More on data

- Surveys and data to study financial literacy

- A focus on UAS data to study financial literacy and how to access them

- Main results on financial literacy and behavior from the UAS

- Evidence from the four UAS waves, the UAS visualization toolkit and a recent survey experiment

- What is missing? Let's fill the gaps

- Designing new questions

Understanding America Study (UAS) Surveys

The UAS

- It is the probability-based longitudinal study housed at the Center for Economic and Social Research (CESR) at University of Southern California (USC).

- The UAS administers a series of “core surveys” administered to the entire panel on a two-year frequency, reaching about 15,000 US residents (18+) (including a 3,500-person California oversample) recruited by address-based sampling and provided with Internet-enabled tablets if needed.

- The UAS national sample is expected to grow to 20,000 respondents by 2025, with oversamples of African Americans, Asians, and Hispanics.

- Surveys are conducted online in English and Spanish.

The UAS, cont.

- Recruitment: replenishment samples are added to the existing pool of panel members on a regular basis to improve the representativeness of the target population.

- Incentive: $20 per 30 minutes of survey time.

- New opportunities: Thanks to a recently awarded grant from the National Institute on Aging, with support from the Social Security Administration, they are able to offer free question time to researchers.

- Five financial literacy questions: numeracy, interest compounding, inflation, time value of money, and money illusion.

The benefits of using the UAS data

- A majority of the UAS data is publicly available.
- Researchers gathering data in the UAS can link newly collected data to the existing longitudinal information available for each panel participant.
- Also, the data can be linked with administrative data such as the Centers for Medicare and Medicaid Services (CMS) records or Social Security Earnings Records.

The UAS data

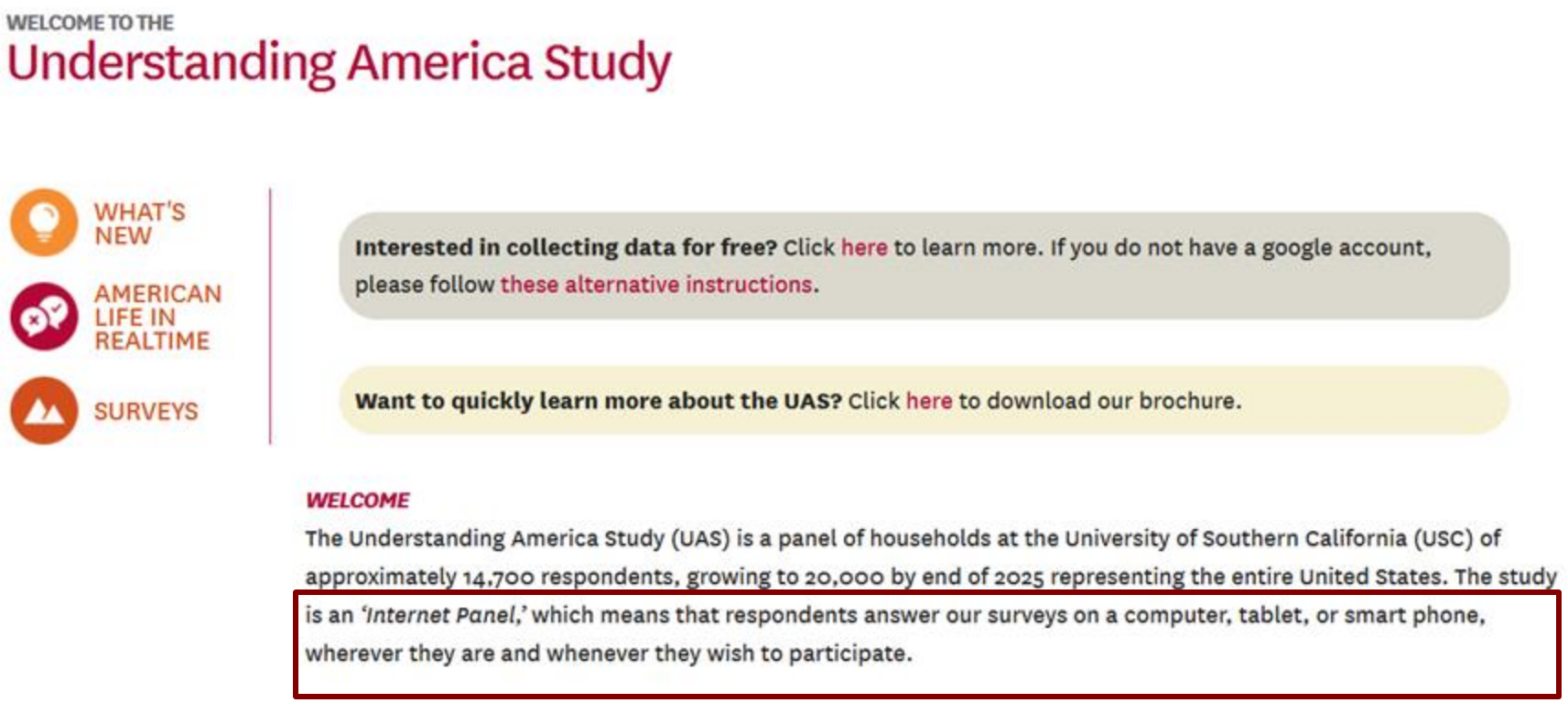
The study collects active and passive data plus para-data

- *active data:* HRS questionnaire, cognitive tests, personality traits, mental health, disability, employment and occupation, respondents' knowledge of Social Security rules, financial literacy, and much more.
- *passive data:* through wearables, such as Fitbits and air quality monitors.
- *para-data:* type of device used by the participant (e.g., a laptop, a smartphone, and a tablet), survey completion time, and time spent on each screen, as well as the number of taps, clicks, or mouse movements).

- New in the May 2025 release: an urbanicity variable was added for each UAS wave.

The variable is based on panel members' current census tract of residence and the 2010 Rural-Urban Commuting Area (RUCA) codes released by the US Department of Agriculture's Economic Research Service.

How the website looks like



A primer on the UAS

An excellent start is the UAS Comprehensive File, which merges the data from a number core surveys in the UAS that are repeated every two years.

- The Comprehensive File also includes wave-specific weights.

- The UAS Comprehensive Data File can be linked with any of the UAS surveys not already included.

- The current version of the UAS Comprehensive File (May 2025) can be downloaded here (registration required).

- For a detailed explanation please have a look at the UAS Comprehensive File Data Description.

https://encr.pw/5CbEt

Measures of financial literacy in the UAS

The entire panel is administered an extensive battery of 14 financial literacy questions every two years.

These include the five questions added earlier to the Centerpanel and the ALP, described by Van Rooij et al. (2011) and Lusardi and Mitchell (2007), respectively.

Table 1. Financial literacy measures: panel breakdown

Number of assessments	Number of respondents
1	9,149
2	3,143
3	2,687
4	3,817
Total	18,796

Note: The table reports the total number of UAS respondents who completed the financial literacy module at least once and the breakdown by the number of times they completed it (from 1 to 4 times).

Question wording

- They always feature a “don’t know” option, capturing participants’ uncertainty or intention to decline to respond, which may have different implications from a wrong answer.

- Unlike other studies eliciting financial literacy (e.g., the National Financial Capability Study), there is not a “refuse to answer” option.

- It should be noted that to minimize item nonresponse, all UAS surveys include a one-time prompt that encourages respondents to answer any skipped question before moving on to the next one (low item nonresponse rate of about 0.1% across all UAS surveys).

Main findings on financial literacy from the UAS

Financial literacy results in UAS

- The UAS financial literacy score takes values between 0 and 14. Its weighted average by wave is reported in Figure 1.
- People get approximately two-thirds of the questions right – with a slight tendency to decline over time.
- This downward trend could be partly attributed to worsening of memory and cognitive functioning more broadly, which can adversely affect survey behavior and

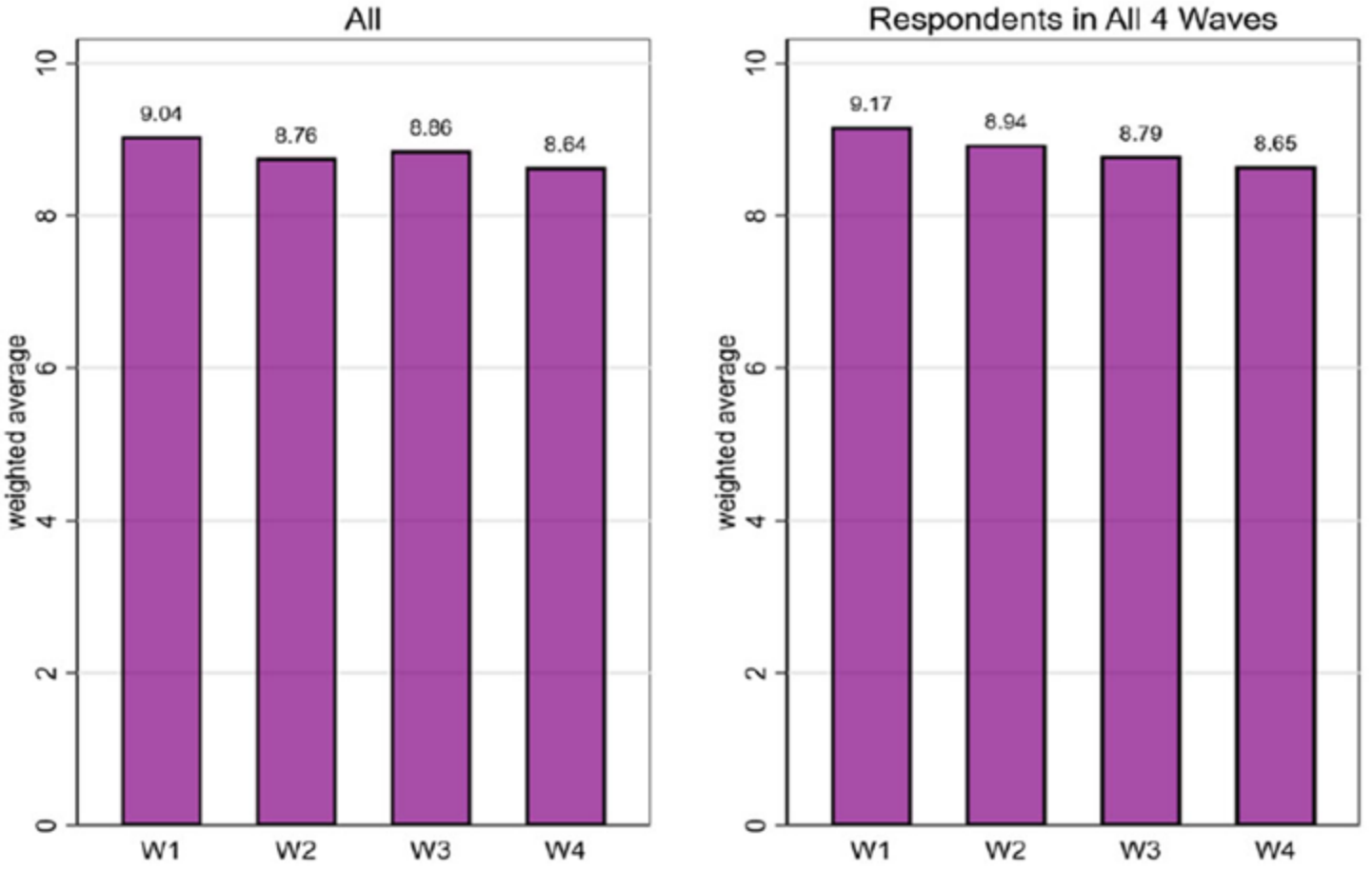


Figure 1. Weighted average total financial literacy score by wave.
Note: The figure shows the weighted average of the total financial literacy score across waves. The left panel includes all UAS respondents who have completed the financial literacy module at least once. The right panel includes only UAS respondents who have completed the financial literacy module in all four waves.

Source: Angrisani and Kapteyn (2024)

Financial literacy results in UAS

- The UAS Big three financial literacy score takes values between 0 and 3. Its weighted average by wave is reported in Figure 7.

- UAS respondents get, on average, about 2.15 questions right out of 3, achieving 72% of the maximum score.

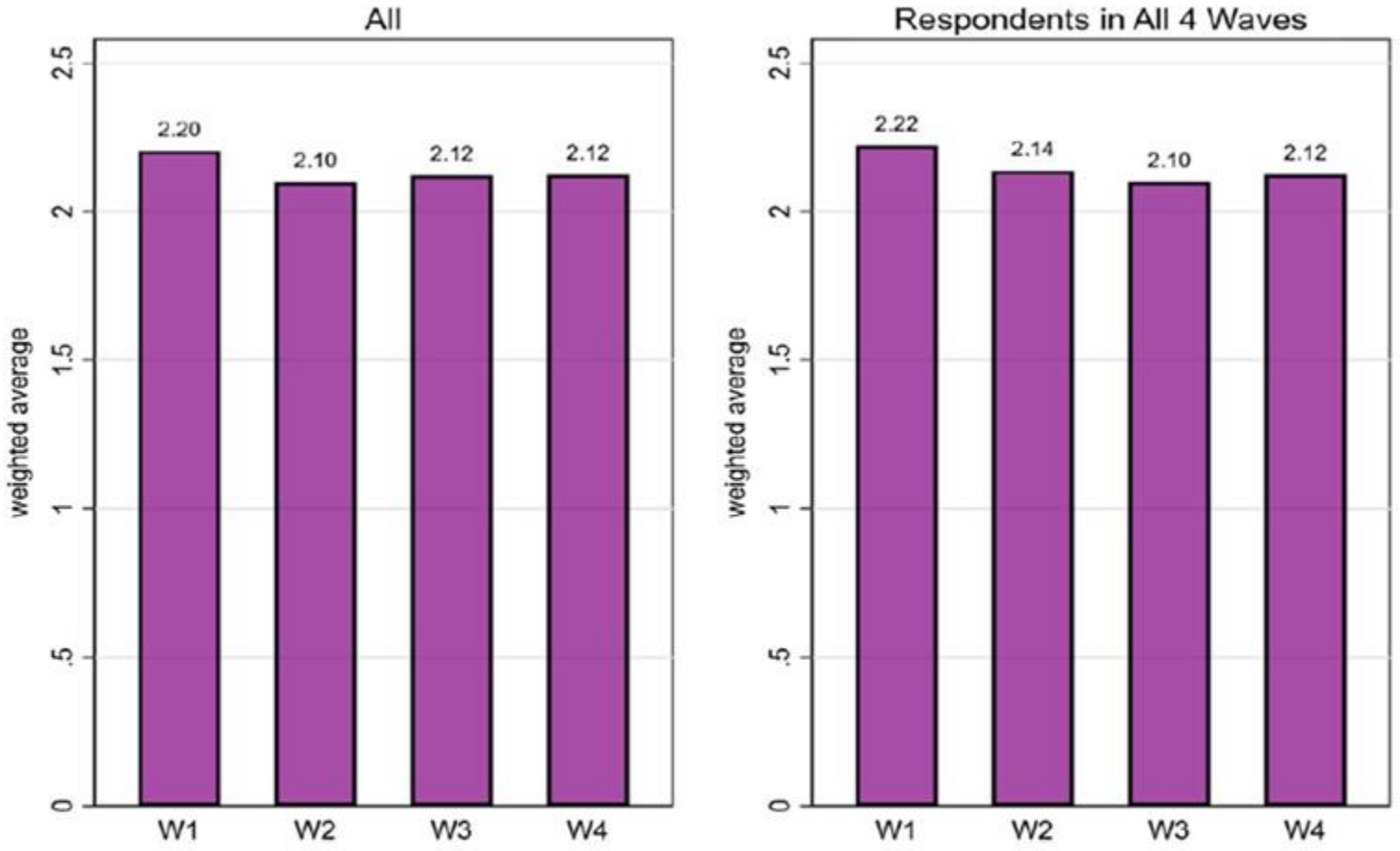


Figure 7. Big Three score across waves.

Note: The figure shows the weighted average of the financial literacy score based on the Big Three questions across waves. The left panel includes all UAS respondents who have completed the financial literacy module at least once. The right panel includes only UAS respondents who have completed the financial literacy module in all four waves. Source: Angrisani and Kapteyn (2024)

Financial literacy results in UAS by gender

Table 3. Weighted proportions of correct and don't know answers to the Big Three by demographics (wave 4 only)

	Interest		Inflation		Risk		Overall	
	Correct	dk	Correct	dk	Correct	dk	3 Correct	≥1 dk
Gender								
Male	87.3	5.1	79.7	7.8	67.8	23.7	57.1	26.7
Female	79.2	8.8	64.3	16.9	47.2	42.9	33.7	46.3

Note: The table reports the weighted proportions of correct and don't know answers to the Big Three questions by demographics in wave 4. dk indicates "don't know" and ≥1 dk indicates at least one don't know answer out of three. Source: Angrisani and Kapteyn (2024)

- By and large, these statistics reproduce the patterns reported by Lusardi and Streeter (2023) using 2021 NFCS data.
- The gender gap in basic financial knowledge is considerable. Female respondents are between 15 and 20 percentage points less likely to provide correct answers than their male counterparts and twice as likely to choose the "don't know" option.

Financial literacy results in UAS by age

Table 3. Weighted proportions of correct and don't know answers to the Big Three by demographics (wave 4 only)

	Interest		Inflation		Risk		Overall	
	Correct	dk	Correct	dk	Correct	dk	3 Correct	≥1 dk
Age (years)								
18–35	77.6	11.0	61.0	20.0	47.0	40.5	33.4	48.6
36–50	83.8	7.0	67.1	13.3	54.1	36.3	42.2	40.5
51–65	85.1	5.4	78.0	8.7	60.8	31.3	50.5	34.4
66+	87.4	3.4	84.7	6.3	70.5	23.5	60.3	26.7

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- The level of financial literacy appears to be the lowest among individuals aged 18–35 years, increasing monotonically with age. The difference between younger (18–35) and older (66) respondents widens as questions become more difficult/less familiar.
- The gap between these two groups is 10 percentage points for the interest question but more than doubles (23 percentage points) for the inflation and risk diversification

The UAS visualization toolkit

How to explore the UAS data

To explore the UAS data in an interactive manner check out the UAS Visualization Toolkit

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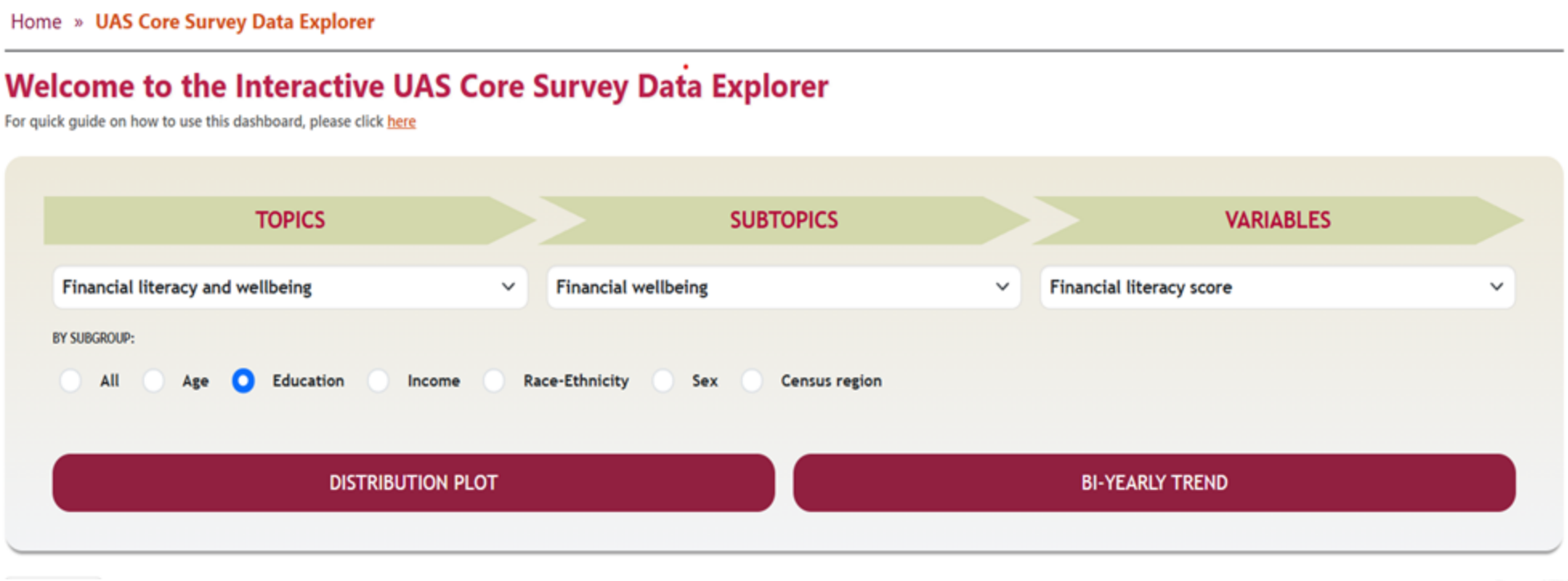
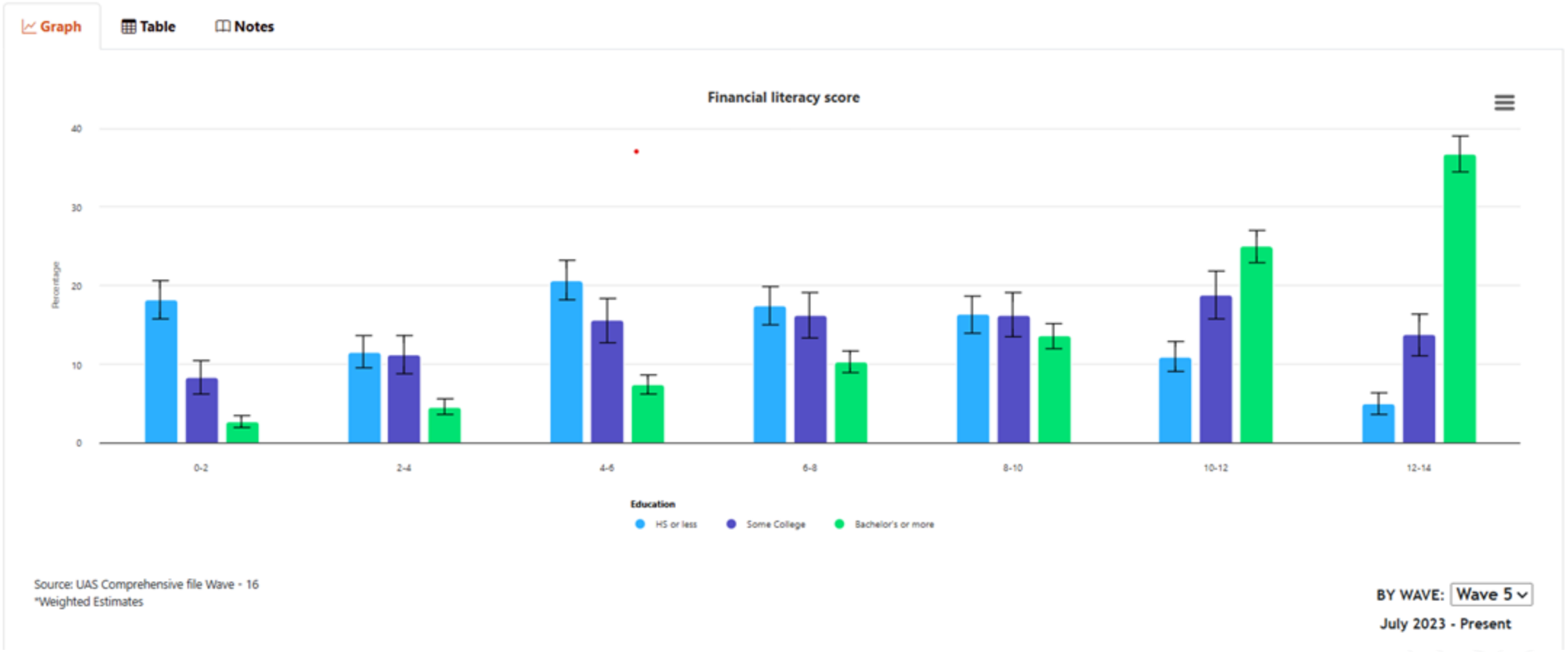


UAS Visualization Toolkit: Example Graphs



UAS Visualization Toolkit: Example Tables

Graph | Table | Notes

Financial literacy score									
Percentage									
Values	HS or less			Some College			Bachelor's or more		
	Average	Lower CI	Upper CI	Average	Lower CI	Upper CI	Average	Lower CI	Upper CI
0-2	18.14	15.71	20.57	8.27	6.15	10.38	2.62	1.87	3.36
2-4	11.55	9.53	13.56	11.22	8.79	13.65	4.53	3.57	5.49
4-6	20.66	18.11	23.21	15.57	12.77	18.37	7.34	6.14	8.53
6-8	17.45	15.05	19.84	16.18	13.34	19.02	10.30	8.89	11.71
8-10	16.28	13.94	18.61	16.24	13.40	19.08	13.54	11.96	15.13
10-12	10.95	8.99	12.91	18.78	15.76	21.80	24.96	22.96	26.96
12-14	4.98	3.61	6.35	13.74	11.08	16.41	36.71	34.48	38.95
Total Sample Size:	1196			1156			3161		

Export table in the following formats: CSV PDF

UAS Visualization Toolkit: Example Tables

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4-6	20.66	18.11	23.21	15.57	12.77	18.37	7.34	6.14	8.53
6-8	17.45	15.05	19.84	16.18	13.34	19.02	10.30	8.89	11.71
8-10	16.28	13.94	18.61	16.24	13.40	19.08	13.54	11.96	15.13
10-12	10.95	8.99	12.91	18.78	15.76	21.80	24.96	22.96	26.96
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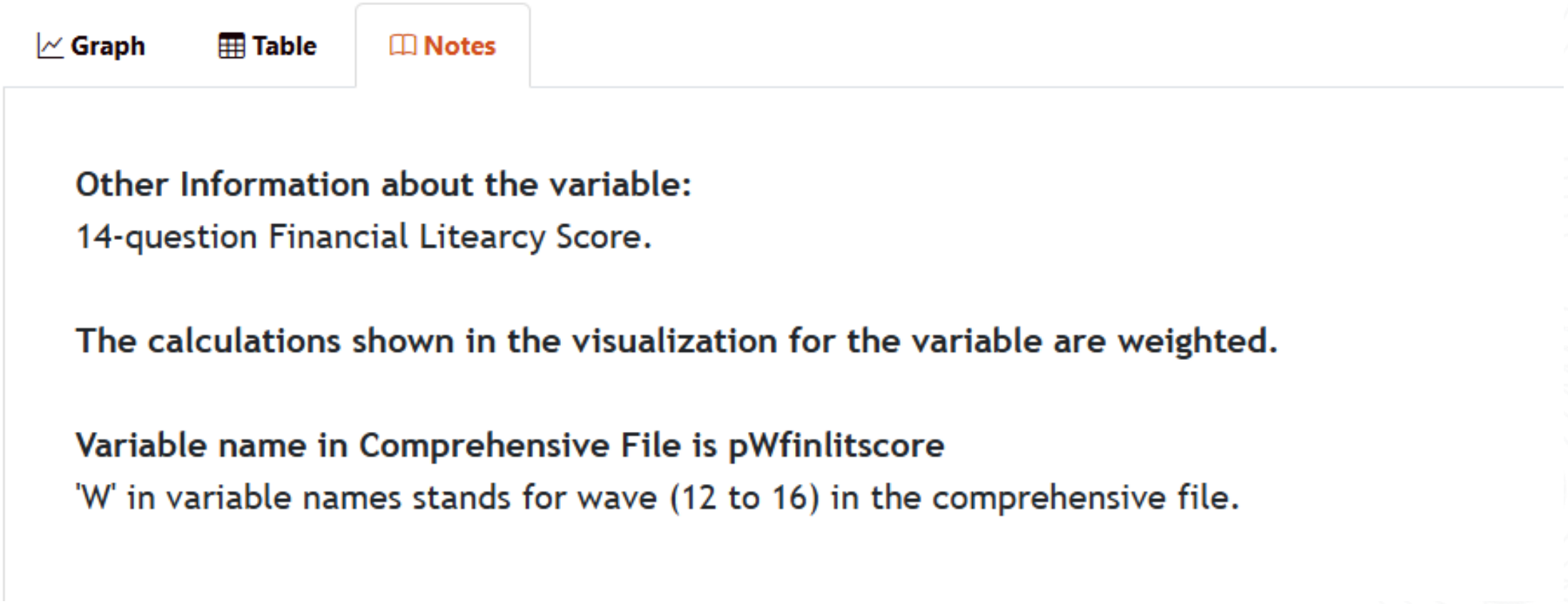

What is missing? Let’s fill the gaps

If you come up with questions to add and a good proposal, we can provide support to add the questions in the UAS

To sum up

- UAS offers financial literacy and financial outcomes measured longitudinally for all panel members and for as long as they remain in the panel.

- This allows researchers to examine how financial knowledge varies as people age, experience changes in life or cognitive function and track financial wellbeing over time.

- It also offers comprehensive background information for each respondent.

- To control for potential confounders and mitigate omitted variable bias, with the possibility to explore heterogeneity.

- Finally, the UAS offers a dynamic platform where researchers with their own funds can collect data and integrate their own survey questions within an unparalleled, longitudinal, rich dataset.

- This helps in conserving significant time and resources

Recent studies on financial literacy using UAS data

RCT from UAS data (Clark et al., 2025)

- Innovative short online and scalable financial education program, similar to Lusardi et al. (2014) and Lusardi et al. (2015), with some implications for financial behavior.

Story 1 is about "compound interest".

It is a story about a young couple making saving decisions.
It teaches the "Rule of 72" which is a simple way to help people calculate how many years it takes for an amount to double given a specific interest rate.

Story 2 is about "risk diversification"

It is a story about a couple discussing investment.
It teaches people the adage "do not put all of your eggs in one basket".

Story 3 is about "inflation"

It is a story about two friend discussing shopping.
It teaches people that prices increase overtime and that we have to take inflation into account in our decisions.

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Research Paper

Evaluating the effects of a low-cost, online financial education program☆

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ABSTRACT

We provide evidence on how a low-cost, online, and scalable financial education program influences older participants' financial knowledge. We test the program using a field experiment that includes short stories covering three fundamental financial education topics: compound interest, risk diversification, and inflation. Two surveys are administered eight months apart to measure the effects of those stories on middle-aged and older (45+) participants' short-term and longer-term knowledge and financial behavior. We show that the risk diversification story is the most effective at improving participants' knowledge, in both the short and longer terms. In the short term, reading the risk diversification story significantly increased the likelihood of correctly answering the related knowledge questions by 17–18 percentage points. The compound interest and inflation stories significantly increase participant knowledge in the short term, but the gain in financial literacy declines over time. Furthermore, timestamp data was used to show that the inflation story increased the time participants spent answering the related knowledge questions suggesting that exposure to our story boosted participants' attentiveness and interest in the topic. Over just an eight-month time period, the stories do not seem to have a significant effect on financial behaviors as measured by four financial distress indicators and a financial resilience index. Nevertheless, higher financial literacy is positively linked to better financial decision-making. The eight months might be too short to measure significant behavioral change; thus, further research is needed to prove the intervention's effect on financial behavior in the long run.

Evidence from UAS data (Clark et al., 2025)

- Someone who correctly answered all three questions was 11.4 p.p. less likely to be financially fragile, compared to a respondent who missed at least one question.
- Getting all three financial literacy questions correct also reduced the probability of reporting having too much debt, being financially dissatisfied, and having difficulty making ends (by 9.9, 4.7, and 11.8 p.p., respectively).
- Thus, financial literacy was strongly inversely related to people's financial distress outcomes pre-intervention, consistent with prior literature.

Table 9. How financial literacy influences financial distress indicators and resilience index

	(1) Financial fragility	(2) Over-indebtedness	(3) Financial dissatisfaction	(4) Difficult ends meet	(5) Financial Resilience Index
Financial literacy	−0.114***	−0.099***	−0.047**	−0.118***	0.306***
	(0.018)	(0.019)	(0.019)	(0.022)	(0.068)
Constant	0.213***	0.260***	0.187***	0.348***	4.233***
	(0.029)	(0.032)	(0.029)	(0.033)	(0.105)
Observations	2122	2184	2212	2218	2218
R squared	.243	.106	.117	.157	.076