



The Impacts of the Social Security Statement Redesign on People's Knowledge and Behavioral Intentions: A Survey Experiment

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Abstract

Social Security information can be complex but is crucial for financial planning. The Social Security Statement, which was recently redesigned, aims to better inform the public. We assess the impact of the Statement’s redesign on people’s understanding of Social Security, their interest in acquiring further information, and their intended behavior, including their intended age for claiming retirement benefits. We do this through a randomized control trial of an information treatment that uses the revised and old versions of the Statement for the treatment and control groups, respectively. Finally, we show respondents an information screen and links that encourage them to check the revised Statement through their *my* Social Security account, and test whether those exposed to the revised Statement are more likely to click on them. We find that the redesigned Statement is more successful in improving understanding of critical issues around benefits. We also find evidence of higher clarity and interest in acquiring more information among those assigned to the redesigned Statement treatment, though we find no effects on clicks to *my* Social Security links. The redesign also affects the ages respondents intend to claim, but these effects dissipated by the time of the follow-up survey.

Citation

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<https://mrdrc.isr.umich.edu/publications/papers/pdf/wp450.pdf>

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1. Introduction

Americans' levels of Social Security literacy are problematic. According to our previous analysis of survey data, 63% of adults in the United States feel that they are not knowledgeable about what their retirement benefits will be (Yoong et al. 2015). In that survey, only 35% of respondents could correctly identify their early eligibility age, or EEA (62), 21% could provide the correct full retirement age, or FRA, based on their year of birth (66 or 67), and only 5.4% of respondents could provide the correct age at which they effectively maximize Delayed Retirement Credits, or DRCs (age 70) (Yoong et al., 2015). Low Social Security literacy has also been documented elsewhere (Carman and Hung 2018).

Poor knowledge may result in potentially suboptimal decisions, such as claiming Social Security retirement benefits too early. Research has consistently shown that well-informed individuals tend to make better decisions than ill-informed ones in many different areas, including retirement and financial decision-making (e.g. Chan and Stevens 2008; Mastrobuoni 2011; Bhargava and Manoli 2015).

Information about Social Security is thus critical. From 2014 to 2016, a printed version of the Social Security Statement (hereafter, "the Statement") was sent out to workers at five-year age increments from 25 to 55 and annually to those ages 60 and older. Since 2016, SSA has automatically mailed Statements annually only to workers ages 60 and older, if they do not have a *my* Social Security account and they are not receiving benefits (Smith 2020).¹ The Statement includes information about expected

¹ *my* Social Security is an online platform of the Social Security Administration. It provides users with a single point of access to all SSA electronic services and allows them to obtain

benefits to individuals with an earnings record. Ultimately, the Statement aims to provide individuals with the information necessary to prepare for their financial future (Smith and Couch 2014) and ensure the accuracy of earnings records (Smith 2015). The fact that Social Security benefits are the primary source of income for a significant portion of elderly U.S. households (Dushi et al. 2017) highlights the centrality of the Statement as an information and decision-support document for workers and their families.

Prior research has examined the impact of the Statement on recipients' retirement and benefits knowledge and behaviors. While little has been written about whether the Statement contributes to ensuring the accuracy of earnings records, studies have delved into whether the Statement improves workers' knowledge about their benefits and whether it affects retirement planning and behaviors. Overall, there is some evidence that the Statement increases workers' knowledge about their Social Security benefits (Matrobuoni 2011; Smith and Couch 2014; Sass 2015; Armour 2020), as well as their planned claiming ages (Armour 2020) and disability insurance claims (Armour 2018). However, studies have not identified significant impacts of the Statement on retirement behaviors, such as retirement savings (Carter and Skimmyhorn 2018).

In recent months, however, the Statement's structure and formatting, as well as the information it includes, have undergone significant revisions. One particularly noteworthy change is that the redesigned Statement provides retirement benefit

information about their own SSA benefit entitlements, including their latest Social Security statement, earnings history, and personalized estimates of future benefits. Users are also able to conduct a number of operations online, such as requesting a replacement Social Security card, changing personal information, or applying for benefits (via a link) without having to call or visit a Social Security office.

estimates for all ages from 62 (the EEA) to 70 (when delayed retirement credits stop accruing), while the previous version included benefit estimates only for ages 62, FRA, and age 70. Furthermore, the Statement now presents this information via a simple graph alongside a short explanatory text box. We describe these changes in more detail in the next section.

Understanding the effect of these changes on workers and their family is important given the Statement's position as a key source of information. By providing personalized, ostensibly salient information on retirement, disability, spousal, and survivor benefit eligibility, it can act as a critical input into financial and retirement planning.

While the addition of substantive content in the Statement is critical, the way information is presented also matters. The provision of clearer Social Security information has been shown to improve both knowledge and intended behaviors. Perez-Arce et al. (2019) and Perez-Arce et al. (2021) show that providing clearer information about Social Security benefit rules increases average intended claiming age, suggesting that imperfect knowledge may be partly responsible for early claiming. Similarly, Liebman and Luttmer (2015) find that small informational interventions about the effect of work income on benefits can encourage work among older adults.

In this paper, we present results from two experiments to understand the redesigned Statement's impact on people's knowledge and behavior intentions. Specifically, we study the impact of being exposed to the redesigned Statement (versus the old version) on: people's knowledge of Security programs and benefits, their confidence in their knowledge of Social Security, their interest in learning more, and

and finally for age 62 (see below for reproductions of the sections in the old and redesigned Statement). A four-paragraph description of how benefits are calculated appeared below the benefit estimates in the old version of the Statement.

In the redesigned Statement, benefit estimates are provided for each age, from 62 to 70, with a short statement added that provides a simple description of how the benefit is calculated and how benefits increase with delays in claiming.

Figure 1: Redesigned section of the Statement showing benefit amounts by claiming age

Figure 2: Section of the previous Statement presenting benefit amounts by claiming age

Perhaps most noticeably, the information is now presented via a simple graph, which makes the difference in benefit amounts by claiming age more salient (see Figures 1 and 2). Changes were also made to how other information (Disability Insurance, survivor benefits, Medicare, taxes, earnings record, and others) is presented in the Statement.

While much of the information appears in both versions of the Statements, the redesigned version may make it more noticeable and clearer. For instance, the fact that individuals may be able to claim benefits when their spouses die is noted in both Statements, however, the placement differs. In the new version, it appears on the same page as the benefit estimates, whereas in the old version, it appears on the page with the earnings record. This is also true for other information, such as individuals' eligibility for benefits on their ex-spouses' record, the future of Social Security, or that benefits are adjusted for inflation. However, the redesigned version is much shorter, and the formatting and delivery of the information have been modified for clarity and accessibility, potentially making this information more salient than it was in the old version.

3. Approach

To provide evidence of the redesigned Statement's impact on people's knowledge and behavior intentions, we conducted a pair of randomized control studies, one using a sample obtained from the *Prolific* platform, and another one using a sample from the Understanding America Study (UAS).³

³ We obtained IRB approval from the University of Southern California Institutional Review Board on March 8, 2022, and Biomedical Research Alliance of New York on June 16, 2022.

The Prolific panel is among the more commonly used platforms for social science research (Palan and Schitter 2018). The Understanding America Study is a nationally representative panel of approximately 10,000 individuals. The UAS is a probability panel, sampled from physical address (Alattar et al. 2018). Individuals who need it are provided with a tablet and internet access. Hence, results from experiments in the UAS are more likely to be nationally representative. However, since it is more costly to field questions in the UAS, we first conducted the experiment in the Prolific panel which allowed us to test and refine our experimental and survey instruments for the UAS experiment.

With these experiments, we aimed to address two overall questions: (1) Does the public prefer the new streamlined Statement to the old four-page Statement? (2) What is the impact of being exposed to the new Statement (versus the old) on people's knowledge of Social Security's programs and benefits, and on behaviors such as intended benefit claiming?

The Prolific experiment was conducted in June of 2022. We aimed to recruit 1,500 respondents, broadly representative of the U.S.-population of adults between the ages of 30 and 62 (though a handful of respondents were older than that age and were allowed to continue).

The hypotheses were preregistered in the Open Science Framework.⁴

For the Understanding America Study, we invited 3,000 panelists from the

with Protocol number 22-265-1044 and amendment SBER-Modification - Event ID: 196963

⁴ Perez-Arce, Francisco. "The Impacts of the Social Security statement redesign on people's knowledge and behavioral intentions." June 09, 2022. <https://osf.io/w9kzt/>

Understanding America Study (UAS) to participate in this survey experiment. Invited panelists were between the ages of 25 and 70 and not Social Security recipients. We over-sampled respondents so that roughly half of participants have not seen their Statements (based on their answers to prior UAS surveys), meaning that we have a roughly equal proportion of respondents who had and had not previously seen their Statements.⁵

We obtained 2,341 completed responses between July 27 and August 23, 2022, for the first survey, which was given the UAS 473 number. The full questionnaire and other information can be accessed in the UAS survey pages (<https://uasdata.usc.edu/survey/UAS+473>). The data is also publicly available for registered researchers.

With the goal of studying the persistence of impacts, all respondents were invited for a follow-up survey on average one month later. The follow-up survey (UAS 487, <https://uasdata.usc.edu/survey/UAS+487>) took place between August 24 and September 25, 2022. Ninety-four percent of the respondents to the first UAS survey completed follow-up. The protocols and hypotheses were added to the OSF project public site on July 27, 2022.

Through both experiments, we aimed to test two sets of hypotheses using a two-part treatment, which was randomized across participants.

⁵ For this purpose, we used the rich background data on UAS participants collected in the UAS Comprehensive File (Moldoff et al. 2019). The variables we used were collected as part of the biannual “Channels of Social Security Information” survey, which is collected every two years and included in the Comprehensive File.

3.1 Treatments and hypotheses

We randomized every participant into one of two groups, with equal probabilities. Those in the control group, or “Old Statement” group were exposed to the Old Statement, and those in the treatment group, or “Redesigned Statement,” were exposed to the new version of the Statement.

The exposure came in two parts. The first part aimed to reproduce as closely as possible the experience a reader may have when encountering the very first section of the Statement (in their respective versions, according to the randomization). As described earlier in the paper, the very first section in both the old and redesigned Statements includes a table and graphic (respectively) on expected benefits at different claiming ages.

In order to present realistic numbers, we first elicited yearly earnings. Using a retirement calculator, we used the age and reported income data to produce estimates as would be seen by someone in their Statement.

Figures 3 and 4 below show an example of how that would be shown on the screen of someone in the experiment, for the Old and Redesign versions respectively.

Figure 3: Section of the Statement presenting benefit amounts by claiming age in the old version of the Statement

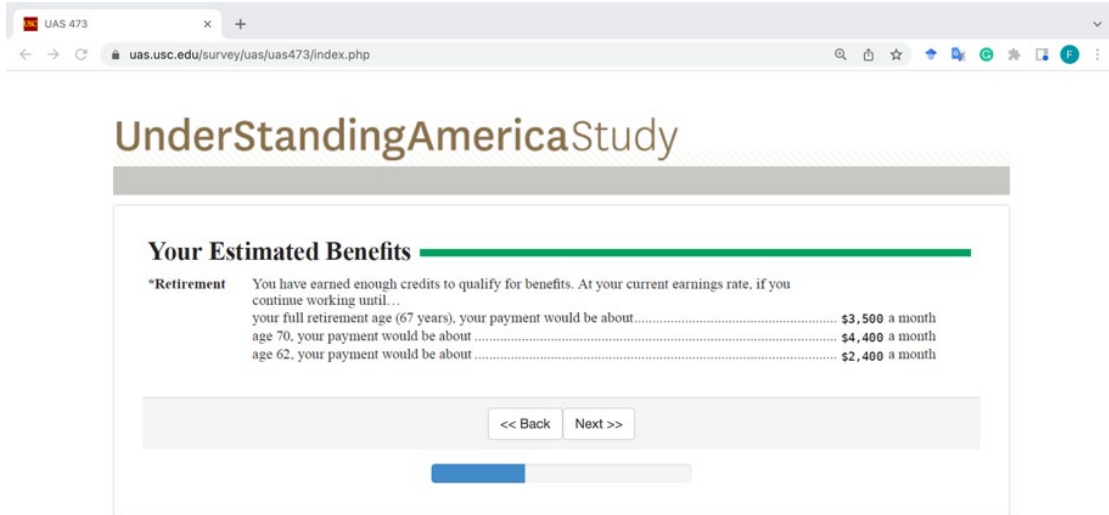


Figure 4: Redesigned section of the Statement showing benefit amounts by claiming age



Soon after those information screens, the surveys include a question asking respondents to choose when they would claim their benefits. The question and response options are included in Appendix A. The goal is to test whether the redesign affected the distribution of intended claiming ages.

The second part consisted of showing respondents a full sample version of the statement (the old or the redesigned according to the treatment arm). The redesigned version of the Statement included the corresponding fact sheets (the corresponding one depending on the age of the participant).

Following this second exposure, we included survey items designed to measure the following outcomes:

- Social Security knowledge test questions;
- confidence in knowledge in the social security knowledge test questions;
- self-reported interest in learning more about Social Security and their own likely benefits;
- satisfaction/opinions on the clarity and usefulness of the statement; and
- views on the likelihood of Social Security being able to pay benefits in the future.

This questionnaire is included in Appendix A.

For a random subset of respondents (two-thirds of the total sample), we also showed respondents a screen that described the *my* Social Security webpage and explained that they could access their own Statement through that site. We recorded the “clicks” on those links, as another measure of interest in further learning.

In the follow-up study, we included questions on claiming age, and self-reported knowledge.

In all cases, we analyze differences between treatment (redesigned Statement) versus control (old Statement) by conducting regressions of the outcomes of interest on a dummy indicating randomization into the redesigned Statement. For robustness, we also estimated the regression models with controls (basic demographics, whether received Statement information before). We do not report these results as they did not make any substantial difference. We also study heterogeneity by age, gender, race/ethnicity, whether they have seen a Social Security Statement recently, and income.

4. Results

4.1 Randomization

Table 1 describes basic demographic characteristics of the sample for each of the experiments. It presents the characteristics in each of the treatment arms, and the p-value of a test of differences across each arm.

The experiment worked well in that there were few significant differences across treatment arms in either of the two experiments. There are three marginally significant differences across arms in the Prolific experiment, but the size for these differences is small. For instance, the average age in the Old Statement treatment is only 0.02 smaller than in the Redesigned Statement treatment, and the proportion men is 51% versus 45%. There are no statistically significant differences among the predetermined variables in the UAS sample. The largest difference is among the proportion of Hispanic respondents, which is 2 percentage points larger in the Redesigned Statement group. We cannot reject the test that all predetermined variables do not jointly predict

assignment to treatment. The p-value for such tests have p-values of 0.28 in the Prolific sample and 0.51 in the UAS sample.

Table 1: Demographic characteristics and orthogonality test in the Prolific and UAS samples

Characteristics	Old Statement	Redesigned Statement	P-value of difference
Prolific Sample			
Age	42.61	42.63	0.095
Male	0.514	0.454	0.058
Less than high school	0.007	0.013	0.462
High School graduate	0.099	0.106	0.918
Some college	0.306	0.307	0.013
College graduate or more	0.588	0.574	0.000
White	0.876	0.877	0.594
Black	0.090	0.075	0.056
Other race	0.052	0.058	0.811
Hispanic	0.065	0.077	0.606
Never seen statement	0.478	0.446	0.416
Yearly earnings	52,941	55,734	0.576
Observations	735	756	
UAS Sample			
Age	46.4	46.0	0.481
Male	0.367	0.392	0.149
Less than high school	0.036	0.037	0.289
High School graduate	0.168	0.164	0.964
Some college	0.364	0.345	0.267
College graduate or more	0.432	0.454	0.528
White	0.803	0.808	0.646
Black	0.117	0.109	0.838
Other race	0.093	0.102	0.292
Hispanic	0.169	0.188	0.108
Never seen statement	0.430	0.433	0.927
Yearly earnings	61,618	66,344	0.317
Observations	1181	1142	

Note: Unweighted means by treatment arm. Third column shows p-value of the test of equality of means across treatment arms. The p-values of the test that all baseline variables do not jointly predict treatment status equal 0.28 in the Prolific experiment and 0.51 In the UAS experiment.

4.2 Impact of the claiming ages information

In the very first section of the Statement, the old version highlights what the benefits would be if claiming benefits at the earliest eligibility age (age 62), the FRA (67 for the vast majority of our participants), and the age at which benefits are maximized (age 70; see Figure 2).⁶ The corresponding section in the redesigned version, instead, shows the expected benefit amount at every age from 62 to 70. It is therefore important to analyze whether exposure to the redesign resulted in a distribution of intended claiming ages that de-emphasizes the ages highlighted in the old statement.

Figure 5 below graphs the distribution of intended claiming ages by treatment arm. The error bars denote the confidence interval for the difference between treatment arms in the fraction intending to claim at that particular age.

Those that chose age 62 are indistinguishable between the old and redesigned Statement groups. However, significantly fewer among those exposed to the redesigned Statement chose their FRA or age 70, and more chose the ages between 63 and 66, and 68 and 69. This is consistent with an impact of the redesign away from the “focal ages” highlighted in the old version of the Statement

⁶ There were three respondents in the Prolific and 148 in the UAS sample who reported an age above 62. This is less than 5% of respondents in the UAS and much less in the Prolific experiment. For the few who were 62 or older at the time of the experiment, their FRA was 66 and a few months.

Figure 5: Effects on Claiming Age intentions, Prolific sample

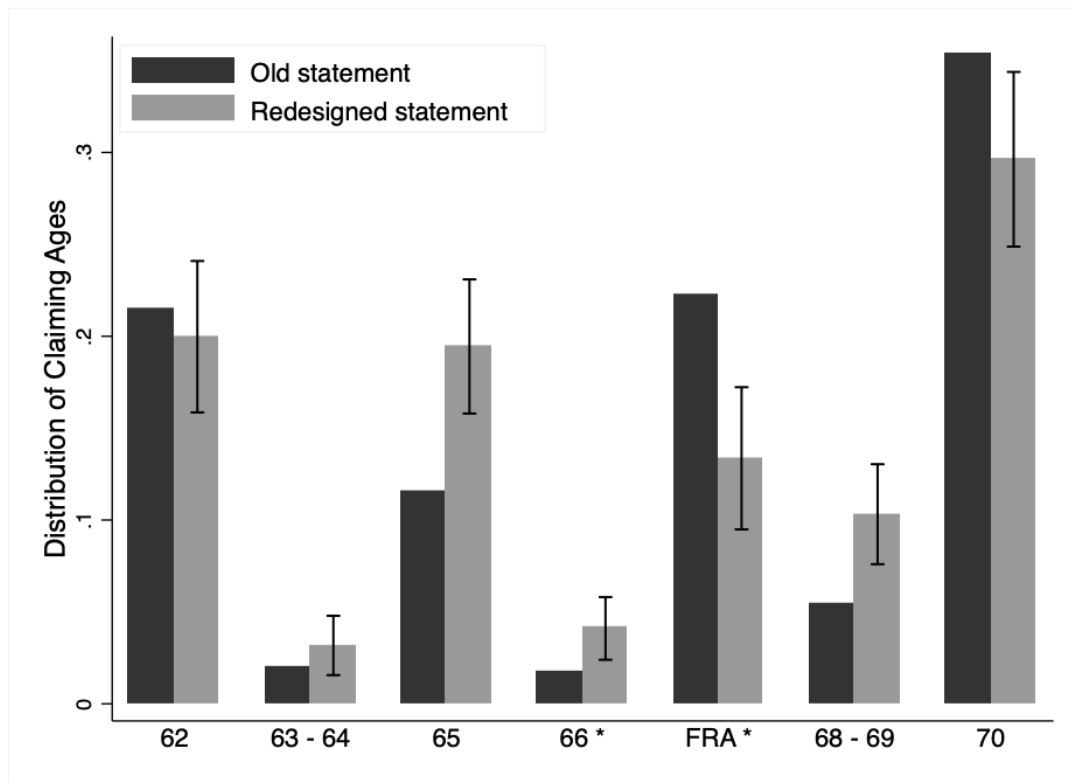


Figure shows the proportion of respondents across treatments intending to claim at 62, 63-64, 65, 66, the full retirement age (67 for 1,492 out of the 1,495 respondents), 68-69, and 70. The black bars show the distribution for those assigned to the old Statement condition, and the gray bars show the distribution for those assigned to the redesigned Statement condition. The range plots show 95% confidence intervals of the difference across the two groups. N=1,495

The results for the experiment in the UAS sample are shown in Figure 6 below. The results are similar in the sense that there are statistically significant differences in the choice of the FRA as the intended claiming age. There are also fewer in the redesign arm choosing age 70, although the difference is only marginally significant. On the flip side, there were significantly higher proportions in the redesign who reported claiming intentions between 63 and 64, at 65, and between 68 and 69.

Figure 6: Effects on claiming age intentions, UAS sample

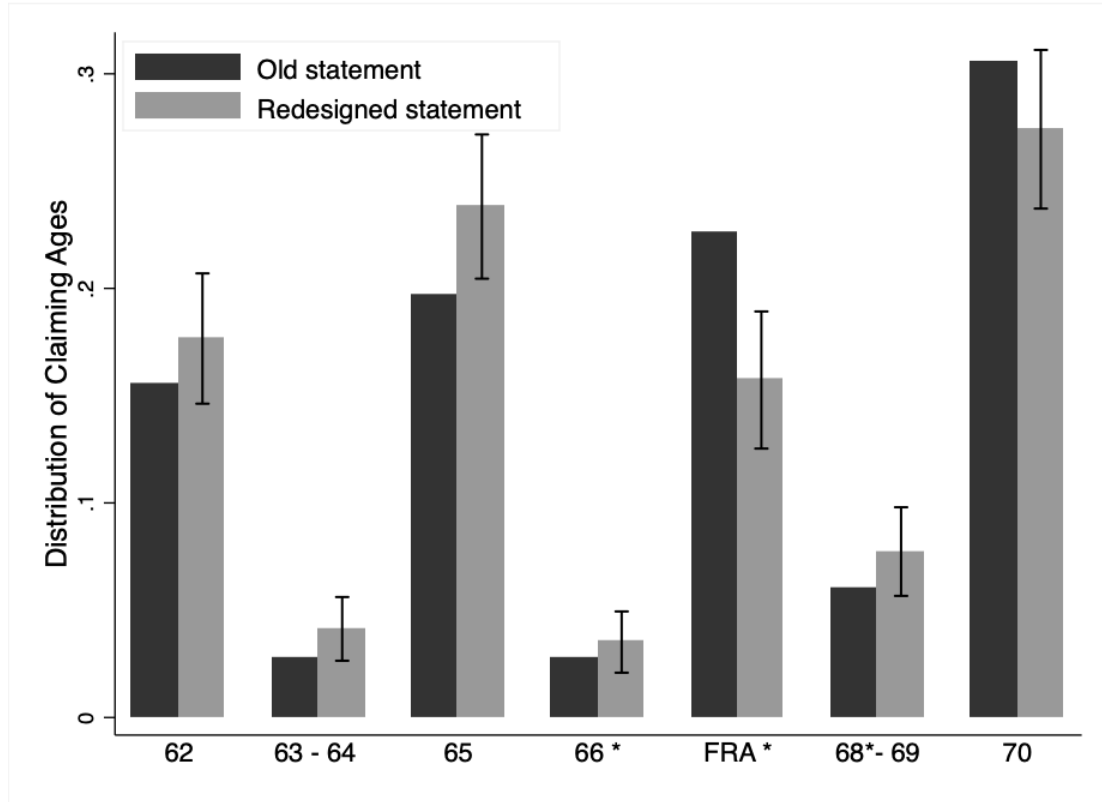


Figure shows the proportion of respondents across treatments intending to claim at 62, 63-64, 65, 66, the Full Retirement Age (67 for over 95% of respondents), 68-69, and 70. The black bars show the distribution for those assigned to the old Statement condition, and the gray bars show the distribution for those assigned to the redesigned Statement condition. The range plots show 95% confidence intervals of the difference across the two groups. respectively. N=2,314. Those born before 1960 are graphed in the FRA columns if their intended claiming age is 66, and in the 68* - 69 if their intended claiming age is between 67 and 69.

It is perhaps concerning that there was an almost significant increase in the proportion claiming at 62 in the UAS sample. There is not a single optimal age at which to claim benefits, since it depends on many individual factors, including credit constraints, life expectancy, and others. However, there is substantial evidence that many people claim too early. Shoven and Slavov (2014) calculate that for most

respondents claiming early results in a reduction in the present discounted value of lifetime benefits, Bronshtein et al. (2016) argue that, for many, claiming early is indeed a suboptimal choice.

Hence, the somewhat lower proportions in the redesigned statement who are reporting an intention to claim at 70, and the fact that much of the drop in FRA is shifting toward earlier ages rather than toward 68 and older, may be concerning. In fact, when we create a single “average claiming age” variable, we find the perhaps *ex-ante* counterintuitive result that respondents seeing the redesigned Statement report a lower claiming age intention on average both in the Prolific and the UAS sample, as shown in Table 4.

4.3 Knowledge scores

Being randomized into seeing the redesigned Statement led to more accurate answers in both the Prolific and the UAS experiments.

The Prolific survey included 14 questions aimed to measure several of the Social Security concepts that the Statement touches upon. Among those exposed to the old-version Statement, the average number of correct questions was 10.15. Those exposed to the redesigned Statement correctly answered 0.37 additional questions (see Table 2 below).

Of particular interest is whether the effect is concentrated among participants who had never seen a Statement before or among participants who had had experience with the Statement. The positive effect was statistically significant both among those who were seeing a Statement for the first time and those who had seen one earlier. The redesigned sample Statement increased the number of correct answers by 0.44 among

those who had not seen their Statement before the experiment and by 0.26 among those who had. While both coefficients are statistically significantly different to zero (at the 5% and 10% confidence levels), they are not statistically significantly different from each other.

Table 2 also shows the Prolific results for each individual question. There were significant effects on questions testing respondents' knowledge on how benefits are calculated, how retirement benefits are affected by claiming age, whether benefits are adjusted for inflation, and the relationship between claiming and retirement (that is, whether people must claim at the moment they retire from work), and a vignette-based question to measure understanding of the relationship between claiming age and monthly benefits. As discussed in Section 2, many of these are aspects where the information is more easily visible in the redesign.

Table 2: Effects on the redesign of the Social Security Statement on understanding, Prolific survey

Sample	All	All	Had not seen statement	Had seen statement
Question	Mean dep. variable in control group	Coef	Coef	Coef
Total correct	10.15	0.372*** (0.118)	0.441** (0.177)	0.258* (0.153)
How benefits are calculated	0.363	0.116*** (0.026)	0.146*** (0.036)	0.081** (0.035)
Non-worker can claim if spouse qualifies {T/F}	0.850	0.014 (0.018)	0.021 (0.030)	0.002 (0.022)
Benefits not affected by age when claimed {T/F}	0.919	0.038*** (0.012)	0.050** (0.020)	0.027* (0.015)
Benefits are adjusted for inflation {T/F}	0.648	0.054** (0.024)	0.089** (0.037)	0.017 (0.031)
Benefits paid for by taxing both workers & employers {T/F}	0.956	-0.001 (0.011)	0.010 (0.017)	-0.011 (0.014)
Workers who pay SS tax entitled to SS disability {T/F}	0.955	0.001 (0.011)	-0.008 (0.018)	0.008 (0.013)
Only children under 18 can claim benefits when SS taxpayer dies {T/F}	0.724	0.010 (0.017)	0.022 (0.028)	-0.004 (0.021)
Only spouses w children can claim benefits when SS taxpayer dies {T/F}	0.657	0.035 (0.024)	0.019 (0.037)	0.044 (0.032)
Divorced persons entitled {T/F}	0.605	0.027 (0.025)	-0.011 (0.038)	0.052 (0.033)
Must claim benefits immediately after retirement {T/F}	0.844	0.030* (0.018)	0.038 (0.026)	0.022 (0.024)
Relationship between retirement and claiming age	0.499	-0.001 (0.026)	0.038 (0.038)	-0.038 (0.035)
When respondent should claim (vignette)	0.731	0.041* (0.023)	0.063* (0.034)	0.019 (0.030)
Retirement Earnings Test	0.657	-0.015 (0.025)	0.000 (0.037)	-0.028 (0.034)

Source: Author's calculations using data from the Prolific and UAS survey experiments.

Notes: Outcome measure in top row is the number of correct responses to test questions. {T/F} = True/False question (i.e., 1/0, respectively). All other questions require a multiple-choice response. The survey questions are listed in Appendix A. Asterisks indicate results statistically different from zero: * (10%), ** (5%), *** (1%).

For variables where the redesign did not have an effect, it is not always possible to ascertain whether this is because the redesign did not highlight this topic, or that the questions were not successful in measuring those concepts well. It seems clear, however, that some questions were not very informative because a very large majority of respondents got those questions right. For instance, when tested in the Prolific sample, 96% correctly answered the True or False questions about whether benefits are paid for by taxes on both workers and employers, and the question on workers' eligibility for disability. Given that these questions were not very informative, they were not included in the UAS experiment survey.

The UAS survey included nine of the 14 test questions in the Prolific experiment. The results on these questions are shown in Table 3 below. On average, UAS experiment participants who were assigned to the "Old Statement" got 6.8 questions correct (out of 9). However, those assigned to the redesigned Statement got an additional 0.21 questions right. Breaking the sample into those who had and had not seen a version of the Statement before, we find a larger effect for those who had already seen the Statement. For them, the effect was 0.32, whereas for those first exposed to a Statement the effect was 0.06 (indistinguishable from zero). This contrasts with the breakdown in the Prolific sample.

The questions where there was a significant effect were those that ask about how benefits are calculated; whether benefits are adjusted for inflation (only significant for those who had seen their statement before); whether spouses with and without children can claim benefits upon death of eligible spouse (significant for the full sample and those first exposed to the statement only); and whether people must claim benefits right after retirement.

Table 3: Effects on the redesign of the Social Security Statement on understanding, Understanding America Study

Question	All	All	Had not seen statement	Had seen statement
	Mean dep. variable in control group	Coef	Coef	Coef
Total correct	6.836	0.207** (0.086)	0.061 (0.127)	0.324*** (0.105)
How benefits are calculated	0.385	0.060*** (0.020)	0.002 (0.029)	0.105*** (0.027)
Non-worker can claim if spouse qualifies {T/F}	0.812	-0.016 (0.016)	-0.039 (0.028)	0.002 (0.019)
Benefits not affected by age when claimed {T/F}	0.891	0.006 (0.013)	-0.007 (0.023)	0.017 (0.014)
Benefits are adjusted for inflation {T/F}	0.679	0.022 (0.019)	-0.020 (0.031)	0.055** (0.024)
Only children under 18 can claim benefits when SS taxpayer dies {T/F}	0.870	-0.014 (0.014)	-0.011 (0.025)	-0.015 (0.015)
Only spouses w children can claim benefits when SS taxpayer dies {T/F}	0.662	0.041** (0.020)	0.072** (0.031)	0.019 (0.025)
Must claim benefits immediately after retirement {T/F}	0.677	0.063*** (0.019)	0.063** (0.031)	0.064*** (0.023)
Relationship between retirement and claiming age (vignette)	0.492	0.026 (0.021)	-0.021 (0.031)	0.063** (0.027)
When respondent should claim	0.817	0.030 (0.020)	0.022 (0.031)	0.036 (0.024)

Source: Author's calculations using data from the Prolific and UAS survey experiments.

Notes: Outcome measure in top row is the number of correct responses to test questions. {T/F} = True/False question (i.e., 1/0, respectively). All other questions require a multiple-choice response. The survey questions are listed in Appendix A and are available in the documentation for the UAS survey in the UAS data pages <https://uasdata.usc.edu/survey/UAS+473>. Asterisks indicate results statistically different from zero: * (10%), ** (5%), *** (1%).

Overall, the results from both the Prolific experiment and the UAS experiments show positive effects of the redesign in the understanding of key concepts. While the results are similar overall, there are differences in the results broken down by previous Statement exposure. The Prolific impacts were stronger among the unexposed sample, whereas the UAS sample showed stronger impacts among the exposed sample.

While it is unclear what drives this difference, it is important to keep in mind that the differences between the two groups in question (had seen the Statement or not) may or may not be attributable to the actual differences in prior Statement exposure, because the two groups differ in other characteristics (most notably age). In Appendix B, we show further analysis of heterogeneity by these and other variables.

4.4 Overall evaluation of the Statement, confidence, and interest in learning more

In the Prolific sample, those assigned to the redesigned Statement became more confident in their knowledge about Social Security. Following the knowledge test questions, respondents were asked to evaluate their confidence about their responses on a 1 to 4 scale. Those assigned to the redesigned Statement, reported on average a higher confidence scale (0.12 points significant at the 1% confidence level).

The surveys included three items asking respondents their subjective evaluation of the sample Statement they were previously shown. The questions asked respondents to rate the sample Statement they read, from 0 to 10, in terms of the clarity of the information, how interesting the information was, and how interested they were in learning more information

In the Prolific sample, those exposed to the redesigned Statement, provided significantly more positive evaluations of the Statement on each of the three variables.

Whereas those exposed to the old Statement provided average scores of 6.7 in the clarity of information, 6.0 in how interesting the information was, and 6.2 in their interest for acquire more information, those exposed to the redesigned Statement provided ratings that were on average 0.23, 0.26, and 0.30 higher (significant at the 5%, 10%, and 10% respectively). These results are depicted in the left panel of Figure 7.

The higher knowledge, confidence and ratings of the sample Statement did not, however, translate into more clicks to the links provided for the *my* Social Security account that could have allowed them to download their statement and acquire more information. Perhaps the difference in interest was not strong enough to translate into behavior, but it is also possible that the experiment was not powered enough to detect small effects which may exist.

For these variables, the results for the UAS sample did not correspond with those in the Prolific experiment. The redesigned Statement did not significantly affect the ratings on the clarity and interest of the information, nor the ratings of respondents' interest in acquiring more information. The effects on clicks to the *my* Social Security website were also indistinguishable from zero.

Figure 7: Overall evaluation of the statement, confidence, and interest in learning more

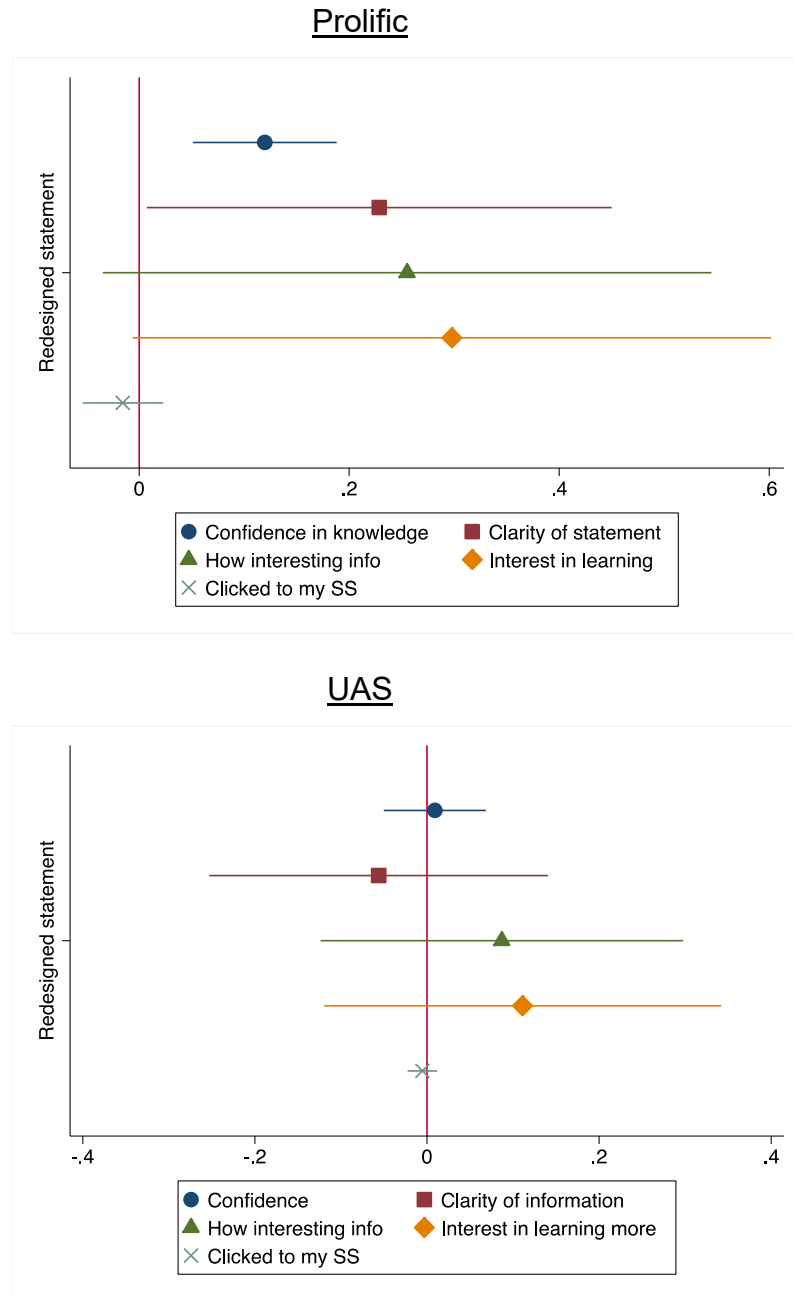


Figure shows coefficients from separate regressions of the independent variables (as listed in the legend) against the indicator variable of assignment to the redesigned Statement. Bars represent 95% confidence intervals. Left panel: Prolific sample, N = 1,467. Right panel, UAS sample, N= 2,313

4.5 Effects on confidence in the future of Social Security

The Social Security trust fund projections are often discussed in the media. However, there seems to be substantial misunderstanding about what it means for trust fund reserves to be “depleted.” In particular, it is often the case that people equate depletion with no benefits being paid as opposed to three-quarters or 80% of scheduled benefits that would still be paid even in the absence of policies to increase the trust funds’ revenues. Misunderstanding of this issue is problematic, as it may affect labor supply if people undervalue their required contribution. This perceived uncertainty can be an important source of welfare loss. Luttmer and Samwick (2018) estimate that the uncertainty around retirement benefits creates a reduction of welfare equivalent to about 6% of Social Security retirement benefits.

Both versions of the Statement include notes about the fact that Social Security would be able to pay a high fraction of benefits even if the trust fund is depleted. However, this note is more visible in the redesigned version. We aim to understand whether this had an impact. The Prolific experiment included two questions about this, and the UAS included three questions. The questions asked about the level of confidence that, when individuals retire, the trust fund will be able to pay “full,” “at least some,” or “at least two-thirds” (only in the UAS) of the benefits as presently scheduled. For all the variables in each of the experiments, the coefficient for the redesigned Statement is positive but statistically insignificant. Figure 8 presents the results for the UAS.

Figure 8: Effects on confidence in the future of Social Security, UAS

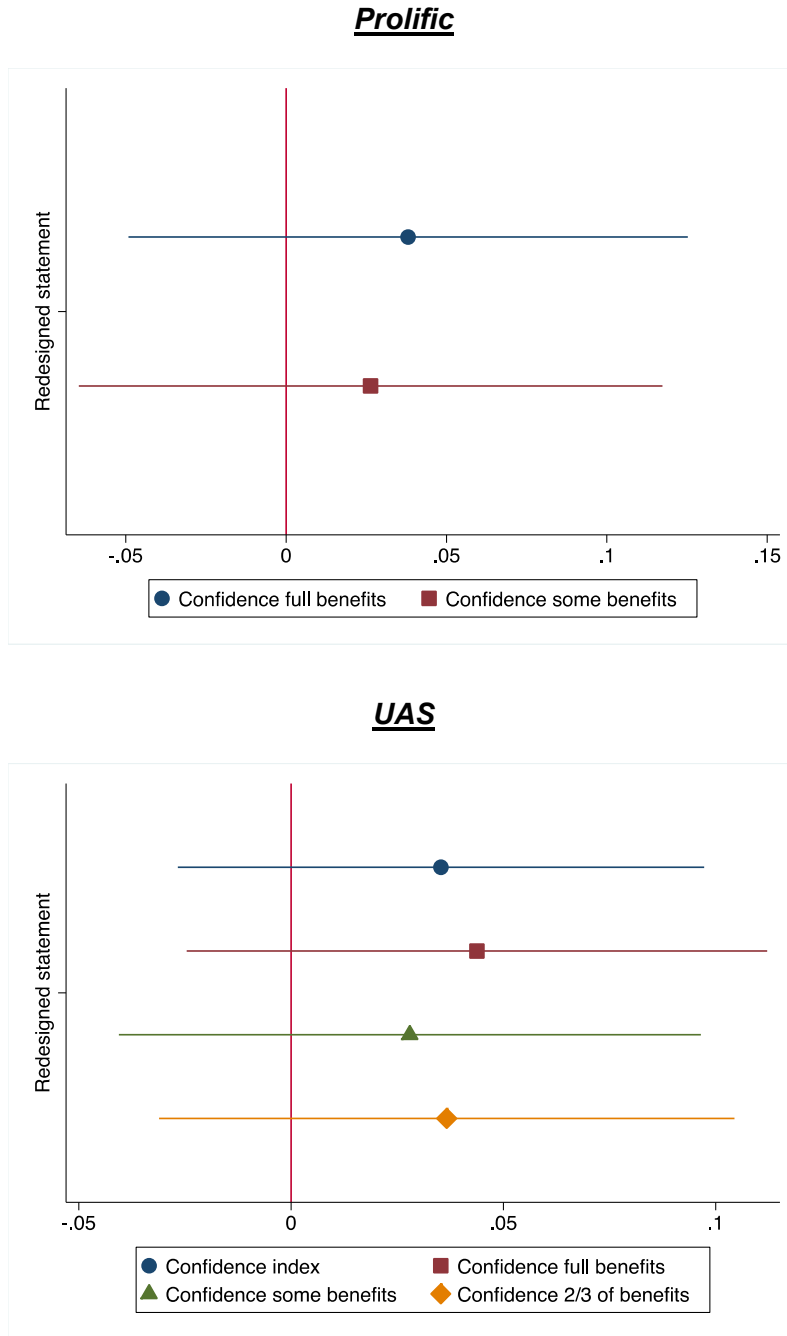


Figure shows coefficients from separate regressions of the independent variables (as listed in the legend) against the indicator variable of assignment to the redesigned Statement. point estimates. Bars represent 95% confidence intervals. Left panel: Prolific sample, N = 1,467. Right panel, UAS sample, N= 2,311

4.6 Persistence of effects

Every participant in the UAS experiment was invited to answer a follow-up survey, which took place approximately one month after the original survey. The response rate for the follow-up was over 94%. The very low attrition rate limits the concern that there are biases from differential attrition. The follow-up UAS survey included questions that aimed to measure self-reported knowledge levels and claiming age intentions.

Since the survey aimed to be very short, the knowledge questions included were self-assessed knowledge ratings in lieu of the test questions in the experiment survey. Four separate questions measure self-reported knowledge about how benefits are calculated, the age of full retirement benefits, a question about earnings when claiming before FRA (Retirement Earnings TEST), and a question about benefit amounts. Figure 9 depicts the coefficients for being assigned to the redesigned Statement. None of the coefficients are statistically significant different from zero. This could mean that any knowledge effects are short-lived. It could also mean, however, that the self-reported measures of knowledge do not successfully capture the knowledge gains detected from the test questions. Unfortunately, we cannot distinguish between the two explanations.

Figure 9: Self-assessed knowledge in the follow-up survey

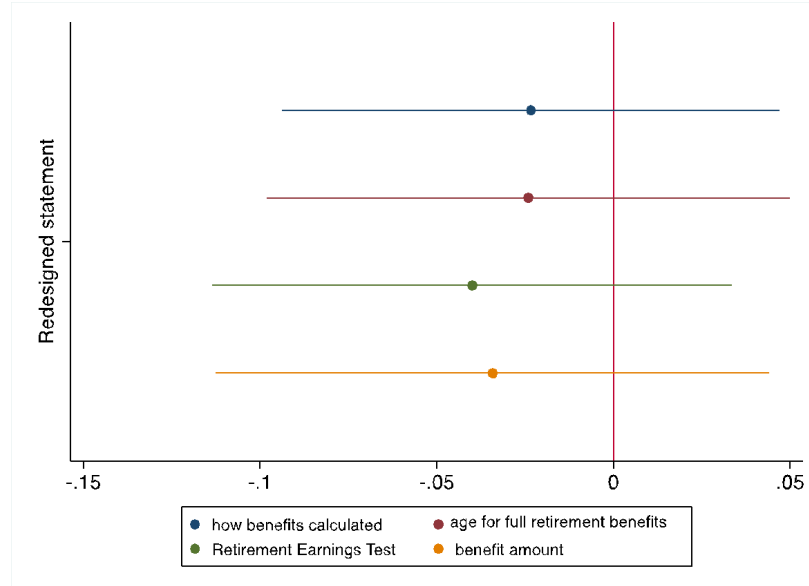


Figure shows coefficients from separate regressions of the independent variables (as listed in the legend) against the indicator variable of assignment to the redesigned Statement. Bars represent 95% confidence intervals. UAS sample, N= 2,164

The follow-up survey repeated the claiming age intention question used in the experiment survey. Figure 10 constructs the intended claiming age distribution as in Figure 6 but using the variable from the follow-up survey. The difference in distribution from the earlier survey is no longer apparent, suggesting that the effects on claiming age intentions dissipated during the interim weeks.

Figure 10. Claiming Age distributions in the Follow-Up survey

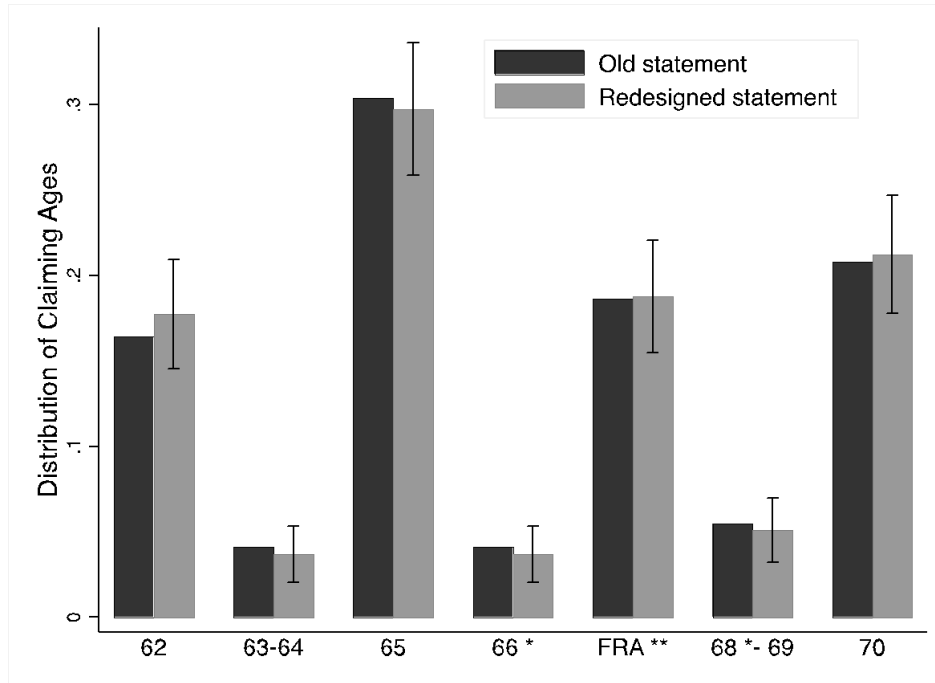


Figure shows the proportion of respondents across treatments intending to claim at 62, 63-64, 65, 66, the FRA (67 for over 95% of respondents), 68-69, and 70. The black bars show the distribution for those assigned to the old Statement condition, and the gray bars show the distribution for those assigned to the redesigned Statement condition. The range plots show 95% confidence intervals of the difference across the two groups, respectively. N=2,154. * Those born before 1960 are graphed in the FRA columns if their intended claiming age is 66, and in the 68* - 69 columns if their intended claiming age is between 67 and 69.

4. Conclusions

The Social Security Statement is a key information resource for workers and their families that can act as a central decision-support tool for retirement and other financial planning. In recent months, the Statement was redesigned in terms of format, length, content type, and presentation. Its new features aim to improve the clarity, accessibility, and usefulness of the Statement to the public.

We conducted an experiment using both the Prolific and UAS panels to test the impacts of the redesign. We aimed to assess whether the redesign leads to improved learning of concepts, and raised confidence in Social Security's ability to pay for at least some of the benefits under current law. We examined how participants evaluated the Statement, whether it affected their interest in learning more, and whether they changed their intended claiming age.

The experiment did not set out to measure the impacts of being exposed to the new Statement against not being exposed to any information. Rather, it aimed to compare improvements over and above those that may be associated with being exposed to the old Statement. In this sense, the experiment set a high bar for the redesigned Statement.

We found statistically significant improvements in learning after being exposed to the redesign. Our interpretation is that people were better able to learn from the redesigned Statement than from the old version of the Statement. There were no consistent differences across the experiments in terms of whether those who were previously exposed to the Statement benefited more or less from the redesign, so it is plausible that both groups benefit from the redesign. We also found some positive

effects on respondents' evaluations of the clarity and interest of the information, as well as on their self-reported interest in learning more. However, these results were only significant in one of the two experiments. Improvements in the confidence in the future of Social Security were small and statistically insignificant.

An important change in the redesigned Statement is the way it shows expected benefits and how they would change depending on claiming age. While the old statement showed benefits at three focal ages (full retirement, 62, and 70, in that order) in a table, the redesigned Statement shows graphically how they would change per each year of delayed claiming. We find that this results in a more even distribution of intended claiming ages with lower spikes at the FRA and age 70.

This is perhaps a positive development, showing that the redesigned Statement leads to a better understanding of the fact that one can claim at any age between 62 and 70, and that monthly benefits increase continuously as claiming is delayed. It is possible, but we cannot test, that this reflects better choices for some.

However, the average claiming age under the redesigned Statement is lower. More respondents in the redesigned Statement condition reported an intended claiming age under 67. This could be problematic as there is evidence that many people claim too early. Of course, it is entirely possible that these effects on intended claiming do not translate into effects on actual claiming ages "in the real world." Indeed, our findings showed that the effects may dissipate with time. More research is needed. One avenue for future research is to explore ways in which the later claiming ages can be highlighted to get people to consider later claiming within the framework of the redesigned Statement. One possibility would be the use of terms such as "Minimum Benefit Age"

and “Maximum Benefit Age” to label the bars in the graphics, as explored in Perez-Arce et al. (2019).

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Appendix A. Survey questions

el005 (after info age receive benefits with scale in section Section3)

Given the information you have just seen, at what age do you plan to start receiving Social Security benefits

1 62

2 63

3 64

4 65

5 66

6 67

7 68

8 69

9 70

END OF IF

F1. Please answer the following questions based on the sample Social Security Statement you were shown earlier in the survey

On a scale of 0 to 10, where 0 is not clear at all and 10 is very clear, how clear is the information presented in the statement?

[Response options go from 0 “Not clear at all at all to 10 Extremely clear]

F2.

On a scale of 0 to 10, where 0 is extremely uninteresting and 10 is extremely interesting, how interesting is the information presented in the statement?

[Response options go from 0 (labeled “extremely uninteresting”) to 10 (labeled “extremely interesting”)]

F3. On a scale of 0 to 10, please rate your interest in learning more about your Social Security interest.

[Response options go from 0 Not interested at all to 10 Extremely interested]

F4. Please use the text below to provide any more feedback or thoughts you have about the sample Social Security statement presented earlier in the survey.

[Text box]

THE FOLLOWING QUESTIONS ARE FROM THE WHAT DO PEOPLE KNOW

SURVEY (UAS 231)

The next few questions are about your familiarity with various aspects of Social Security.

q9 (how a worker's Social Security benefits are calculated in section Ssa)

Which of the following best describes how a worker's Social Security benefits are calculated?

If you are unsure, please give your best guess.

1 They are based on how long the person worked and his or her pay during the last five

years

2 They are based on the average of a person's highest 35 years of earnings

3 They are based on the Social Security taxes paid and the interest on those taxes

4 They are based on a person's income tax bracket when he or she claims benefits

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

q10 intro (Section Ssa)

Next, please tell us if you believe the following statements to be true or false.

SUBGROUP OF QUESTIONS

q10a (benefits if their spouse qualifies for SS in section Ssa)

Someone who has never worked for pay may still be able to claim benefits if his or her

spouse qualifies for Social Security.

1 True

2 False

q10b (Social Security benefits are not affected by claiming age in section Ssa)

The amount of Social Security retirement benefits is not affected by the age at which

someone starts claiming

1 True

2 False

q10c (Social Security benefits are adjusted for inflation in section Ssa)

Social Security benefits are adjusted for inflation

1 True

2 False

q10f (Social Security is paid for by a tax placed on both workers and employers.

NOT INCLUDED IN UAS EXPERIMENT

in section Ssa)

Social Security is paid for by a tax placed on both workers and employers

- 1 True
- 2 False

q10g (if disabled most are entitled to SS in section Ssa). NOT INCLUDED IN UAS EXPERIMENT

Workers who pay Social Security taxes are entitled to Social Security disability benefits

if they become disabled and are no longer able to work

- 1 True
- 2 False

18 q10h (children under 18 get SS benefits in section Ssa)
If a worker who pays Social Security taxes dies, any of his/her children under age

may claim Social Security survivor benefits

- 1 True
- 2 False

q10i (spouse entitled to benefits in section Ssa)

If a worker who pays Social Security taxes dies, his/her spouse may claim Social Security survivor benefits only if they have children

- 1 True
- 2 False

q10j (divorces person never entitled in section Ssa)
A divorced person is never entitled to receive retirement benefits on their ex-spouse's

record

- 1 True
- 2 False

q10k (People have to claim Social Security retirement benefits as soon as they retire from work. in section Ssa)

People have to claim Social Security retirement benefits as soon as they retire from work.

- 1 True
- 2 False

END OF SUBGROUP
END OF GROUP

q11 (confidence true, false in section Ssa)
In general, how confident are you that the responses you just gave to these true or false

questions are correct?

- 1 Very confident

- 2 Somewhat confident
- 3 Not too confident
- 4 Not at all confident

q12 (automatically deducted in section Ssa). NOT INCLUDED IN UAS

EXPERIMENT

Which of the following is automatically deducted from the Social Security benefits that people

ages 65 and over receive each month?

- 1 Medicare Part B premium
- 2 Premium for Medigap policies
- 3 Income taxes

q13 (N age eligible SS w/o reduction early retirement in section Ssa). NOT INCLUDED IN UAS EXPERIMENT

At what age (are you/are you) eligible to receive Social Security retirement benefits without

a reduction for early retirement?

- 1 61 or younger
- 2 62
- 3 63
- 4 64
- 5 65
- 6 66
- 26
- 7 67
- 8 68 or older
- 9 Never/Not eligible
- 10 Already eligible
- 11 Don't know

NP 02 (FRA in section Naming) NOT INCLUDED IN UAS EXPERIMENT

Another term used by Social Security is Full Retirement Age, or FRA. To the best of your knowledge, what is your personal Full Retirement Age?

NP 03 (work retirement age in section Naming)

Based on Social Security guidelines, what is the relationship between the age at which you

stop working and the age at which you can begin claiming benefits?

- 1 Both occur at the same age
- 2 The age at which you stop working should be first
- 3 The Social Security claiming age should be first
- 4 Any of these combinations are acceptable
- 5 Don't know

NP 08 (when should claim in section Naming)

Imagine an individual, Ms Helen Johnson, who is 68 and earning \$50,000 per year from

her full-time job. She has never claimed Social Security benefits but has found out that she

will be entitled to a \$1,600 monthly retirement benefit if she starts claiming when she turns

70. Which of the statements below is correct?

1 She cannot claim before age 70, unless she stops working

2 She should start claiming right away since her monthly benefit will not increase by waiting

longer

3 She should start claiming at 72 since her benefit at that age will be higher than if she

claims earlier

4 She can claim now, but her benefit will be lower than if she waits until she turns 70.

NP 09 (retirement earnings test statement in section Naming) NOT INCLUDED IN UAS EXPERIMENT

The Retirement Earnings Test (RET) specifies that Social Security withholds benefits if a

person below their Full Retirement Age receives benefits while working, and whose earnings

from this work exceed a certain amount. To the best of your knowledge, which of the

following aspects of the RET is also true?

1 A person's benefit amount is permanently reduced

2 Once a person reaches Full Retirement Age their benefit amount is increased to account

for the withheld benefit

3 The withheld benefit is paid as a lump sum once the person reaches Full Retirement Age.

SECTION E VIEWS ON SOCIAL SECURITY

The following few questions ask about your views of the role and future of Social Security.

q5 (provide you with the level of benefits you are supposed to get under current law in the future in section Ssa)

How confident are you that, when you retire, the Social Security system will be able to provide you with the same level of benefits you are entitled to under current law?

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

q6a (how confident SS pays at least some of benefits in section Ssa)
How confident are you that, when you retire, the Social Security system will be able to pay

you at least some of the benefits you are entitled to under current law?

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

New q6a_b

How confident are you that, when you retire, the Social Security system will be able to pay

you more than two-thirds of the benefits you are entitled to under current law?

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

q6d (replacement by social security in section Ssa)

Which of the options below best describes Social Security retirement benefits?

1 Retirement benefits pay back to workers approximately the same amount they contributed

in Social Security taxes during their working lives

2 Retirement benefits are approximately equal to a person's pre-retirement earnings from

work

3 Retirement benefits are less than a person's pre-retirement earnings from work

4 Retirement benefits are more than a person's pre-retirement earnings from work

Appendix B: Heterogeneity

In this Appendix, we present results on the heterogeneity of effects. We focus on the effects on knowledge scores and on the distribution of intended claiming ages. For the former, we use the variables “total answers correct.” For the latter, we use the indicator of claiming at the “focal” ages highlighted in the old Statement.

All the explanatory variables that we use for this analysis are indicator variables, so that all the analyses can be described as the effects on two comparison groups. For continuous variables such as age, we construct a variable that denotes whether the respondent is above or below the median of that variable in the sample.

The coefficients of interest are: 1) the sum of the coefficient for the treatment indicator, interpreted as the impact of the redesign for the baseline group (for which the predetermined variable equals zero); and 2) the sum of the coefficients for the treatment indicator and the coefficient for the interaction of the treatment with the predetermined variable of interest, interpreted as the impact of the redesign for the comparison group (for which the predetermined variable equals one).

Tables B.1 and B.2 show the results for knowledge scores and intended claiming, respectively. To facilitate comparisons, the results for the regressions without the predetermined variables and interactions are presented in the first column of each table. The following columns show the results for separate regressions, each for one of the set of predetermined variables that we look at. Each of the first 7 columns, shows the results of a regression of the outcome variable (“total answers correct” or “focal age claiming”) against the treatment dummy (assignment to the redesigned Statement), the interaction of the treatment indicator with the predetermined variable of interest, and the

predetermined variable of interest by itself. The last columns show the result of including all the predetermined variables and their interaction with the treatment in a single model. This allows us to study whether some of the variables predict the effect of the treatment conditional on other variables.

Table B.1 shows the results for the knowledge scores. As previewed in the main paper's results section, in the Prolific survey, the effects are stronger for those who had not seen a statement before; while in the UAS experiment the effects are stronger among those who had previously seen it. This is reflected in this table in the negative and positive coefficients for the interaction variable (first column in each panel).

The last column shows the regression where all the predetermined variables and their interactions are shown at once. In both panels, the interaction of the treatment with "had seen the statement before" loses significance. Hence, it is possible that the difference in effects is not driven by the previous experience with the statement, but by other variables that correlate with having previously seen the statement (i.e., age). Since the populations are different (the Prolific sample being less likely to be representative due to unobservables in the selection to the panel), it may be that the puzzling result of different interaction with "had seen statement before" is driven by the interaction with other correlates and differences in the sample composition in the table's two panels.

The effect was stronger for Black and younger respondents, particularly so in the Prolific sample. It was slightly stronger, but insignificantly so for older respondents in the UAS sample.

We study heterogeneity in claiming using an indicator of claiming at the "focal"

claiming ages (62, FRA, or 70) highlighted in the previous version of the Statement. This variable serves as a single measure of the extent to which claiming ages are concentrated on those three ages.

Table B2 shows the extent to which variables explain the effect of the redesign on the bunching at focal ages, captured as the negative effect of the treatment indicator on “focal.” The first column shows this negative effect when the predetermined variable and their interactions are not included. We do not see clear patterns of variables that explain these effects.

Table B.1: Heterogeneity in impacts on knowledge scores

Panel A: Prolific

VARIABLES	all	Never seen statement	Older	Male	Black	Other race	Hispanic	Low income	All
Redesigned statement	0.372***	0.258	0.592***	0.348**	0.280**	0.398***	0.387***	0.452***	0.575*
x_neverseen	(0.118)	(0.158) 0.184 (0.233)	(0.160)	(0.165)	(0.123)	(0.122)	(0.123)	(0.175)	(0.314) 0.025 (0.270)
x_older			-0.479** (0.234)						-0.536** (0.272)
x_male				0.015 (0.237)					-0.038 (0.251)
x_Black					1.024** (0.430)				0.958** (0.441)
x_other_race						-0.447 (0.520)			-0.321 (0.531)
X_Hispanic							-0.119 (0.462)		0.126 (0.466)
x_low income								-0.001 (0.249)	-0.001 (0.250)
Observations	1,491	1,491	1,491	1,491	1,491	1,491	1,491	1,237	1,237
R-squared	0.007	0.047	0.037	0.010	0.014	0.008	0.011	0.011	0.081
Mean dependent variable for White respondents	0	0.478	0.465	0.514	0.0898	0.0517	0.0653	0.489	0

Panel B: UAS

VARIABLES	all	Never seen statement	Older	Male	Black	Other race	Hispanic	Low income	All
Redesigned statement	0.207** (0.086)	0.324*** (0.108)	0.135 (0.117)	0.152 (0.110)	0.189** (0.091)	0.211** (0.091)	0.225** (0.093)	0.414*** (0.134)	0.159 (0.214)
x_neverseen		-0.263 (0.164)							0.087 (0.204)
x_older			0.158 (0.167)						0.101 (0.198)
x_male				0.135 (0.178)					0.156 (0.183)
x_Black					0.021 (0.271)				-0.078 (0.308)
x_other_race						-0.049 (0.292)			-0.216 (0.299)
X_Hispanic							0.036 (0.220)		0.049 (0.246)
x_low income								-0.136 (0.191)	0.063 (0.182)
Observations	2,323	2,323	2,323	2,306	2,306	2,323	1,691	1,679	2,323
R-squared	0.123	0.069	0.004	0.031	0.012	0.052	0.050	0.208	0.123
Mean dependent variable for White respondents	0.430	0.489	0.367	0.117	0.0928	0.169	0.502	0	0.430

Table B.2: Heterogeneity in impacts on claiming age (claiming at focal ages)

Panel A: Prolific experiment

VARIABLES	all	Never seen statement	Older	Male	Black	Other race	Hispanic	Low income	All
Redesigned statement	-0.162***	-0.139***	-0.142***	-0.131***	-0.156***	-0.160***	-0.153***	-0.176***	-0.027
	(0.023)	(0.032)	(0.032)	(0.032)	(0.024)	(0.024)	(0.024)	(0.036)	(0.067)
x_neverseen		-0.050 (0.046)							-0.079 (0.057)
x_older			-0.043 (0.046)						-0.100* (0.058)
x_male				-0.068 (0.046)					-0.077 (0.053)
x_Black					-0.091 (0.084)				-0.164* (0.093)
x_other_race						-0.049 (0.102)			-0.041 (0.113)
X_Hispanic							-0.129 (0.090)		-0.132 (0.099)
x_low income								0.009 (0.051)	0.001 (0.053)
Observations	1,491	1,491	1,491	1,491	1,491	1,491	1,491	1,237	1,237
R-squared	0.032	0.033	0.034	0.034	0.034	0.033	0.033	0.035	0.049
Mean dependent variable for White respondents	0	0.478	0.465	0.514	0.0898	0.0517	0.0653	0.489	0

Panel B: UAS experiment

VARIABLES	all	Never seen statement	Older	Male	Black	Other race	Hispanic	Low income	All
Redesigned statement	-0.078***	-0.086***	-0.059**	-0.084***	-0.083***	-0.085***	-0.096***	-0.098***	-0.060
x_neverseen	(0.020)	(0.026) 0.019 (0.040)		(0.025)	(0.021)	(0.021)	(0.022)	(0.032)	(0.056)
x_older			-0.039 (0.039)						(0.053) -0.098* (0.052)
x_male				0.016 (0.041)					0.015 (0.048)
x_Black					0.041 (0.063)				0.066 (0.080)
x_other_race						0.080 (0.067)			0.062 (0.078)
X_Hispanic							0.108** (0.052)		0.113* (0.064)
x_low income								0.084* (0.046)	0.095** (0.048)
Observations	-0.078*** 2,323	-0.086*** 2,323	-0.059** 2,323	-0.084*** 2,323	-0.083*** 2,306	-0.085*** 2,306	-0.096*** 2,323	-0.098*** 1,691	0.207** 1,679
R-squared	0.007	0.017	0.015	0.007	0.007	0.009	0.011	0.006	0.023
Mean dependent variable for White respondents	0.430	0.430	0.489	0.367	0.117	0.0928	0.169	0.502	0.502