TESTING METHODS TO ENHANCE LONGEVITY AWARENESS

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Motivation

- People have some idea of how long they will survive.
- 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 longevity *(Elder 2013; Wu et al. 2015; Abel et al. 2020).*
- Some groups are overly-optimistic regarding life expectancy *(Ayanian & Clearly 1999; Hurwitz & Sade 2020).*
- 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).*

Preview of Results

- Getting people to think about a long-term financial decision can alter their optimism regarding survival probabilities.
- Providing information to people who are pessimistic regarding their survival probabilities, on either life expectancy or longevity information, significantly affects their financial decisions regarding longevity insurance products.
- Our results can inform insurers and policymakers on how to encourage people to annuitize and make other financial decisions relevant for later life.

Methodology

- Nationally 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 are 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 versus their recommendations to the 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

Vignette ***Presentation***	**Life expectancy**	**Longevity**	**Control**	**Total**
Savings	844	853	853	2,550
Annuitization	853	852	837	2,542
Total	1,697	1,705	1,690	5,092

Baseline vignette: Annuitization (a)

Next, we will describe a financial decision facing Mr. Smith and then we will ask you ask 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.

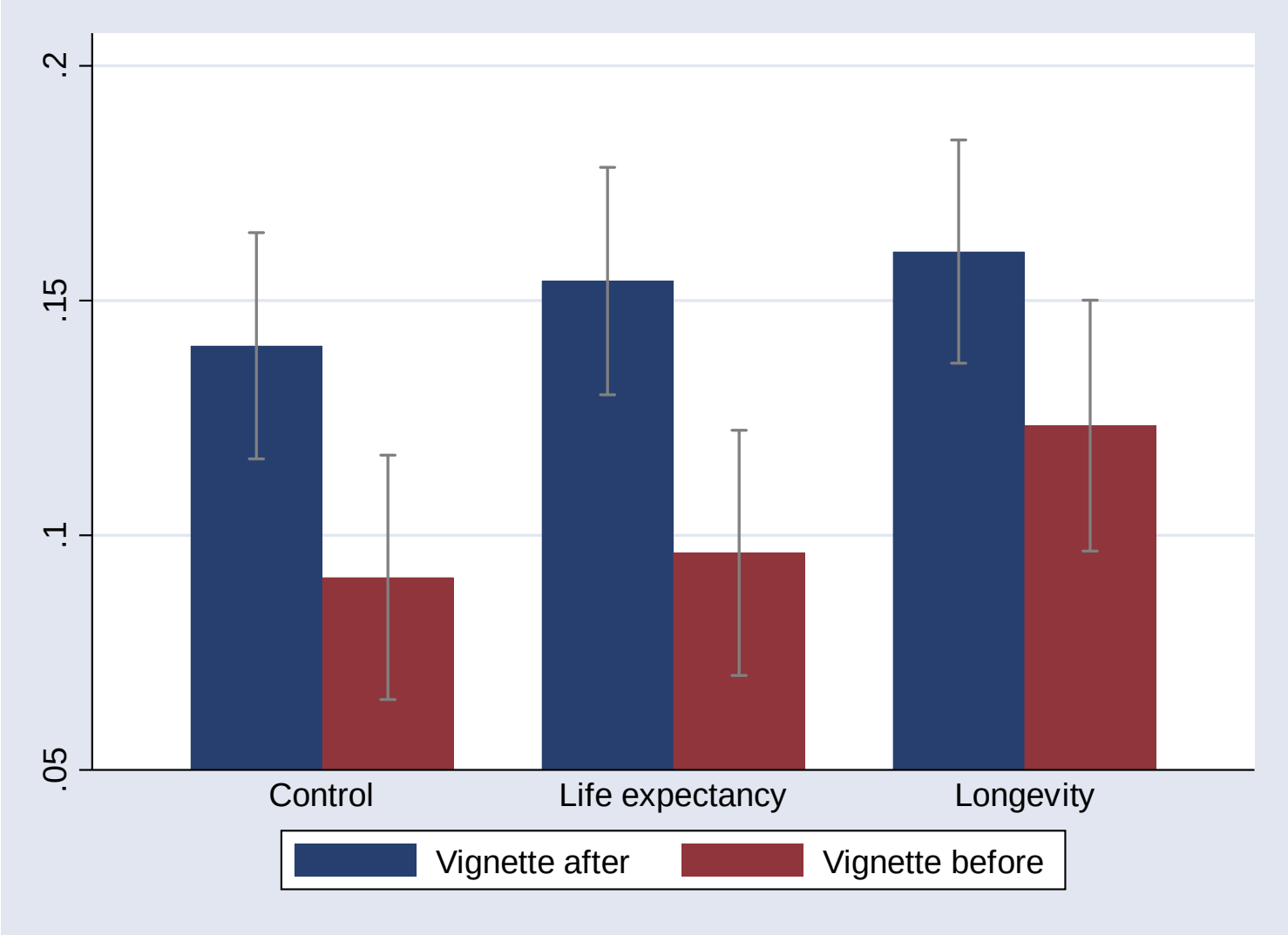
→OR

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

Data

- 5,108 U.S. residents; age 35-83 (mean 49.2);
- 43.7% male; 58.6% married;
- 60.7% had completed college or graduate school;
- 85% believed that their health was good, very good, or excellent;
- Median monthly self-reported income was US$4,900.

Impact of Vignette: Mean diff. between respondents' subjective minus life table probability (SLE_LE) of living to age X: By treatment and question order

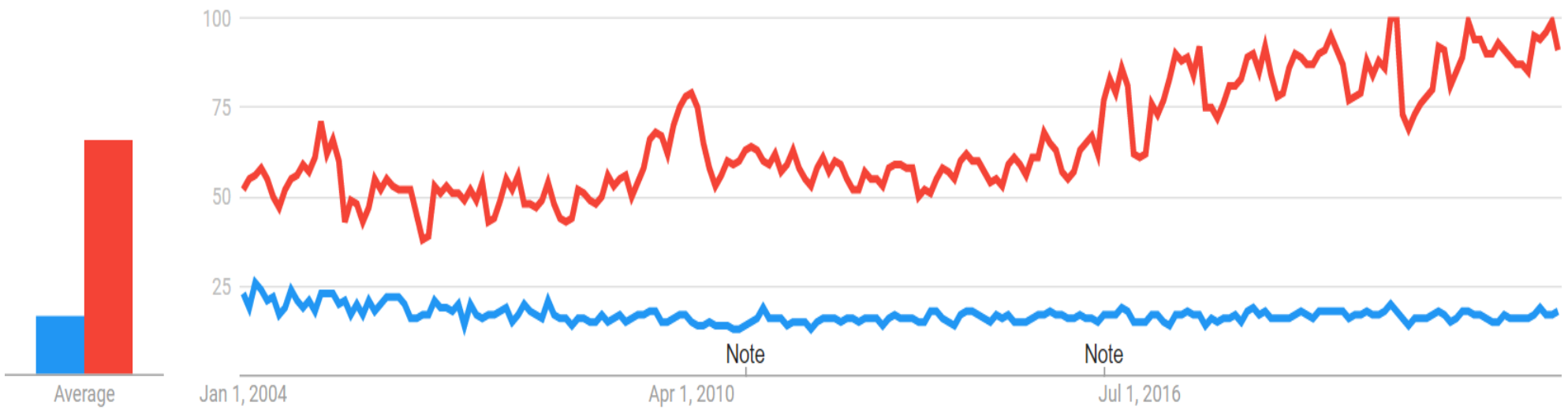


Framing LE & impact of additional information

	SLE-LE: (OLS) *Participants seeing vignette first*	*SLE-LE:* (OLS) *Full sample*
Saw vignette first		-0.052***
		(0.009)
Life expectancy treatment	0.005	0.007
	(0.016)	(0.011)
Longevity treatment	0.040**	0.025**
	(0.016)	(0.011)
Observations	1,867	4,162
Pseudo R-sq/R-sq	0.122	0.121
Dep. Var. Mean	0.154	0.171
Dep. Var. St. Dev.	0.296	0.303
Other Controls	Y	Y

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

Potential Explanation: Attention to life expectancy and longevity



Note: To assess popular interest in longevity comparing to interest in life expectancy, we used the Google trends tool (https://trends.google.com/trends/). This reports a normalized measure of search volume in the US on Google for the terms "life expectancy" (red) and "longevity" (blue).

Framing LE & savings advice

	Savings vignette		Annuitization vignette	
	(1) Full sample	(2) Underestimators	(3) Full Sample	(4) Underestimators
Saw vignette first	0.001	0.055	-0.003	0.024
	(0.020)	(0.034)	(0.018)	(0.030)
Life expectancy treatment	-0.020	0.024	0.039	0.100***
	(0.024)	(0.039)	(0.022)	(0.036)
Longevity treatment	-0.020	-0.025	-0.000	0.071**
	(0.024)	(0.040)	(0.022)	(0.035)
Observations	2,269	818	2,263	804
Pseudo R-sq/R-sq	0.096	0.095	0.039	0.044
Dep. Var. Mean	0.539	0.567	0.741	0.755
Dep. Var. St. Dev.	0.499	0.496	0.438	0.43
Other Controls	Y	Y	Y	Y

Other controls:

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

Conclusions (a)

- Providing people who understand conditional probability information about their likely **longevity** *does* change their perceptions about living a long time, while providing **life expectancy** information has no effect.
- This suggests that many people in the general population are already reasonably aware of their *mean* survival chances, but they are less well-informed about the *right tail* of the survival distribution.
- We also provide novel evidence that merely getting people to think about a long-term financial decision can alter their optimism regarding survival probabilities.

Conclusions (b)

- Providing under-estimators with either life expectancy or longevity information can significantly increase the likelihood that they will recommend **annuitization** (longevity insurance), but it does not significantly affect **savings** recommendations.
- Our results can inform regulators and insurers so they provide people with the less familiar information about longevity risk, thus helping them make better decumulation decisions.
- This information can also be embedded in retirement calculators and other tools used by financial advisors.

Related work

- Hurwitz, A., Mitchell, O. S., & Sade, O. (2021, May). Longevity perceptions and saving decisions during the COVID-19 outbreak: An experimental investigation. In *AEA Papers and Proceedings* (Vol. 111, pp. 297-301).
- Hurwitz, A., Mitchell, O. S., & Sade, O. (2022). Racial and Ethnic Differences in Longevity Perceptions and Implications for Financial Decision-Making. Wharton Pension Research Council Working Paper, (2022-15).
- Hurwitz, A., & Mitchell, O. S. (2022). Financial Regret at Older Ages and Longevity Awareness (No. w30696). National Bureau of Economic Research.