those asking about respondent health in relation to their ability and desire to work. NORC and NCSES decided to drop these items and replace them with validated items on work ability from the HRS. If collecting data on health insurance is of interest to NCSES, future research could explore which data on insurance coverage would be most important to collect, identify sources of potential items on these topics or construct new items, and test them for future rounds of the SDR and NSCG.
- **Social activities** – Item Rs4 asked respondents how often they did certain activities with their family and friends who did not live with them. Experts felt that the question, which appeared to be modeled off the Technology Use and Social Communications section of the HRS, did not accurately measure social activities. They felt that adequately covering social activities would require asking respondents about their hobbies and leisure activities. Since the purpose and goals of this question required clarification, it was removed for 2023. Future research could explore the data that would be useful to collect on social activities, identify sources of potential items or construct new items, and test them for future rounds of the SDR and NSCG.

Next Steps for SDR. Based on findings from the cognitive testing and review of the module in the Expert Meeting, and in consultation with NCSES, the retirement module has been finalized for the SDR. The retirement module is currently being programmed into the SDR and a small-scale implementation test of the instrument will be conducted in the spring of 2023. Once the implementation test has been completed, the retirement module will be fielded as part of the SDR beginning in the summer of 2023. In future research, once data from the 2023 fielding is available, the functioning of the new retirement module may be evaluated to identify further improvements for future rounds of the SDR.

Next Steps for NSCG. Several areas of research can be pursued to prepare the retirement module for fielding in the NSCG. These are listed below:

- Address any issues relevant to the NSCG that are identified in the spring 2023 implementation test of the retirement module in the SDR.
- Conduct an implementation test of the retirement module within the full NSCG to ascertain that the items work well within the flow of the full NSCG instrument.
- If continued research is possible prior to the launch of the retirement module in the NSCG, NORC recommends further development and testing of the module in the areas identified by topic area, as listed above.
- After fielding of the retirement module in the 2023 SDR, identify potential areas for improvement and address any of these issues that are relevant to the NSCG.

Attachment A: Round 3 Questionnaire

Round 3 Questionnaire [26 Jan 2023]

USPHD [USED TO ROUTE RESPONDENTS TO THE SDR OR NSCG VERSION OF THE INSTRUMENT]

Pre-loaded

Does the respondent have a PhD from a U.S. institution?

1. Yes
2. No

A1

During the week of \${e://Field/month} 1, 2022, were you working for pay or profit?

Working for pay or profit also includes being self-employed and not getting paid that week, an intermittent worker not working that week (e.g., consultant, freelancer, independent contractor), on a postdoctoral appointment, traveling while employed, or on any type of paid or unpaid leave, including vacation or during a government shutdown.

1. Yes → **SKIP TO A8INFO**
2. No

A2

Did you look for work during the four weeks preceding \${e://Field/month} 1, 2022 (that is, between \${e://Field/monthbefore} 4 and \${e://Field/month} 1)?

1. Yes
2. No

A3

During the week of $\{e://Field/month\}$ 1, 2022, what were your reasons for not working?

Select Yes or No for each item.

	Yes	No
Retired	<input type="radio"/>	<input type="radio"/>
On layoff from a job	<input type="radio"/>	<input type="radio"/>
Student	<input type="radio"/>	<input type="radio"/>
Family responsibilities	<input type="radio"/>	<input type="radio"/>
Chronic illness or permanent disability	<input type="radio"/>	<input type="radio"/>
Suitable job not available	<input type="radio"/>	<input type="radio"/>
Did not need or want to work	<input type="radio"/>	<input type="radio"/>
Other reason	<input type="radio"/>	<input type="radio"/>

A3PROBE

Show if A3 = 2 for all

During the week of $\{e://Field/month\}$ 1, 2022, were you not working but still employed for any of the following reasons?

- Intermittent worker, not working that week (e.g., consultant, freelancer, independent contractor)
- Self-employed and not getting paid that week
- On a postdoctoral appointment including medical residencies or internship
- On vacation from work or traveling while employed
- On paid sick leave, personal leave or other temporary leave
- On a job that did not pay but had other benefits
- On a sabbatical

1. Yes → **SKIP TO A8INFO**
2. No

A3OS

Show if A3 Other reason = 1 or A3PROBE = 2

During the week of $\{e://Field/month\}$ 1, 2022, what is the other reason for not working?

A3YY

Show if A3.1 = 1

In what year did you retire?

A3JOB

Show if A3.1 = 1

What was the title of the job you retired from?

Example: Physics professor

A3DESC

Show if A3.1 = 1

What kind of work were you doing on the job you retired from – that is, what were your duties and responsibilities? Please be as specific as possible, including any area of specialization.

Example: Taught physics and conducted research. Specialized in high energy physics.

A3JOBCAT

Show if A3.1 = 1

[JOB CATEGORY]

A3_A27_SDR

Show if A3.1 = 1 and USPHD = 1

To what extent was your work on the job you retired from related to your first U.S. doctoral degree? Was it...

1. Closely related
2. Somewhat related
3. Not related

A3_A27_NSCG

Show if A3.1 = 1 and USPHD = 2

To what extent was your work on the job you retired from related to your highest degree? Was it...

1. Closely related
2. Somewhat related
3. Not related

A4

Prior to the week of $\{e://Field/month\}$ 1, 2022, when did you last work for pay or profit?

___ Month ___ Year

Never worked for pay or profit → In full SDR, skip to D1 (In cognitive interviews, skip to E13)

JOBMATCH

Show if A3.1 = 1

Is your last job the same as the job you retired from?

1. Yes → In full SDR, skip to A42; In cognitive interviews, skip to B1
2. No

A5

Prior to the week of $\{e://Field/month\}$ 1, 2022, what was the title of the last job you held?

Example: *Physics professor*

A6

What kind of work were you doing on this last job – that is, what were your duties and responsibilities? Please be as specific as possible, including any area of specialization.

Example: *Taught physics and conducted research. Specialized in high energy physics.*

A4_A27_SDR

Show if USPHD = 1

To what extent was your work on your last job related to your first U.S. doctoral degree? Was it...

1. Closely related
2. Somewhat related
3. Not related

A4_A27_NSCG

Show if USPHD = 2

To what extent was your work on your last job related to your highest degree? Was it...

1. Closely related

2. Somewhat related
3. Not related

A8INFO

Show if A3PROBE = 1 or A1=1

For the purposes of this survey, you are considered employed on \${e://Field/month} 1, 2022. Please answer the next series of questions as best as you can.

A9-A18

Show if A1 = 1

[PRINCIPAL EMPLOYER QUESTIONS]

A19-A41

Show if A1 = 1

[PRINCIPAL JOB QUESTIONS]

A42-A44

[WORK IN PREVIOUS YEAR QUESTIONS]

B1-B3

[PAST EMPLOYMENT QUESTIONS]

A8

Show if (B3.10 = 2 or skipped) and (A40.1 = 2 or skipped)

[NOTE: If A40.1=1 or B3.10 = 1, then fill in answer to A8. A8=1.]

Although you were working during the week of \${e://Field/month} 1, 2022, had you previously retired from any position?

Examples of retirement include mandatory retirement, early retirement, or voluntary retirement.

1. Yes
2. No → **In full SDR, skip to C1 if age <55; In cognitive interviews, skip to E13 if age <55**

A8YYTEXT

Show if (A40.1YY = missing and B3.10 = 1) or (A40.1=1 and A40.1YY = missing)

You indicated that you had previously retired or semi-retired.

A8YY

Show if A8 = 1 and A40.1YY = missing

[NOTE: If A40.1=1 and A40.1YY = not missing, then fill in answer to A8YY. A8YY=A40.1YY.]

In what year did you retire?

A8JOBTEXT

Show if A40.1 = 1 **and** A40.1YY = not missing

You indicated that you previously retired or semi-retired in [A40.1YY].

A8JOB

Show if A8 = 1

What was the title of the job you retired from?

Example: Physics professor

A8DESC

Show if A8 = 1

What kind of work were you doing on the job you retired from – that is, what were your duties and responsibilities? Please be as specific as possible, including any area of specialization.

Example: Taught physics and conducted research. Specialized in high energy physics.

A8JOB CAT

Show if A8 = 1

[JOB CATEGORY]

A8_A27_SDR

Show if A8 = 1 **and** USPHD=1

To what extent was your work on the job you retired from related to your first U.S. doctoral degree? Was it...

1. Closely related
2. Somewhat related
3. Not related

A8_A27_NSCG

Show if A8 = 1 **and** USPHD = 2

To what extent was your work on the job you retired from related to your highest degree? Was it...

1. Closely related
2. Somewhat related
3. Not related

BENEFITS

Are you currently receiving any retirement benefits?

Please include receiving money from retirement accounts (IRAs or Keogh plans), tax deferred retirement savings plans, pensions, 401(k) plans, or other defined benefit plans and defined contribution plans.

Do not include Social Security.

1. Yes
2. No

BENEFITS.1

Show if BENEFITS = 1

Which retirement benefits are you currently receiving?

Select Yes or No for each item.

	Yes	No
Pension or other defined benefit plan <i>(you receive a recurring payment in retirement based on your earnings and years on the job)</i>	<input type="radio"/>	<input type="radio"/>
401(k) or other defined contribution plan <i>(you and/or your employer made contributions to a personal account at a financial services organization that you draw on in retirement)</i>	<input type="radio"/>	<input type="radio"/>
IRA or Keogh plan	<input type="radio"/>	<input type="radio"/>
Other benefit: _____	<input type="radio"/>	<input type="radio"/>

SEMITEXT

Show if A8 = 1

Please think about the retirement situation you reported previously when answering the following questions.

R3

Show if A8 = 1 or A3.1 = 1

Did any of the following employment situations encourage you to retire?

Select Yes or No for each item.

	Yes	No
Wage reduction	<input type="radio"/>	<input type="radio"/>
Increase or decrease in hours	<input type="radio"/>	<input type="radio"/>
Job location change	<input type="radio"/>	<input type="radio"/>
Change in job duties or responsibilities	<input type="radio"/>	<input type="radio"/>
Organizational change at work	<input type="radio"/>	<input type="radio"/>
Experiencing age discrimination	<input type="radio"/>	<input type="radio"/>
Receiving early retirement incentive offer	<input type="radio"/>	<input type="radio"/>
Becoming eligible for pension	<input type="radio"/>	<input type="radio"/>
Receiving pension buy-out	<input type="radio"/>	<input type="radio"/>
Other employment situation: _____	<input type="radio"/>	<input type="radio"/>

R4Show if A8 = 1 or A3.1 = 1**Did any of the following factors encourage you to retire?***Select Yes or No for each item.*

	Yes	No
My personal health	<input type="radio"/>	<input type="radio"/>
The health of other family members	<input type="radio"/>	<input type="radio"/>
Job satisfaction	<input type="radio"/>	<input type="radio"/>
Lack of work available	<input type="radio"/>	<input type="radio"/>
Having sufficient income to retire	<input type="radio"/>	<input type="radio"/>
My spouse/partner retiring	<input type="radio"/>	<input type="radio"/>
Desire to spend more time with family and friends	<input type="radio"/>	<input type="radio"/>
Desire to spend more time on personal pursuits and leisure	<input type="radio"/>	<input type="radio"/>
Other factor: _____	<input type="radio"/>	<input type="radio"/>

Rw1

Show if A8 = 1

You reported working after retiring. What were your reasons for working after retiring?*Select Yes or No for each item.*

	Yes	No
Health insurance for me	<input type="radio"/>	<input type="radio"/>
Health insurance for my spouse/partner or dependents	<input type="radio"/>	<input type="radio"/>
Needed additional income	<input type="radio"/>	<input type="radio"/>
Wanted additional income	<input type="radio"/>	<input type="radio"/>
Did not enjoy retirement	<input type="radio"/>	<input type="radio"/>
Missed being in the workforce	<input type="radio"/>	<input type="radio"/>
Able to contribute to the workforce	<input type="radio"/>	<input type="radio"/>
Was asked to return to work	<input type="radio"/>	<input type="radio"/>
My spouse/partner changed their work status	<input type="radio"/>	<input type="radio"/>

Rw3a

Show if A8 = 1

In the next five years, are you planning to fully retire (completely stop working for pay or profit)?

1. Yes
2. No
3. I don't know

Rw3a.1Show if A8 = 2 **and** age \geq 55**In the next five years, are you planning to fully retire (completely stop working for pay or profit) or semi-retire (reduce working hours or job responsibilities)?***Semi-retirement could be at your same or a different employer.*

1. Yes, fully retire
2. Yes, semi-retire
3. No
4. I don't know

R5

Show if A3.1 = 1

All in all, how satisfied are you with your retirement?

1. Very satisfied
2. Somewhat satisfied
3. Not too satisfied
4. Not at all satisfied

Rs5Show if A3.1 = 1 **or** (A8INFO = Not Displayed **and** age \geq 55)**In the last 12 months, did you provide unpaid help to any groups? Consider charitable, political, and social organizations, churches, other non-profits, and clubs.**

1. Yes
2. No

Rs6

Show if Rs5 = 1

What kind of unpaid help did you provide?

Select Yes or No for each item.

	Yes	No
Fundraising	<input type="radio"/>	<input type="radio"/>
Participating in a working group or committee	<input type="radio"/>	<input type="radio"/>
Organizing or helping to run an activity or event	<input type="radio"/>	<input type="radio"/>
Educating/teaching/coaching/mentoring people	<input type="radio"/>	<input type="radio"/>
Providing information/counseling/consulting	<input type="radio"/>	<input type="radio"/>
Secretarial, administrative, or clerical work	<input type="radio"/>	<input type="radio"/>
Providing transport/driving	<input type="radio"/>	<input type="radio"/>
Campaigning/representing an organization	<input type="radio"/>	<input type="radio"/>
Serving on a non-profit board	<input type="radio"/>	<input type="radio"/>
Conducting research/producing academic or other professional writing/reviewing research publications	<input type="radio"/>	<input type="radio"/>
Public service work such as cleaning parks or roadsides	<input type="radio"/>	<input type="radio"/>
Other unpaid help: _____	<input type="radio"/>	<input type="radio"/>

Rs7_SDR

Show if A3.1 = 1 **or** (A8INFO = Not Displayed **and** age >=55) **and** USPHD = 1

Within the last 12 months, have you participated in research, public policy, government, or other professional activities related to your first U.S. doctoral degree? Please consider paid and unpaid work.

1. Yes
2. No

Rs8_SDR

Show if Rs7_SDR = 1

Please indicate the professional activities related to your first U.S. doctoral degree that you have done in the last 12 months.

Select Yes or No for each item.

	Yes	No
Held speaking engagements	<input type="radio"/>	<input type="radio"/>
Completed freelance or consulting work	<input type="radio"/>	<input type="radio"/>
Worked as a subcontractor	<input type="radio"/>	<input type="radio"/>
Authored a published work (manuscript, book, journal article)	<input type="radio"/>	<input type="radio"/>
Served as an editor for a book, edited volume, or academic journal	<input type="radio"/>	<input type="radio"/>
Served on a committee related to academic or policy research	<input type="radio"/>	<input type="radio"/>
Presented a paper at a professional conference (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Served as a reviewer for a research publication or grant	<input type="radio"/>	<input type="radio"/>
Advised a social or research organization (policy-oriented organizations, advocacy organizations, research institutes)	<input type="radio"/>	<input type="radio"/>
Advised a government entity (federal agencies, state, or local government)	<input type="radio"/>	<input type="radio"/>
Served as an expert witness	<input type="radio"/>	<input type="radio"/>
Provided professional mentorship to a doctoral candidate, post-doc, or early career researcher	<input type="radio"/>	<input type="radio"/>
Taught a course or gave a lecture at a college or university (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Gave a lecture or made a formal research presentation (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Other professional activity: _____	<input type="radio"/>	<input type="radio"/>

Rs7_NSCG

Show if A3.1 = 1 **or** (A8INFO = Not Displayed **and** age >=55) **and** USPHD = 2

Within the last 12 months, have you participated in research, public policy, government, or other professional activities related to your highest degree? Please consider paid and unpaid work.

1. Yes
2. No

Rs8_NSCG

Show if Rs7_NSCG = 1

Please indicate the professional activities related to your highest degree that you have done in the last 12 months.

	Yes	No
Completed freelance or consulting work	<input type="radio"/>	<input type="radio"/>
Worked as a subcontractor	<input type="radio"/>	<input type="radio"/>
Authored or edited a published work (manuscript, book, journal article)	<input type="radio"/>	<input type="radio"/>
Presented at a professional conference (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Advised a social or research organization (policy-oriented organizations, advocacy organizations, research institutes)	<input type="radio"/>	<input type="radio"/>
Advised a government entity (federal agencies, state, or local government)	<input type="radio"/>	<input type="radio"/>
Provided professional or academic mentorship	<input type="radio"/>	<input type="radio"/>
Taught a course or gave a lecture at a college or university (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Other professional activity: _____	<input type="radio"/>	<input type="radio"/>

Rs4

Show if A3.1 = 1

On average, how often do you do each of the following with any of your close family and friends (not counting anyone that lives with you)?

	Three or more times a week	Once or twice a week	Once or twice a month	Every few months	Once or twice a year	Less than once a year or never
Meet up in person (chance and arranged meetings)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speak on the phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Text message	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write or email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicate by Zoom, Skype or similar platforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interact through Facebook or other social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C1-C6

[Other work-related experiences]

D1-D12

[Recent educational experiences]

E1-14

[Demographic information]

Rh1

Show if A3.1 = 1

How is your physical health?

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor

Rh6

Show if A3.1 = 1

Do you have health insurance?

1. Yes
2. No

Rh7

Show if Rh6 = 1

What kind of health insurance do you have? Select all that apply.

1. Medicare health insurance
2. Medicaid health insurance
3. Private insurance (self-paid)
4. Health insurance through my spouse's/partner's employer

Rh8

Show if A3.1 = 1

Are you covered by or enrolled in a Medicare prescription drug plan (Medicare Part D or as part of Medicare Part C [Advantage Plan])?

1. Yes
2. No

Rf1

Show if A3.1 = 1

Were there times in the last year when you (including your spouse/partner) did not have enough money to meet your basic needs, such as paying your rent or mortgage, paying utility bills, paying medical or prescription drug bills, or buying food for everyone in your household?

1. Yes
2. No

Rf3

Show if A3.1 = 1

Overall, how confident are you that you (and your spouse/partner) will have enough money to live comfortably throughout your retirement years?

1. Very confident
2. Somewhat confident
3. Not too confident
4. Not at all confident

[IN REAL SDR, GO TO E15; COGNITIVE INTERVIEWS END].

Attachment B: Round 3 Protocol

STEP 1: INTRODUCTION

1. Introduce yourself, and anyone else on the call.
2. Describe the current study:

“NORC and the National Center for Science and Engineering Statistics (NCSES) are testing a survey on retirement. During our interview today, I’ll plan to bring up the survey on my screen, share it with you and give you control of the screen so you can fill it out. As you go, I will ask you some questions about items you are seeing.”

STEP 2: INFORMED CONSENT

“Before we begin, I need to show you some information and tell you a bit about your participation today. I’m going to read a statement tells you about your rights as a research participant. I’ll ask you a few questions to confirm your willingness to participate, and then we’ll get started.”

At the bottom of the Zoom screen, select “Share Screen”

1. *Select the appropriate screen to share and click “ok.”*
2. *Read consent statement aloud, scrolling as you read.*
3. **PAUSE SHARE**
4. *With “Pause Share” still on, click through screens, obtaining consent to participate and to record. Record responses in the survey tool.*

“Before I begin the recording, please note that you can change your name as it appears on Zoom.”
Help respondent change Zoom name if they would like to do this.

If consent to record is provided, turn on recorder. All recordings must be saved on your NORC computer. “Ok. I have turned the recording on. Would you please confirm for me that you agree to participate and to have this interview recorded?”

STEP 3: BEGIN SURVEY

“As you complete the survey, we will sometimes stop to discuss the questions and your answers. Hearing you talk about how you figure out your answers to the questions will help me understand how to improve the survey. There are no right or wrong answers to the questions. I am more interested in how you arrive at your answers than in the answers themselves.”

“I’ll now give you control of my mouse and keyboard and ask that you fill out the survey as you normally would.” *At the top of the screen, select remote control > give mouse/keyboard control.* “Now I’m sharing my screen for you to control. You may see a box pop up at the top of your screen. You may need to click to accept control, and then you should be able to use your mouse to control my whole screen and walk through the survey. Please begin the survey.”

USPHD [USED TO ROUTE RESPONDENTS TO THE SDR OR NSCG VERSION OF INSTRUMENT]

Pre-loaded

Does the respondent have a PhD from a U.S. institution?

1. Yes
2. No

A1**During the week of \${e://Field/month} 1, 2022, were you working for pay or profit?**

Working for pay or profit also includes being self-employed and not getting paid that week, an intermittent worker not working that week (e.g., consultant, freelancer, independent contractor), on a postdoctoral appointment, traveling while employed, or on any type of paid or unpaid leave, including vacation or during a government shutdown.

1. Yes **à SKIP TO A8INFO**
2. No

Goal(s): Identify any difficulties with the reference period/recall.

PROBE on A1:

- Please look at this question. Can you tell me in your own words what this question is asking?
- These questions asked you about the week of [2 MONTHS AGO] 1, 2022 (and the weeks prior to this date). How easy or hard was it for you to remember your work activities from this time period?
- You said you were [FILL FROM A1]. Can you walk me through how you remembered what you were doing?
- How sure are you about what you were doing around [2 MONTHS AGO] 1, 2022?
- *NOTE: How do respondents who do sporadic work answer A1? Does the addition of “an intermittent worker not working that week (e.g., consultant, freelancer, independent contractor)” work for them? Do they respond accurately based on whether they worked during the reference week?*

A2**Did you look for work during the four weeks preceding \${e://Field/month} 1, 2022 (that is, between \${e://Field/monthbefore} 4 and \${e://Field/month} 1)?**

1. Yes
2. No

A3

During the week of $\{e://Field/month\}$ 1, 2022, what were your reasons for not working?

Select Yes or No for each item.

	Yes	No
Retired	<input type="radio"/>	<input type="radio"/>
On layoff from a job	<input type="radio"/>	<input type="radio"/>
Student	<input type="radio"/>	<input type="radio"/>
Family responsibilities	<input type="radio"/>	<input type="radio"/>
Chronic illness or permanent disability	<input type="radio"/>	<input type="radio"/>
Suitable job not available	<input type="radio"/>	<input type="radio"/>
Did not need or want to work	<input type="radio"/>	<input type="radio"/>
Other reason	<input type="radio"/>	<input type="radio"/>

A3PROBE

Show if A3 = 2 for all

During the week of $\{e://Field/month\}$ 1, 2022, were you not working but still employed for any of the following reasons?

- Intermittent worker, not working that week (e.g., consultant, freelancer, independent contractor)
- Self-employed and not getting paid that week
- On a postdoctoral appointment including medical residencies or internship
- On vacation from work or traveling while employed
- On paid sick leave, personal leave or other temporary leave
- On a job that did not pay but had other benefits
- On a sabbatical

1. Yes → **SKIP TO A8INFO**
2. No

A3OS

Show if A3 Other reason = 1 **or** A3PROBE = 2

During the week of \${e://Field/month} 1, 2022, what is the other reason for not working?

A3YY

Show if A3.1 = 1

In what year did you retire?

A3JOB

Show if A3.1 = 1

What was the title of the job you retired from?

Example: Physics professor

A3DESC

Show if A3.1 = 1

What kind of work were you doing on the job you retired from – that is, what were your duties and responsibilities? Please be as specific as possible, including any area of specialization.

Example: Taught physics and conducted research. Specialized in high energy physics.

A3_A27_SDR

Show if A3.1 = 1 **and** USPHD = 1

To what extent was your work on the job you retired from related to your first U.S. doctoral degree? Was it...

1. Closely related
2. Somewhat related
3. Not related

Cognitive Testing Goal(s): Identify unclear words or terms.

PROBE on A3_A27_SDR:

- Can you tell me in your own words what this question is asking?
- What does it mean to for work to be “related” to your first U.S. doctoral degree?
- You said [FILL ANSWER]. Can you walk me through how you came up with your answer?

A3_A27_NSCG

Show if A3.1 = 1 **and** USPHD = 2

To what extent was your work on the job you retired from related to your **highest degree**? Was it...

1. Closely related
2. Somewhat related
3. Not related

Cognitive Testing Goal(s): Identify unclear words or terms.

PROBE on A3_A27_NSCG:

- Can you tell me in your own words what this question is asking?
- What does it mean to for work to be “related” to your highest degree?
- You said [FILL ANSWER]. Can you walk me through how you came up with your answer?

A4

Prior to the week of \${e://Field/month} 1, 2022, when did you last work for pay or profit?

___ Month ___ Year

Never worked for pay or profit → **SKIP TO E13**

JOBMATCH

Show if A3.1 = 1

Is your last job the same as the job you retired from?

1. Yes → **SKIP TO B1**
2. No

A5

Prior to the week of \${e://Field/month} 1, 2022, what was the title of the last job you held?

Example: Physics professor

A6

What kind of work were you doing on this last job – that is, what were your duties and responsibilities? Please be as specific as possible, including any area of specialization.

Example: Taught physics and conducted research. Specialized in high energy physics.

A4_A27_SDR

Show if USPHD = 1

To what extent was your work on your last job related to your first U.S. doctoral degree? Was it...

1. Closely related
2. Somewhat related
3. Not related

Cognitive Testing Goal(s): Identify unclear words or terms.

PROBE on A4_A27_SDR:

- Can you tell me in your own words what this question is asking?
- What does it mean to for work to be “related” to your first U.S. doctoral degree?
- You said [FILL ANSWER]. Can you walk me through how you came up with your answer?

A4_A27_NSCG

Show if USPHD = 2

To what extent was your work on your last job related to your highest degree? Was it...

1. Closely related
2. Somewhat related
3. Not related

Cognitive Testing Goal(s): Identify unclear words or terms.

PROBE on A4_A27_NSCG:

- Can you tell me in your own words what this question is asking?
- What does it mean to for work to be “related” to your highest degree?
- You said [FILL ANSWER]. Can you walk me through how you came up with your answer?

A8INFOShow if A3PROBE = 1 or A1=1

For the purposes of this survey, you are considered employed on $\{e://Field/month\}$ 1, 2022. Please answer the next series of questions as best as you can.

Note: Next, respondents will see the questions listed below. They will answer the questions, but you will not do any probing. Questions come from the full SDR and are included to simulate the experience of embedding the retirement module within the full SDR.

PART A: PRINCIPAL EMPLOYER

Show if A1 = 1

- A9 (principal employer information) – limit employer name to reduce burden
- A10 (principal employer sector/type)
- A11 (principal employer industry)
- A19 (principal job title)
- A20 (principal job duties/description)
- A22 (did principal job duties require bachelor’s degree or higher)
- A26 (principal job start date)
- A27 (how principal job relates to first US PhD)
- A28 (why working outside of field of first US PhD)
- A38 (principal job hours worked/week)
- A39 (if wanted to work more than 35 hours/week)
- A40 (reasons for working less than 35 hours/week)

PART B: PAST EMPLOYMENT

- B1 (working during reference week and 2 years prior)
- B2 (did employer/job type change between reference week and 2 years prior)
- B3 (why did employer/job type change)

A8

Show if (B3.10 = 2 or skipped) and (A40.1 = 2 or skipped)

[NOTE: If A40.1=1 or B3.10 = 1, then fill in answer to A8. A8=1.]

Although you were working during the week of \${e://Field/month} 1, 2022, had you previously retired from any position?

Examples of retirement include mandatory retirement, early retirement, or voluntary retirement.

1. Yes
2. No → **SKIP TO E13 IF AGE <55**

A8YYTEXT

Show if (A40.1YY = missing and B3.10 = 1) or (A40.1=1 and A40.1YY = missing)

You indicated that you had previously retired or semi-retired.

A8YY

Show if A8 = 1 and A40.1YY = missing

[NOTE: If A40.1=1 and A40.1YY = not missing, then fill in answer to A8YY. A8YY=A40.1YY.]

In what year did you retire?

A8JOBTEXT

Show if A40.1 = 1 **and** A40.1YY = not missing

You indicated that you previously retired or semi-retired in [A40.1YY].

A8JOB

Show if A8 = 1

What was the title of the job you retired from?

Example: Physics professor

A8DESC

Show if A8 = 1

What kind of work were you doing on the job you retired from – that is, what were your duties and responsibilities? Please be as specific as possible, including any area of specialization.

Example: Taught physics and conducted research. Specialized in high energy physics.

A8_A27_SDR

Show if A8 = 1 **and** USPHD=1

To what extent was your work on the job you retired from related to your first U.S. doctoral degree? Was it...

1. Closely related
2. Somewhat related
3. Not related

Cognitive Testing Goal(s): Identify unclear words or terms.

PROBE on A8_A27_SDR:

- Can you tell me in your own words what this question is asking?
- What does it mean to for work to be “related” to your first U.S. doctoral degree?
- You said [FILL ANSWER]. Can you walk me through how you came up with your answer?

A8_A27_NSCG

Show if A8 = 1 **and** USPHD = 2

To what extent was your work on the job you retired from related to your highest degree? Was it...

1. Closely related
2. Somewhat related
3. Not related

Cognitive Testing Goal(s): Identify unclear words or terms.

PROBE on A4_A27_NSCG:

- Can you tell me in your own words what this question is asking?
- What does it mean to for work to be “related” to your highest degree?
- You said [FILL ANSWER]. Can you walk me through how you came up with your answer?

BENEFITS

Are you currently receiving any retirement benefits?

Include receiving money from retirement accounts (IRAs or Keogh plans), tax deferred retirement savings plans, pensions, 401(k) plans, or other defined benefit plans and defined contribution plans.

Do not include Social Security.

1. Yes
2. No

Cognitive Testing Goal(s): Learn what respondents include in “retirement benefits.”

- Can you tell me in your own words what this question is asking?
- You said [FILL ANSWER] to this question. Could you tell me more about that? How did you come up with your answer?
- *NOTE: What do respondents think about the list of benefits in the instruction text? Are we missing any? Are there any that don’t fit? Do they include Social Security in their answer?*

BENEFITS.1

Show if BENEFITS = 1

Which retirement benefits are you currently receiving?

Select Yes or No for each item.

	Yes	No
Pension or other defined benefit plan (you receive a recurring payment in retirement based on your earnings and years on the job)	<input type="radio"/>	<input type="radio"/>
401(k) or other defined contribution plan (you and/or your employer made contributions to a personal account at a financial services organization that you draw on in retirement)	<input type="radio"/>	<input type="radio"/>
IRA or Keogh plan	<input type="radio"/>	<input type="radio"/>
Other benefit: _____	<input type="radio"/>	<input type="radio"/>

Cognitive Testing Goal(s): Determine if there are missing items in the list of benefits.

- [If “other benefit” named:] You added [FILL ANSWER]. Tell me more about that.
- Are there retirement benefits missing from this list?

SEMITEXT

Show if A8 = 1

Please think about the retirement situation you reported previously when answering the following questions.

R3

Show if A8 = 1 **or** A3.1 = 1

Did any of the following employment situations encourage you to retire?

Select Yes or No for each item.

	Yes	No
Wage reduction	<input type="radio"/>	<input type="radio"/>
Increase or decrease in hours	<input type="radio"/>	<input type="radio"/>
Job location change	<input type="radio"/>	<input type="radio"/>
Change in job duties or responsibilities	<input type="radio"/>	<input type="radio"/>
Organizational change at work	<input type="radio"/>	<input type="radio"/>
Experiencing age discrimination	<input type="radio"/>	<input type="radio"/>
Receiving early retirement incentive offer	<input type="radio"/>	<input type="radio"/>
Becoming eligible for pension	<input type="radio"/>	<input type="radio"/>
Receiving pension buy-out	<input type="radio"/>	<input type="radio"/>
Other employment situation: _____	<input type="radio"/>	<input type="radio"/>

R4

Show if A8 = 1 **or** A3.1 = 1

Did any of the following factors encourage you to retire?

Select Yes or No for each item.

	Yes	No
My personal health	<input type="radio"/>	<input type="radio"/>
The health of other family members	<input type="radio"/>	<input type="radio"/>
Job satisfaction	<input type="radio"/>	<input type="radio"/>
Lack of work available	<input type="radio"/>	<input type="radio"/>
Having sufficient income to retire	<input type="radio"/>	<input type="radio"/>
My spouse/partner retiring	<input type="radio"/>	<input type="radio"/>
Desire to spend more time with family and friends	<input type="radio"/>	<input type="radio"/>
Desire to spend more time on personal pursuits and leisure	<input type="radio"/>	<input type="radio"/>
Other factor: _____	<input type="radio"/>	<input type="radio"/>

Cognitive Testing Goal(s): Identify unclear words or terms. Identify missing conditions or factors.

PROBE on R4:

- Are there factors that you think are missing from the list?
- Are the words and terms used in the question and item list clear or unclear?
- *[OPTIONAL; pick 1-2 items]* One of the items is "[FILL TEXT]". What does that mean to you?
- *NOTE: Probe as needed if respondent provides response in the "Other" field.*

Rw1

Show if A8 = 1

You reported working after retiring. What were your reasons for working after retiring?

Select Yes or No for each item.

	Yes	No
Health insurance for me	<input type="radio"/>	<input type="radio"/>
Health insurance for my spouse/partner or dependents	<input type="radio"/>	<input type="radio"/>
Needed additional income	<input type="radio"/>	<input type="radio"/>
Wanted additional income	<input type="radio"/>	<input type="radio"/>
Did not enjoy retirement	<input type="radio"/>	<input type="radio"/>
Missed being in the workforce	<input type="radio"/>	<input type="radio"/>
Able to contribute to the workforce	<input type="radio"/>	<input type="radio"/>
Was asked to return to work	<input type="radio"/>	<input type="radio"/>
My spouse/partner changed their work status	<input type="radio"/>	<input type="radio"/>

Cognitive Testing Goal(s): Identify unclear words or terms.

PROBE on Rw1:

- Are the words and terms used in the question and item list clear or unclear?
- Are there factors that you think are missing from the list?
- *[OPTIONAL; pick 1-2 items]* One of the items is "[FILL TEXT]". What does that mean to you?
- Tell me more about your reasons to work after retirement.
- *NOTE: Confirm that respondent is thinking about their marital status at the time they decided to work again after retiring. In some cases, marital status will have changed. Do those who did not have a spouse/partner at the time correctly choose NA?*

Rw3a

Show if A8 = 1

In the next five years, are you planning to fully retire (completely stop working for pay or profit)?

1. Yes
2. No
3. I don't know

Cognitive Testing Goal(s): Test definition of full retirement.**PROBE on Rw3a:**

- Can you tell me in your own words what this question is asking?
- How did you decide your answer?
- What does it mean to be “planning” to fully retire?
- In your own words, what does it mean to “fully retire?” The survey describes “fully retire” as “completely stop working for pay or profit.” Is the meaning of this phrase clear or unclear to you?

Rw3a.1Show if A8 = 2 **and** age >= 55**In the next five years, are you planning to fully retire (completely stop working for pay or profit) or semi-retire (reduce working hours or job responsibilities)?***Semi-retirement could be at your same or a different employer.*

1. Yes, fully retire
2. Yes, semi-retire
3. No
4. I don't know

Cognitive Testing Goal(s): Test definitions of full/semi-retirement and instruction text.**PROBE on Rw3a.1:**

- Can you tell me in your own words what this question is asking?
- How did you decide your answer?
- What does it mean to be “planning” to retire?
- In your own words, what does it mean to “fully retire”? The survey describes “fully retire” as “completely stop working for pay or profit.” Is the meaning of this phrase clear or unclear to you?
- The survey describes “semi-retire” as “reduce working hours or job responsibilities.” Is the meaning of this phrase clear or unclear to you?
- The italicized text says: “Semi-retirement could be at your same or a different employer.” What did this phrase make you think about?

R5

Show if A3.1 = 1

All in all, how satisfied are you with your retirement?

1. Very satisfied
2. Somewhat satisfied
3. Not too satisfied
4. Not at all satisfied

Rs5Show if A3.1 = 1 or (A8INFO = Not Displayed and age >=55)**In the last 12 months, did you provide unpaid help to any groups? Consider charitable, political, and social organizations, churches, other non-profits, and clubs.**

1. Yes
2. No

Cognitive Testing Goal(s): Identify unclear words or terms. Identify missing groups or types of help. Identify recall problems.

PROBE on Rs5:

- In your own words, what is this question asking?
- What does “unpaid help” mean to you? Can you give some examples?
- Are there groups you provide unpaid help to that are missing from this list?
- Unpaid help is also referred to as volunteering. If the word “volunteer” or “volunteering” was used in this question, would your response change? *[Note: If respondent would change answer to “yes” if the question were about volunteering, have them answer Rs6.]*
- This question asks about unpaid help you gave over the last 12 months. How easy or hard is it for you to remember whether you did any of the activities listed within the last 12 months?

Rs6

Show if Rs5 = 1

What kind of unpaid help did you provide?

Select Yes or No for each item.

	Yes	No
Fundraising	<input type="radio"/>	<input type="radio"/>
Participating in a working group or committee	<input type="radio"/>	<input type="radio"/>
Organizing or helping to run an activity or event	<input type="radio"/>	<input type="radio"/>
Educating/teaching/coaching/mentoring people	<input type="radio"/>	<input type="radio"/>
Providing information/counseling/consulting	<input type="radio"/>	<input type="radio"/>
Secretarial, administrative, or clerical work	<input type="radio"/>	<input type="radio"/>
Providing transport/driving	<input type="radio"/>	<input type="radio"/>
Campaigning/representing an organization	<input type="radio"/>	<input type="radio"/>
Serving on a non-profit board	<input type="radio"/>	<input type="radio"/>
Conducting research/producing academic or other professional writing/reviewing research publications	<input type="radio"/>	<input type="radio"/>
Public service work such as cleaning parks or roadsides	<input type="radio"/>	<input type="radio"/>
Other unpaid help: _____	<input type="radio"/>	<input type="radio"/>

Cognitive Testing Goals: Identify unclear words or terms. Identify recall problems.

PROBE on Rs6:

- Can you tell me what you think this question is asking?
- Please tell me more about [FILL TEXT].
- Did you receive any pay for that help?
- Unpaid help is also referred to as volunteering. Have you done any volunteering that you did not already report in the survey?

Rs7_SDR

Show if (A3.1 = 1 **or** (A8INFO = Not Displayed **and** age >=55)) **and** USPHD = 1

Within the last 12 months, have you participated in research, public policy, government, or other professional activities related to your first U.S. doctoral degree? Please consider paid and unpaid work.

3. Yes
4. No

Cognitive Testing Goal(s): *Identify unclear words or terms. Determine if respondents correctly include professional activities related to their degree and exclude other activities. Identify any recall problems.*

PROBE on Rs7_SDR:

- Can you tell me what you think this question is asking?
- This question asks about professional activities from the last 12 months. How easy or hard is it for you to remember whether you participated in any of the activities listed within the last 12 months?
- This question asks about professional activities “related to your doctoral degree.” How easy or hard is it for you to determine if an activity is related to your highest degree? Tell me about that.
- *NOTE: Note whether respondents are including professional activities not related to their degrees. Also note any difficulty deciding if an activity is related to their degree.*

Rs8_SDR

Show if Rs7_SDR = 1

Please indicate the professional activities related to your first U.S. doctoral degree that you have done in the last 12 months.

Select Yes or No for each item.

	Yes	No
Held speaking engagements	<input type="radio"/>	<input type="radio"/>
Completed freelance or consulting work	<input type="radio"/>	<input type="radio"/>
Worked as a subcontractor	<input type="radio"/>	<input type="radio"/>
Authored a published work (manuscript, book, journal article)	<input type="radio"/>	<input type="radio"/>
Served as an editor for a book, edited volume, or academic journal	<input type="radio"/>	<input type="radio"/>
Served on a committee related to academic or policy research	<input type="radio"/>	<input type="radio"/>
Presented a paper at a professional conference (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Served as a reviewer for a research publication or grant	<input type="radio"/>	<input type="radio"/>
Advised a social or research organization (policy-oriented organizations, advocacy organizations, research institutes)	<input type="radio"/>	<input type="radio"/>
Advised a government entity (federal agencies, state, or local government)	<input type="radio"/>	<input type="radio"/>
Served as an expert witness	<input type="radio"/>	<input type="radio"/>
Provided professional mentorship to a doctoral candidate, post-doc, or early career researcher	<input type="radio"/>	<input type="radio"/>
Taught a course or gave a lecture at a college or university (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Gave a lecture or made a formal research presentation (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Other professional activity: _____	<input type="radio"/>	<input type="radio"/>

Cognitive Testing Goals: Identify unclear words or terms. Identify recall issues.

PROBE on Rs8_SDR:

- Are the words and terms used in the question and item list clear or unclear?
- Are there professional activities that you think are missing from the list?
- *[OPTIONAL; pick 1-2 items]* One of the items is "[FILL TEXT]". What does that mean to you?
- One of the items is "presented a paper at a professional conference." What does that mean to you? Would it count if you presented but there was no paper? Would presenting a poster count here?
- One of the items is "gave a lecture or made a formal research presentation." Is this the same or different from presenting a paper at a professional conference?
- This question asks about professional activities from the last 12 months. How easy or hard is it for you to remember whether you did any of the activities listed within the last 12 months?

Rs7_NSCG

Show if A3.1 = 1 or (A8INFO = Not Displayed and age >=55) and USPHD = 2

Within the last 12 months, have you participated in research, public policy, government, or other professional activities related to your highest degree? Please consider paid and unpaid work.

3. Yes
4. No

Cognitive Testing Goal(s): Identify unclear words or terms. Identify recall issues.

PROBE on Rs7_NSCG:

- Can you tell me what you think this question is asking?
- This question asks about professional activities from the last 12 months. How easy or hard is it for you to remember whether you participated in any of the activities listed within the last 12 months?
- This question asks about professional activities "related to your highest degree." How easy or hard is it for you to determine if an activity is related to your highest degree? Tell me about that.
- *NOTE: Note whether respondents are including professional activities not related to their degrees. Also note any difficulty deciding if an activity is related to their degree.*

Rs8_NSCG

Show if Rs7_NSCG = 1

Please indicate the professional activities related to your highest degree that you have done in the last 12 months.

Select Yes or No for each item.

	Yes	No
Completed freelance or consulting work	<input type="radio"/>	<input type="radio"/>
Worked as a subcontractor	<input type="radio"/>	<input type="radio"/>
Authored or edited a published work (manuscript, book, journal article)	<input type="radio"/>	<input type="radio"/>
Presented at a professional conference (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Advised a social or research organization (policy-oriented organizations, advocacy organizations, research institutes)	<input type="radio"/>	<input type="radio"/>
Advised a government entity (federal agencies, state, or local government)	<input type="radio"/>	<input type="radio"/>
Provided professional or academic mentorship	<input type="radio"/>	<input type="radio"/>
Taught a course or gave a lecture at a college or university (virtual or in person)	<input type="radio"/>	<input type="radio"/>
Other professional activity: _____	<input type="radio"/>	<input type="radio"/>

<p>Cognitive Testing Goals: <i>Identify unclear words or terms. Identify recall issues.</i></p>
<p>PROBE on Rs8_NSCG:</p> <ul style="list-style-type: none"> • Are the words and terms used in the question and item list clear or unclear? • Are there professional activities that you think are missing from the list? • One of the items is "Provided professional or academic mentorship." What does that mean to you? • <i>[OPTIONAL; pick 1-2 items]</i> One of the items is "[FILL TEXT]". What does that mean to you? • This question asks about professional activities from the last 12 months. How easy or hard is it for you to remember whether you did any of the activities listed within the last 12 months?

Rs4

Show if A3.1 = 1

On average, how often do you do each of the following with any of your close family and friends (not counting anyone that lives with you)?

	Three or more times a week	Once or twice a week	Once or twice a month	Every few months	Once or twice a year	Less than once a year or never
Meet up in person (chance and arranged meetings)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speak on the phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Text message	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write or email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicate by Zoom, Skype or similar platforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interact through Facebook or other social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Note: Before going on to the health questions, respondents in the SDR and NSCG will see other demographic questions. We simulate this by asking the following demographic questions from Part E. Respondents should answer the questions but will not probe.

Part E: Demographics

- E13 (functional limitations questions)
- E14 (age at which functional limitations started)

Rh1

Show if A3.1 = 1

How is your physical health?

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor

Rh6

Show if A3.1 = 1

Do you have health insurance?

1. Yes
2. No

Rh7

Show if Rh6 = 1

What kind of health insurance do you have? Select all that apply.

1. Medicare health insurance
2. Medicaid health insurance
3. Private insurance (self-paid)
4. Health insurance through my spouse's/partner's employer

Rh8

Show if A3.1 = 1

Are you covered by or enrolled in a Medicare prescription drug plan (Medicare Part D or as part of Medicare Part C [Advantage Plan])?

1. Yes
2. No

Rf1

Show if A3.1 = 1

Were there times in the last year when you (including your spouse/partner) did not have enough money to meet your basic needs, such as paying your rent or mortgage, paying utility bills, paying medical or prescription drug bills, or buying food for everyone in your household?

1. Yes
2. No

Cognitive Testing Goal(s): *Identify difficulty with added text in this question.*

PROBE on Rf1:

- In your own words, can you tell me what you think the question is asking about?
- How easy or hard was it for you to decide how confident you are? Can you walk me through how you figured that out?

Rf3

Show if A3.1 = 1

Overall, how confident are you that you (and your spouse/partner) will have enough money to live comfortably throughout your retirement years?

1. Very confident
2. Somewhat confident
3. Not too confident
4. Not at all confident

Cognitive Testing Goal(s): *Identify difficulty choosing confidence in retirement finances. Identify discomfort/sensitivity in questions about personal health and finances.*

PROBE on Rf3:

- In your own words, can you tell me what you think the question is asking about?
- How easy or hard was it for you to decide how confident you are? Can you walk me through how you figured that out?
- This question asked, “How confident are you that you (and your spouse/partner) will have enough money to live comfortably throughout your retirement years?” What does “live comfortably” mean to you in this question?
- Questions in this section asked about your personal health and finances. How do you feel about answering these questions? Do you consider it ok to ask about these things in the survey?

STEP 4: WRAP UP

Thank you for taking the survey. I will now take back control of the screen. I have a few final questions for you:

- Is there anything (else) you would like to see changed or improved in the survey?
- Are there questions or topics that you think should have been included in the survey that we did not cover?
- Were there questions or topics that we asked about that you think do not need to be included in the survey?
- If we are not able to include everything that would be ideal to cover in the survey, what questions or topics do you think are the most important to include?
- Is there anything that we have not already discussed that you would like to share?

Thank you very much for your time. We very much appreciate your feedback.

[Stop the recording. Answer any questions.]

Attachment C: Survey Paths by Retirement Groups

		Fully retired (Not working, retired)	Semi-retired (Working but previously retired)	Never retired, Working PT or FT, 55+	Never retired, not working, 55+	Never retired, Working PT or FT, <55	Never retired, Not working, <55
Item		A1=2 AND A8INFO not displayed AND A3 Retired = 1	(A1=1 OR A8INFO displayed) AND A8=1	(A1=1 OR A8INFO displayed) AND A8=2 AND age>=55	A1=2 AND A8INFO not displayed AND A3 Retired=2 AND age>=55	(A1=1 or A8INFO displayed) and A8=2 and age<55	A1=2 and A8INFO not displayed and A3 Retired=2 and age<55
USPHD	Has PhD from US institution						
A1	Working for pay or profit	x (answers no)	x (answers yes)	x (answers yes)	x (answers no)	x (answers yes)	x (answers no)
A2	Looked for work	x			x		x
A3	Reasons for not working	x (answers Retired = yes)			x (answers Retired = no)		x (answers Retired = no)
A3PROBE	Probe to capture other situations that count as working				Shown if A3 = no for all (answers no)		Shown if A3 = no for all (answers no)
A3OS	Other reason not working	Shown if A3 Other = yes			Shown if A3PROBE = no		Shown if A3 Other = Yes or A3PROBE = no
A3YY	Year retired	x					
A3JOB	Retirement job title	x					
A3DESC	Retirement job description	x					
A3_A27_SDR	Retirement job relevance to first US doctoral degree	Shown if USPHD = yes					
A3_A27_NSCG	Retirement job relevance to highest degree	Shown if USPHD = no					

A4	Date last worked	x (answers with MM/YYYY of last worked)			x If Never Worked -> E13; otherwise continue		x If Never Worked -> D1; otherwise continue
JOBMATCH	Is last job worked the retirement job	x					
A5	Last job title	Shown if JOBMATCH = no			x		x
A6	Last job duties	Shown if JOBMATCH = no			x		x
A4_A27_SDR	Last job relevance to first US doctoral degree (SDR)	Shown if JOBMATCH = no <u>AND</u> USPHD = yes			Show if USPHD = yes		Show if USPHD = yes
A4_A27_NSCG	Last job relevance to highest degree (NSCG)	Shown if JOBMATCH = no <u>AND</u> USPHD = no			Show if USPHD = no		Show if USPHD = no
A8INFO	For the purposes of this survey you are employed		x	x		x	
A9	Principal employer		x	x		x	
A10	Principal employer sector/type		x	x		x	
A11	Principal employer industry		x	x		x	
A19INFO	Transition text to principal job questions		x	x		x	
A19	Principal job title		x	x		x	
A20	Principal job duties/description		x	x		x	
A22	Principal job required BA+		x	x		x	
A26	Principal job start date		x	x		x	

A27_SDR	Principal job relevance to first US doctoral degree (SDR)		Shown if USPHD = yes	Shown if USPHD = yes		Shown if USPHD = yes	
A27_NSCG	Principal job relevance to highest degree (NSCG)		Shown if USPHD = no	Shown if USPHD = no		Shown if USPHD = no	
A28_SDR	Why working outside field of first US doctoral degree (SDR)		Shown if A27_SDR = Not related	Shown if A27_SDR = Not related		Shown if A27_SDR = Not related	
A28_os_SDR			Shown if A28_SDR Some other reason = yes	Shown if A28_SDR Some other reason = yes		Shown if A28_SDR Some other reason = yes	
A28_NSCG	Why working outside field of first US doctoral degree (SDR)		Shown if A27_NSCG = Not related	Shown if A27_NSCG = Not related		Shown if A27_NSCG = Not related	
A28_os_NSCG			Shown if A28_NSCG Some other reason = yes	Shown if A28_NSCG Some other reason = yes		Shown if A28_NSCG Some other reason = yes	
A38	Principal job hours worked		x	x		x	
A39	Wanted to work more than 35 hrs/week		Shown if A38 = <35 hrs	Shown if A38 = <35 hrs		Shown if A38 = <35 hrs	
A40	Reasons for working less than 35 hrs/week		Shown if A38 = <35 hrs	Shown if A38 = <35 hrs		Shown if A38 = <35 hrs	
B1	Working during ref week and 2 years prior		x	x		x	
B2	Employer/job change between ref week and 2 years prior		Shown if B1 = yes	Shown if B1 = yes		Shown if B1 = yes	
B3	Why did employer/job change		Shown if B2 =2,3,4	Shown if B2 =2,3,4		Shown if B2 =2,3,4	

B3os			Shown if B3 Some other reason = yes	Shown if B3 Some other reason = yes		Shown if B3 Some other reason = yes	
A8	Previously retired		Shown if (A40 Prev or semi- retired = no or skipped) AND (B3 Retired = no or skipped) (answers yes); Autofill A8 = yes when A40.1 = yes or B3.10 = yes	x (answers no)		x (answers no)	
A8YYTEXT	Transition text to collect previously retired year		Shown if (A40 Prev or semi- retired = no AND B3 Retired = yes) OR (A40 Prev or semi-retired = yes and A40 Yr retired = missing) (answers yes)				
A8YY	Previously retired year		Shown if A8 = 1 and A40 Yr Retired = missing				
A8JOBTEXT	Transition text to collect previously retirement job		Shown if A40.1 = 1 and A40 Yr Retired = not missing				
A8JOB	Previously retired job		x				
A8DESC	Previously retired job description		x				
A8JOBCAT	Previously retired job category		x				

A8_A27_SDR	Previously retired job relevance to first US doctoral degree (SDR)		Shown if USPHD = yes				
A8_A27_NSCG	Previously retired job relevance to highest degree (NSCG)		Shown if USPHD = no				
BENEFITS	Receiving retirement benefits	x	x	x	x		
BENEFITS.1	Type of retirement benefits	Shown if BENEFITS = yes	Shown if BENEFITS = yes	Shown if BENEFITS = yes	Shown if BENEFITS = yes		
SEMITEXT	Semi-retirement transition text		x				
R3	Employment conditions as a reason for past retirement	x	x				
R4	Other factors as a reason for past retirement	x	x				
Rw1	Reasons for working after retirement		x				
Rw3a	Planning full retirement in next 5 years		x				
Rw3a.1	Planning full or semi retirement in next 5 years			x			
R5	Satisfaction with retirement	x					
Rs5	Provided unpaid help in past 12 months	x			x		
Rs6	Type of unpaid help provided	Shown if Rs5 = yes			Shown if Rs5 = yes		
Rs7_SDR	Research, public policy, govt or professional	Shown if USPHD = yes			Shown if USPHD = yes		

	activities in past 12 months (SDR)						
Rs8_SDR	Type of research, public policy, govt or professional activities in past 12 months (SDR)	Shown if USPHD = yes <u>AND</u> Rs7_SDR = yes			Shown if USPHD = yes <u>AND</u> Rs7_SDR = yes		
Rs7_NSCG	Research, public policy, govt or professional activities in past 12 months (NSCG)	Shown if USPHD = no			Shown if USPHD = no		
Rs8_NSCG	Type of research, public policy, govt or professional activities in past 12 months (NSCG)	Shown if USPHD = no <u>AND</u> Rs7_NSCG = yes			Shown if USPHD = no <u>AND</u> Rs7_NSCG = yes		
Rs4	Frequency of social interaction	x					
E13.1	Functional limitation - seeing	x	x	x	x	x	x
E13.2	Functional limitation - hearing	x	x	x	x	x	x
E13.3	Functional limitation - walking	x	x	x	x	x	x
E13.4	Functional limitation - lifting	x	x	x	x	x	x
E13.5	Functional limitation - concentrating, remembering, making decisions	x	x	x	x	x	x
E14	Age at which functional limitations started	Shown if any E13.1-5 ≠ None	Shown if any E13.1-5 ≠ None	Shown if any E13.1-5 ≠ None	Shown if any E13.1-5 ≠ None	Shown if any E13.1-5 ≠ None	Shown if any E13.1-5 ≠ None

Rh1	Quality of physical health	x					
Rh6	Has health insurance	x					
Rh7	Type of health insurance	Shown if Rh6=yes					
Rh8	Has Medicare prescription drug plan	x					
Rf1	Has enough money to meet basic needs	x					
Rf3	Confidence in having enough money to live comfortably in retirement	x					