



# Testing Methods to Enhance Longevity Awareness

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# Motivation

- People have some idea of how long they will live.
- These estimates can drive financial decisions:
  - Savings;
  - Annuitization;
  - Claiming social security.
- Important for researchers as well as policymakers.

# Research Questions

- How do people estimate & use subjective survival probabilities when making long-term financial decisions?
- How does information about life expectancy & longevity influence subjective survival probabilities?
- How does information about life expectancy & longevity influence financial decisions?

# Related literature

- People do devote some thought to potential longevity (*Hurd & Smith 2004; Bloom et al. 2006*).
- There are systemic biases in predicting own longevity (*Elder 2013; Wu et al. 2015; Abel et al. 2020*).
- Some groups are overly-optimistic regarding life expectancy (*Ayanian & Clearly 1999; Hurwitz & Sade forthcoming*).
- People consider personal characteristics (*Hamermesh 1985; McGarry 2020*).
- ‘Death denial’ may drive avoiding thoughts about mortality (*Becker 1973; Greenberg et al. 1986; Dor-Ziderman et al. 2019*). Many avoid information about longevity (*McGarry, 2020*).

# Methodology

- National online survey of US respondents age 35-83:
  - Measure subjective life expectancies & longevity risk assessments and compare with life tables.
  - Assess various methods to boost peoples' awareness of the risk of living a very long time
- Prolific platform, compensated.

# Vignettes

- Vignettes are short stories about hypothetical persons confronting the same or similar questions (*van Soest et al. 2011; Brown et al. 2017, 2019; Samek, Kapteyn, & Gray 2019*).
- Survey respondents asked to provide advice to a hypothetical vignette person facing decisions about health, saving, or other economic decisions.
- Advantages:
  - ✓ Randomize treatments.
  - ✓ Compare vignette responses within and across respondents.
  - ✓ Study differences between respondents' own responses vs. their recommendations to vignette individual.
  - ✓ Control variation that might otherwise impart noise to the analysis.

# Experimental design

## 12 manipulations:

- 3 Informational interventions
- 2 timings of info. provided
- 2 economic tasks

## # participants by Treatment group & Vignette presentation

	<u>Life expec.</u>	<u>Longev.</u>	<u>Control</u>	<u>Total</u>
Savings	725	728	730	2,183
Annuitization	734	731	723	2,188
<i>Total</i>	1,459	1,459	1,453	4,371

## Baseline vignette: Annuitization (a)

Next we will describe a financial decision facing Mr. Smith and then we will ask you what you would recommend to this person: Mr. Smith is a single, 60-year-old man with no children. He will retire and claim his Social Security benefits at 65. When he retires, he will have \$100,000 saved for his retirement, and he will receive \$1,400 in monthly Social Security benefits. Imagine that Mr. Smith asks you about how to manage his \$100,000 retirement savings. Please indicate which one of the two options you would recommend:

1. Withdraw the entire \$100,000 all at once from the retirement account, to use as he needs.
2. Receive a regular monthly sum of \$500 (equal to \$6,000 yearly) for the rest of his life.



## Baseline vignette: Annuitization (b)

Just as before, Mr. Smith is still a single, 60-year-old man with no children who will retire and claim Social Security benefits at 65. When he retires, he will have \$100,000 saved for his retirement, and he will receive \$1,400 in monthly Social Security benefits. But now he has a third option that he can choose from. Please indicate which one of the three options you would recommend:

1. Withdraw the entire \$100,000 all at once from the retirement account, to use as he needs.
2. Receive a regular monthly sum of \$500 (equal to \$6,000 yearly) for the rest of his life.
3. Withdraw a lump sum of \$50,000 at retirement and receive a monthly sum of \$250 (equal to \$3,000) for the rest of his life.

## Baseline vignette: Savings

Mr. Smith is a single, 40-year-old man with no children. He will retire and claim his Social Security benefits at 65. When he retires, he will have \$100,000 saved for his retirement, and he will receive \$1,400 in monthly Social Security benefits. Please indicate which of these options you would recommend:

1. Maintain his current saving level.
2. Slightly increase his long-term savings by spending less.
3. Significantly increase his long-term savings by spending less.
4. Don't know.

## Information treatments:

Please note that American men, 65 years old, will survive 18.1 more years on average.

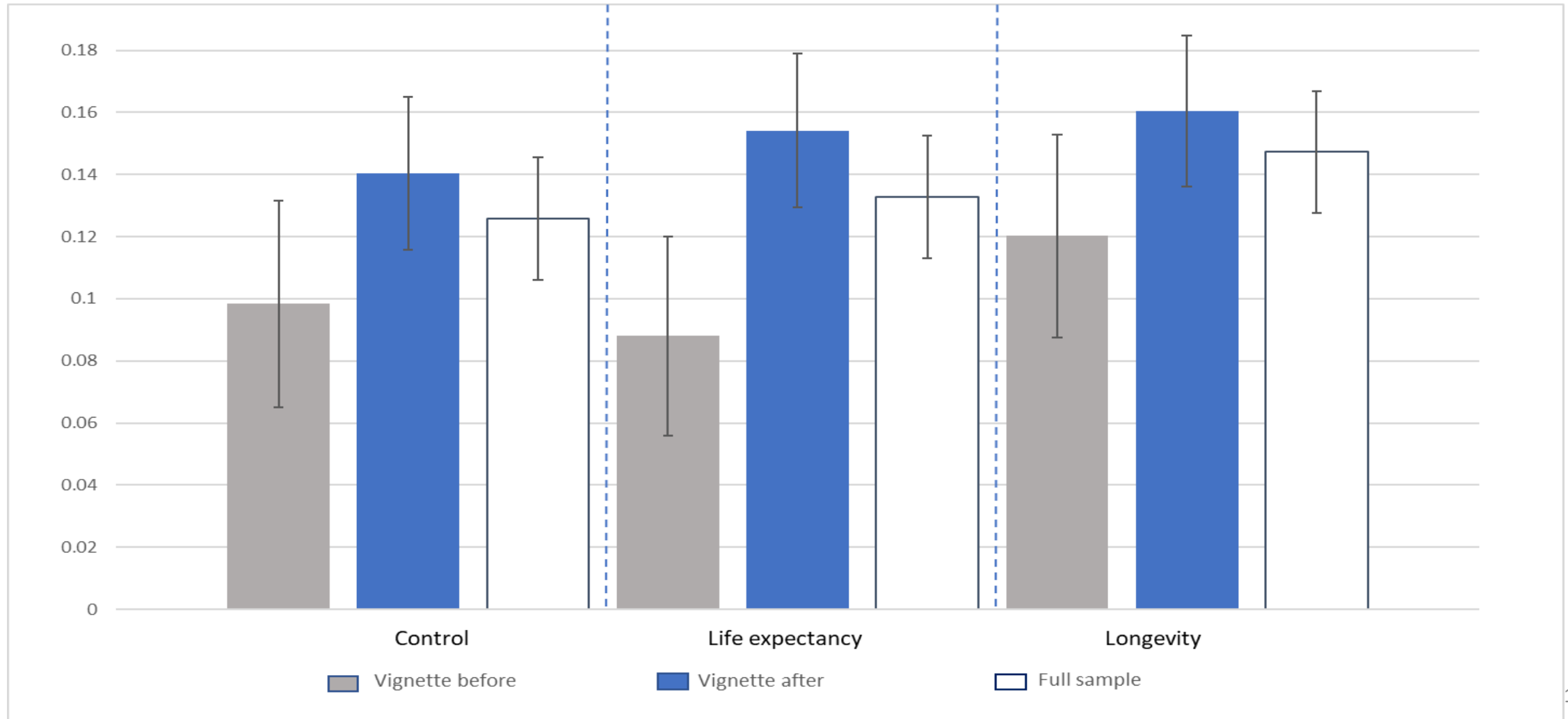
→OR

Please note that 22.3% of American men, 65 years old, will survive to the age of 90 or more.

# Our Respondents:

- 4,380 U.S. residents; age 35-83 (mean 49.2);
- 43.5% male; 57.8% married;
- 26% some college; 36% had bachelor's degree;
- 85.1% believed that their health was good, very good, or excellent;
- On average, participants mentioned having visited the doctor 2.9 times during the last year;
- Median monthly self-reported income was US\$4,700.

# Impact of Vignette: Mean diff. between respondents' subjective minus life table probability ( $SLE\_LE$ ) of living to age X, by Treatment and Question order



# Framing LE & impact of additional information

Dep Var: *Longevity+* or *SLE-LE*

3 main controls:

✓ Saw vignette 1st

✓ Life expec trt.

✓ Longev. trt.

Other controls:

Age, sex, educ., marital, health, finlit,  
numeracy, present prefs, income, # in HH,  
attention, covid

<u><i>Longevity+</i></u>	<u><i>SLE-LE: (OLS)</i></u>
-0.078***	-0.062***
(0.021)	(0.012)
0.020	0.012
(0.024)	(0.014)
0.054**	0.028**
(0.024)	(0.014)

# Framing LE & savings advice *(Logit marginals reported)*

Dep Var: Recommend saving more

	<u>Under- estimators</u>	<u>Consistent</u>	<u>Consistent &amp; Under- estimators</u>
3 main controls:	0.038 (0.040)	0.009 (0.027)	0.029 (0.044)
✓ Saw vignette 1st	0.018	-0.006	0.036
✓ Life expec trt.	(0.044)	(0.031)	(0.048)
✓ Longev. trt.	-0.006 (0.045)	-0.003 (0.031)	0.024 (0.050)
Other controls:			
Age, sex, educ., marital, health, finlit, numeracy, present prefs, income, # in HH, attention, covid			

# Framing LE & annuitization advice *(Logit marginals reported)*

Dep Var: Recommend annuitizing

	<u>Under-estimators</u>	<u>Consistent</u>	<u>Consistent &amp; Under-estimators</u>
3 main controls:			
✓ Saw vignette 1st	0.009	0.007	0.037
✓ Life expec trt.	(0.036)	(0.025)	(0.042)
✓ Longev. trt.	0.118***	0.046	0.123***
	(0.040)	(0.029)	(0.047)
Other controls:	0.090**	0.014	0.054
Age, sex, educ., marital, health, finlit, numeracy, present prefs, income, # in HH, attention, covid	(0.039)	(0.028)	(0.045)

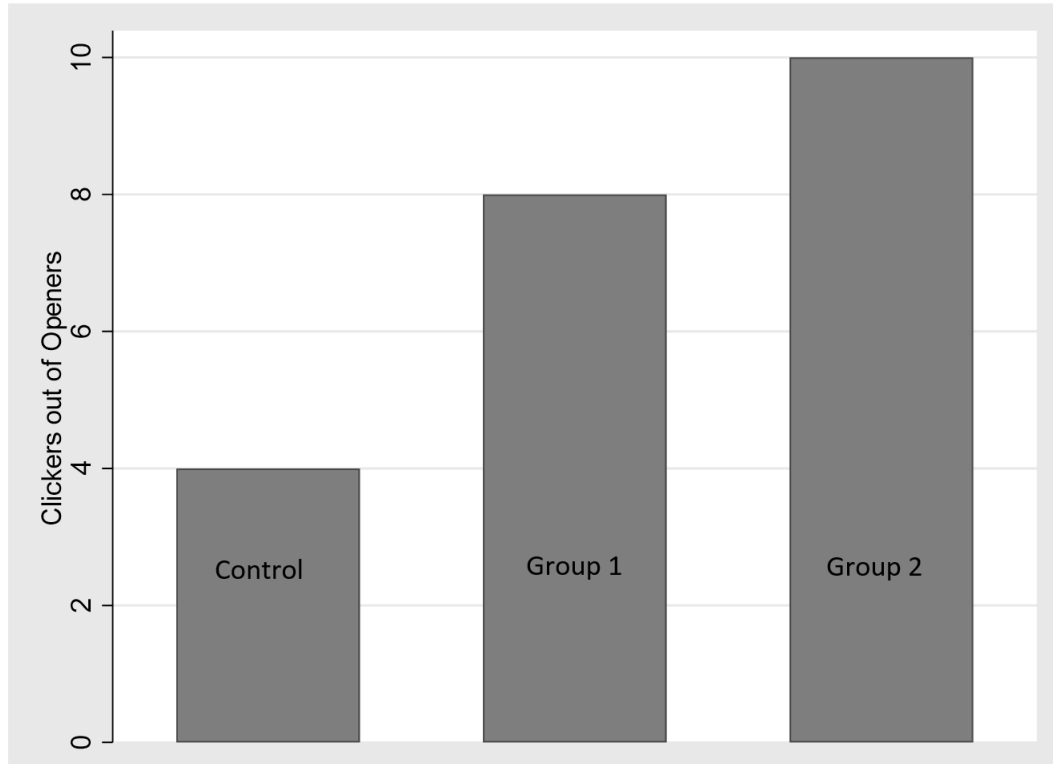


# Robustness: field study

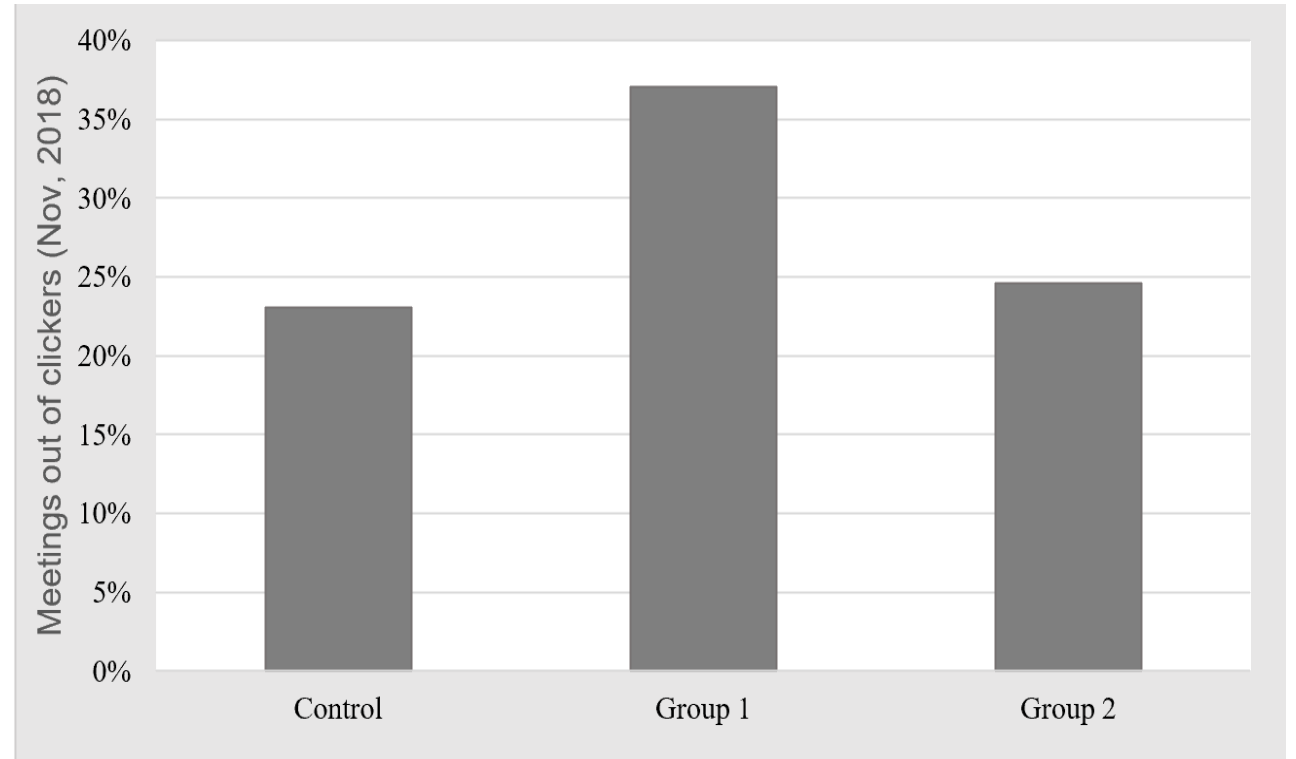
- Collaboration with an Israeli provident fund.
- 4,130 clients received information via email.
- Clients randomly assigned to three informational interventions:
  - Life expectancy:
    - “Did you know that after retirement you are expected to live for many more years?”
  - Working years will fund non-paid years:
    - Did you know that, in the 40 years of work in which you will set aside money for retirement, you will have to finance about 20 years, on average, during which you will probably not work?
  - Controls

# Field study results

*Click email for additional information*



*Requested meeting with an advisor*



# Conclusions and Implications (a)

- Providing information about peoples' likely longevity *does change peoples' perceptions*
- Giving them life expectancy information has *no effect* on subjective survival probabilities.
- Suggests that people are aware of mean survival expectations but less informed about the tails of the survival distribution.

# Conclusions and Implications (b)

- Providing either life expectancy or longevity information *does not affect advice re retirement saving*.
- Advice re annuitization most affected by longevity information when respondents are **pessimistic** regarding own survival probabilities.
- Also: novel evidence that merely getting people to think about a long-term financial decision can alter their optimism regarding survival probabilities.
- Our results can inform insurers and policymakers on how to encourage people to annuitize and make other financial decisions relevant for later life.