

Web Appendix for "Who Pays the Price for Bad Advice? The Role of Consumer Vulnerability, Learning and Confirmation Bias"

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These materials have been supplied by the authors to aid in the understanding of their paper. The AMA is sharing these materials at the request of the authors.

Web Appendix A: Survey Instrument

This section contains the screenshots of the survey instrument used in the paper.

Thank you for agreeing to participate in this survey about financial advice. The survey will take approximately **25** minutes to complete. Please take as much time as you need to answer the questions. Most questions only require you to tick a box. All your answers to the questions are strictly anonymous – that is no one involved in this study can identify you personally, no one will contact you after the survey and no sales solicitation is involved. Your answers will be used for academic and industry research purposes only.

This study is being conducted by researchers at the [REDACTED]. The purpose is to learn more about [REDACTED] suggest ways to improve the way financial advice is given. If you are interested, the final research report analysing the survey results will be available on the Institute for Choice's website accessible through the following link:

[http://www.\[REDACTED\]tions/Working-papers/](http://www.[REDACTED]tions/Working-papers/)

As part of this survey, you will view video recommendations from two different financial advisors relating to four financial scenarios, some of which you may have already experienced. For each scenario, we will ask you which advice you would be most likely to follow if you were in this situation. Following that we have a few questions for you to complete in an online survey. We gratefully acknowledge permission to use risk questions designed and copyrighted by FinaMetrica in this survey.

Keep in mind that the information presented in the following videos and the accompanying online survey is for research purposes only and should NOT under any circumstances be understood to be actual financial advice being provided by [REDACTED], nor by any staff or student affiliated with these organizations. We encourage you to please seek the advice of a professional financial planner when making your own personal financial decisions.

When taking the survey, please DO NOT USE the "back" and "forward" buttons in your browser, please use the buttons at the bottom of each screen. If you would like to pause the survey to return to it later, simply close the window and click on the original link in the invitation, it will return you to the last point of entry in the survey.

Please click on ">>" button to proceed.

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Please note that due to the nature of this survey you will be asked questions about your personal information such as your income and your housing situation. You have the right to refuse to answer any question. Your answers to these questions are confidential, and cannot be used to identify you personally. They will be used only to make comparisons of different types of people, such as younger and older people, males and females, high and low income people, etc.

Finally, please be aware that you may terminate participation in the survey at any time. However, only completed surveys will be given full compensation for participation.

Will you participate in this survey?

- ☐ Yes
☐ No

THIS PROJECT WAS APPROVED BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 0011-1-757-221-3966) ON 2014-03-11 AND EXPIRES ON 2015-03-11.

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Some questions in this survey require certain features to be available in your browser (Flash Player etc.). To test them, simply click on the "Test Features" button if you can see it in the embedded Flash interface. If you cannot see it, please select "I cannot see this button".

To test whether you have required features in this browser for this survey, please click on the button below.

Test Features

I cannot see this button

To which age group do you belong?

- ☐ Under 18 years
- ☒ 18-24 years
- ☐ 25-29 years
- ☐ 30-34 years
- ☐ 35-39 years
- ☐ 40-44 years
- ☐ 45-49 years
- ☐ 50-54 years
- ☐ 55-59 years
- ☐ 60-64 years
- ☐ 65-69 years
- ☐ 70-74 years
- ☐ 75 years and over

Are you?

- ☐ Male
- ☐ Female

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The following questions measure your general financial competence and numeracy skills. Please answer the questions without using a calculator.

Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

- ☐ More than \$102
- ☐ Exactly \$102
- ☐ Less than \$102
- ☐ Do not know

Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?

- ☐ More than today
- ☐ Exactly the same
- ☐ Less than today
- ☐ Do not know

Buying shares in a single company usually provides a safer return than buying units in a managed share fund.

- ☐ True
- ☐ False
- ☐ Do not know

Suppose you had \$100 in a savings account and the interest rate is 20% per year and you never withdraw money or interest payments. After 5 years, how much would you have in this account in total?

- ☐ More than \$200
- ☐ Exactly \$200
- ☐ Less than \$200
- ☐ Do not know

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Suppose you had a \$2,000 credit card debt, but you also want to save for a holiday. You should:

- ☐ Save for your holiday first
- ☐ Pay off your credit card debt
- ☐ Do not know

Suppose you have recently changed jobs. You are now trying to decide whether or not to move your superannuation to your new employer's superannuation fund. You should:

- ☐ Consolidate your superannuation accounts in one fund
- ☐ Keep two superannuation accounts in different funds
- ☐ Do not know

Suppose you want to invest in the share market. You should:

- ☐ Buy shares in one blue chip company
- ☐ Spread your money across a variety of shares in different companies
- ☐ Do not know

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An equity index fund...

Please choose the correct statement below

- ☐ Buys and sells a portfolio of equities to outperform an index such as the S&P200
- ☐ Buys and sells equities, bonds and cash to outperform an index such as the S&P200
- ☐ Buys a portfolio of equities that mimic an index such as the S&P200
- ☐ Buys a portfolio of equities, bonds and cash that mimic an index such as the S&P200
- ☐ Buys a portfolio of equities that generate a return that is no worse than an index such as the S&P200
- ☐ Buys a portfolio of equities, bonds and cash that generate a return that is no worse than an index such as the S&P200

Two statements below describe equity index funds. Please tell us whether you think each statement is true or false.

1) All equity index funds that follow the same index offer the same product, so an investor should choose a fund with low fees.

- ☐ True
- ☐ False

2) Some equity index funds have better reputations than others, so an investor should avoid a low-fee fund.

- ☐ True
- ☐ False

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Imagine that we rolled a fair, six-sided die 1,000 times. Out of 1,000 rolls, how many times do you think the die would come up even?

Please enter a number between 0 to 1000 in the box.

 times

In a lottery, the chance of winning a \$500 prize is 1%. What is your best guess of how many people would win the prize if 1,000 people each buy a single ticket in the lottery?

Please enter a number between 0 to 1000 in the box.

 people

In a raffle, the chance of winning a car is 1 in 1,000. What per cent of tickets in the raffle win a car?

Please enter a percentage.

 %

The following questions are designed to help us learn more about your understanding and use of financial products.

Which, if any, of the following financial products do you have or have you used in the past?

Please select all that apply.

- ☐ Mortgages (home loans)
- ☐ Life insurance policies
- ☐ Credit cards
- ☐ Personal loans
- ☐ Bank accounts
- ☐ Index funds
- ☐ Superannuation accounts
- ☐ Shares (stocks)
- ☐ Bonds (corporate or government issued)
- ☐ None of the above

Tick the products which you know enough about to explain them to a friend or colleague.

Tick only the boxes that apply to you personally

- ☐ Mortgages (home loans)
- ☐ Life insurance policies
- ☐ Credit cards
- ☐ Personal loans
- ☐ Bank accounts
- ☐ Index funds
- ☐ Superannuation accounts
- ☐ Shares (stocks)
- ☐ Bonds (corporate or government issued)

Tick the products you personally consider useful or valuable.*Tick only the boxes that apply to you personally*

- ☐ Mortgages (home loans)
- ☐ Life insurance policies
- ☐ Credit cards
- ☐ Personal loans
- ☐ Bank accounts
- ☐ Index funds
- ☐ Superannuation accounts
- ☐ Shares (stocks)
- ☐ Bonds (corporate or government issued)

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Tick the products you would NOT choose due to personal circumstances such as you can't afford it, you would have to learn new knowledge or skills to use it, your friends or colleagues would think badly of you if they knew you used it, or some other barrier or constraint to your choosing.*Tick only the boxes that apply to you personally*

- ☐ Mortgages (home loans)
- ☐ Life insurance policies
- ☐ Credit cards
- ☐ Personal loans
- ☐ Bank accounts
- ☐ Index funds
- ☐ Superannuation accounts
- ☐ Shares (stocks)
- ☐ Bonds (corporate or government issued)

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Suppose you had \$100 in a savings account and the interest rate is 20% per year and you never withdraw money or interest payments. After 5 years, how much would you have in this account in total?

- ☐ More than \$200
☐ Exactly \$200
☐ Less than \$200
☐ Do not know

Suppose you want to invest in the share market. You should:

- ☐ Buy shares in one blue chip company
☐ Spread your money across a variety of shares in different companies
☐ Do not know

Have you seen these questions previously in this survey?

- ☐ Yes
☐ No

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The following questions will assess your experience with and attitudes towards financial advisors.

Please read each of the 4 statements below, and then rank them from 1 to 4 in order of the statement that best describes how you feel about financial advisors (=1) to the statement that least describes how you feel about financial advisors (=4).

Please use drag-n-drop to rank the following statements.

Generally, financial advisors do what is best for their customers

For the most part, financial advisors are trustworthy

Financial advisors tend to have their own interests in mind

Potential commissions influence the advice a financial advisor gives to his/her clients

1

2

3

4

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Who would you go to for financial advice if you needed it?

Please select all that apply.

- ☐ Employer
- ☐ Private banker/investment banker
- ☐ Fund manager
- ☐ Superannuation fund representative
- ☐ Full service stockbroker
- ☐ Bank relationship manager (including personal banker)
- ☐ Bank branch staff or manager
- ☐ Mortgage broker
- ☐ Accountant
- ☐ Financial planner/advisor
- ☐ Friends or family
- ☐ Other (please specify)

Have you ever paid for professional financial advice?

- ☐ Yes
- ☐ No

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Why have you never paid for professional advice?

Please select all that apply.

- ☐ I have no need for financial advice
- ☐ I do not have enough money to make it worthwhile
- ☐ Financial advice is too expensive
- ☐ I can do it myself
- ☐ If I need advice I ask family or friends
- ☐ I like to be in control of my finances
- ☐ I do not know where to find a good financial advisor
- ☐ I do not trust financial planners or the advice industry
- ☐ I am not interested in financial matters
- ☐ I do not want to disclose my financial situation
- ☐ I do not feel confident talking about financial matters
- ☐ Other (please specify)

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Why did you pay for professional financial advice?

Please select all that apply.

- ☐ Key life event, such as marriage, birth of child, divorce, redundancy, retirement, inheritance
- ☐ To address a particular financial goal, such as saving for a house or saving for retirement
- ☐ Wanted advice about budgeting and debt management
- ☐ Wanted a review of my financial situation
- ☐ To learn about financial matters to be able to make my own financial decisions
- ☐ To increase the chance that I would stick to a financial plan
- ☐ The tax and regulations affecting financial products are complicated
- ☐ Wanted to start a Self-managed Superannuation Fund
- ☐ Other (please specify)

What was this advice for?

☐ A comprehensive financial plan

A specific issue (or issues)

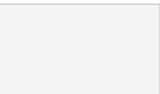
- ☐ Superannuation
- ☐ Property investment
- ☐ Financial investment (for example, shares, managed funds)
- ☐ Insurance
- ☐ Estate planning
- ☐ Social security
- ☐ Tax minimisation
- ☐ Self-managed Superannuation Fund
- ☐ Other (please specify)

The experimental treatment video starts here. Since screenshots for the video are unavailable, please use the following link to view an example of one condition: https://researchbox.org/3425&PEER_REVIEW_passcode=RHAZSA. This video is sourced from Agnew et al. (2018), which utilized a different combination of conditions than those employed in this paper. For a summary of the present paper's conditions, please refer to Web Appendix B. The attached video uses the Quality Sequence 5 in Table B1, Panel C. The sequence of topics in this video (Debt, Diversification, Fees, Consolidation) does not match any topic sequence in this paper (described in Table B1, Panel B) nor does the Advisor pair (Male, Old, Yes Certification vs Female, Young, No Certification) match any of this paper's pairs (described in Table B1, Panel A).

The present study utilized the same videos; however, the conditions were generated using Flash Player, a platform that Adobe has since discontinued and is no longer accessible. As a result, it was not possible to produce a new video capturing one of the specific conditions discussed in this paper after Flash Player was discontinued. It is important to highlight that the screenshots provided in this appendix display two different advisors (an Old Female and a Young Male), than those the video example features (an Old Male and a Young Female). In the actual experiment, the images in the subsequent screenshots would correspond to those shown in the video.

Now that you've experienced the two financial advisors, we'd like to know what you think about them.

Please select the advisor that MOST displays this characteristic:

	 Elizabeth Turner	 Both the same	 Michael Adams
Trustworthiness	☐	☐	☐
Competence	☐	☐	☐
Attractiveness	☐	☐	☐
Understanding	☐	☐	☐
Professionalism	☐	☐	☐
Genuineness	☐	☐	☐
Persuasiveness	☐	☐	☐

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Thinking about the 2 advisors you saw, which one of them do you think is most like you?



Michael Adams



Elizabeth Turner

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The last question has to do with paying for financial advice. Both advisors charge \$100 for a one hour session. Now that you've experienced both of them, what would you be most likely to do?

Advisor A	Advisor B
	
Elizabeth Turner	Michael Adams

- ☐ I would pay both Advisor A and Advisor B to give me financial advice
- ☐ I would only pay Advisor A for financial advice
- ☐ I would only pay Advisor B for financial advice
- ☐ I would not pay Advisor A or Advisor B for financial advice

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This following questions are to see where you fit in the Australian population.

What is your marital status?

- ☐ Never married and not living in a long term (de facto) relationship
- ☐ Widowed
- ☐ Divorced
- ☐ Separated but not divorced
- ☐ Married
- ☐ Living in long term relationship (de facto)

Who is most responsible for the major financial decisions in your household?

- ☐ I am
- ☐ Someone else
- ☐ Someone else and I are equally responsible

How many people in your household do you fully or partially support financially?

- ☐ 1 (myself)
- ☐ 2
- ☐ 3
- ☐ 4 or more

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What is the highest level of school you have completed?

- ☐ Year 12 or equivalent
- ☐ Year 11 or equivalent
- ☐ Year 10 or equivalent
- ☐ Year 9 or equivalent
- ☐ Year 8 or equivalent
- ☐ Year 7 or equivalent
- ☐ Year 6 or below
- ☐ Did not go to school

What is the highest post school qualification you have?

- ☐ PhD
- ☐ Master Degree or equivalent
- ☐ Graduate Diploma and Graduate Certificate from university or equivalent
- ☐ Bachelor Degree or equivalent
- ☐ Advanced Diploma and Diploma from university/TAFE or equivalent
- ☐ Certificate or equivalent from TAFE or equivalent
- ☐ None of the above

What was the main field of study for your highest qualification completed?

For example: plumbing, history, economics, primary school teaching, hairdressing, greenkeeping, finance, etc.

Please type in the box below.

Which of the following best describes your current work status?

- ☐ Employed full time
- ☐ Employed part time
- ☐ Unemployed
- ☐ Not in the labour force - Stay-at-home parent or caregiver
- ☐ Not in the labour force - Full-time student
- ☐ Not in the labour force - Retired
- ☐ Not in the labour force - Other

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Which of the following categories best describes your weekly (annual) gross *personal income* (before tax)?

- ☐ Negative income
- ☐ Nil income
- ☐ \$1-\$199 (\$1-\$10,399)
- ☐ \$200-\$299 (\$10,400-\$15,599)
- ☐ \$300-\$399 (\$15,600-\$20,799)
- ☐ \$400-\$599 (\$20,800-\$31,199)
- ☐ \$600-\$799 (\$31,200-\$41,599)
- ☐ \$800-\$999 (\$41,600-\$51,999)
- ☐ \$1,000-\$1,249 (\$52,000-\$64,999)
- ☐ \$1,250-\$1,499 (\$65,000-\$77,999)
- ☐ \$1,500-\$1,999 (\$78,000-\$103,999)
- ☐ \$2,000 or more (\$104,000 or more)

Which of the following categories best describes your weekly (annual) gross household income (before tax)?

- ☐ Negative income
- ☐ Nil income
- ☐ \$300-\$399 (\$15,600-\$20,799)
- ☐ \$400-\$599 (\$20,800-\$31,199)
- ☐ \$600-\$799 (\$31,200-\$41,599)
- ☐ \$800-\$999 (\$41,600-\$51,999)
- ☐ \$1,000-\$1,249 (\$52,000-\$64,999)
- ☐ \$1,250-\$1,499 (\$65,000-\$77,999)
- ☐ \$1,500-\$1,999 (\$78,000-\$103,999)
- ☐ \$2,000-\$2,499 (\$104,000-\$129,999)
- ☐ \$2,500-\$2,999 (\$130,000-\$155,999)
- ☐ \$3,000-\$3,499 (\$156,000-\$181,999)
- ☐ \$3,500-\$3,999 (\$182,000-\$207,999)
- ☐ \$4,000-\$4,999 (\$208,000-\$259,999)
- ☐ \$5,000 or more (\$260,000 or more)

How many times have you declared bankruptcy?

Please select your answer 

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Suppose you had a \$2,000 credit card debt, but you also want to save for a holiday. You should:

- ☐ Save for your holiday first
- ☐ Pay off your credit card debt
- ☐ Do not know

Suppose you had \$100 in a savings account and the interest rate is 20% per year and you never withdraw money or interest payments. After 5 years, how much would you have in this account in total?

- ☐ More than \$200
- ☐ Exactly \$200
- ☐ Less than \$200
- ☐ Do not know

Have you seen these questions previously in this survey?

- ☐ Yes
- ☐ No

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Thinking about the past year, how does your income compare to your expenses?

- ☐ My expenses were far greater than my income
- ☐ My expenses were slightly greater than my income
- ☐ My expenses and my income were equal
- ☐ My income was slightly greater than my expenses
- ☐ My income was far greater than my expenses

Do you rent your home, own your home, or live in someone else's home?

- ☐ Rent
- ☐ Own
- ☐ Live with someone else
- ☐ Refuse to answer

Are you a member of a superannuation fund?

- ☐ Yes (not a self-managed fund, a regular superannuation fund)
- ☐ Yes, only a self-managed superannuation fund
- ☐ Yes, both a self-managed superannuation fund and a regular superannuation fund
- ☐ No
- ☐ Do not know

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Your wealth is what you own (your assets) less what you owe (your debts). We are going to ask you about your wealth in two parts. First we will ask you about the assets you own. We will then ask you about the debts that you owe.

Think about what you own. These are your assets. Some examples of what you could own (your assets) include:

Please select all that apply.

- ☐ **(Cash)** bank accounts, currency, CDs, notes.
- ☐ **(Fixed interest)** bonds, debentures, term deposits.
- ☐ **(Equities)** shares, units in trusts, mutual funds, warrants, convertibles, derivatives.
- ☐ **(Property - own home)**
- ☐ **(Other property)** listed and unlisted property trusts, investment properties.
- ☐ **(Superannuation)** in defined benefit funds, accumulation schemes, large superannuation funds, self-managed superannuation funds.
- ☐ **(Private businesses)** farms, family businesses etc.
- ☐ **(Other)** such as collectibles, home contents, vehicles.

<<

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You have nominated types of assets that you own. For each of these assets, please enter their approximate value. You should report the current value of these assets, without deducting any debts.

Please enter a whole number in each box with no \$ sign, decimal or commas.

Cash (\$)	
Fixed interest (\$)	
Equities (\$)	
Property – own home (\$)	
Other property (\$)	
Superannuation (\$)	
Private businesses (\$)	
Other (\$)	

<<

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Now think about what you owe. These are your debts. Some examples of what you could owe (your debts) include:

- ☐ Outstanding credit card or store card balances
- ☐ Car loans, hire purchase agreements or other personal loans
- ☐ Home loans (mortgages)
- ☐ Loans to purchase investment properties or other investment loans (such as loans to buy financial assets or shares)
- ☐ Overdrafts or business loans
- ☐ Other loans (such as, amounts you borrowed from family or friends but excluding HECS/HELP)
- ☐ I don't have any debts

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You have nominated the types of debts you have. For each of these debts, please report the approximate amount outstanding.

Please enter a whole number in each box with no \$ sign, decimal or commas.

Outstanding credit card or store card balances (\$)

Car loans, hire purchase agreements or other personal loans (\$)

Home loans (mortgages) (\$)

Loans to purchase investment properties or other investment loans (such as loans to buy financial assets or shares) (\$)

Overdrafts or business loans (\$)

Other loans (such as, amounts you borrowed from family or friends but excluding HECS/HELP) (\$)

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Do you have HELP(HECS) debts or other student loans?

☐ Yes

☐ No

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What is your outstanding debt? (in \$)

Please enter a whole number with no \$ sign, decimal or commas.

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The following questions ask you to describe your own personality traits and habits.

Please indicate how well each of the following describes you.

Please select one answer per row.

	A lot	Somewhat	A little	Not at all
Organized	☐	☐	☐	☐
Responsible	☐	☐	☐	☐
Hardworking	☐	☐	☐	☐
Careless	☐	☐	☐	☐
Thorough	☐	☐	☐	☐

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Please tell us how often you do each of the following:

Please select one answer per row.

	Very Often	Often	Sometimes	Rarely	Never	Don't Know
Spend too much money	☐	☐	☐	☐	☐	☐
Buy things on impulse	☐	☐	☐	☐	☐	☐
Buy things you hadn't planned to buy	☐	☐	☐	☐	☐	☐
Buy things you don't really need	☐	☐	☐	☐	☐	☐

Generally speaking would you say that most people can be trusted or that you have to be very careful when dealing with people?

- ☐ Most people can be trusted
☐ You have to be very careful when dealing with people

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The following questions will help us understand your attitudes towards risk. (Source: FinaMetrica Pty Ltd)

Compared to others, how do you rate your willingness to take financial risks?

- ☐ Extremely low risk taker
- ☐ Very low risk taker
- ☐ Low risk taker
- ☐ Average risk taker
- ☐ High risk taker
- ☐ Very high risk taker
- ☐ Extremely high risk taker

If you had to choose between more job security with a small pay increase and less job security with a big pay increase, which would you pick?

- ☐ Definitely more job security with a small pay increase
- ☐ Probably more job security with a small increase
- ☐ Not sure
- ☐ Probably less job security with a big pay increase
- ☐ Definitely less job security with a big pay increase

What degree of risk are you currently prepared to take with your financial decisions?

- ☐ Very small
- ☐ Small
- ☐ Medium
- ☐ Large
- ☐ Very large

How much confidence do you have in your ability to make good financial decisions?

- ☐ None
- ☐ A little
- ☐ A reasonable amount
- ☐ A great deal
- ☐ Complete

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Most investment portfolios have a mix of investments - some of the investments may have high expected returns but with high risk, some may have medium expected returns and medium risk, and some may be low-risk/low-return. (For example, shares and property would be high-risk/high-return whereas cash and term deposits would be low-risk/low-return.) Which mix of investments do you find most appealing? Would you prefer all low-risk/low-return, all high-risk/high-return, or somewhere in between?

	High Risk/Return	Medium Risk/Return	Low Risk/Return
☐	0%	0%	100%
☐	0%	30%	70%
☐	10%	40%	50%
☐	30%	40%	30%
☐	50%	40%	10%
☐	70%	30%	0%
☐	100%	0%	0%

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>>

Please read each of the four (4) statements below and rank them from 1 to 4 in order of which most closely describes you. Assign (=1) to the statement that most closely describes you and (=4) to the statement that least closely describes you.

Please use drag-n-drop to rank the following statements.

I always prefer investments that have higher returns even though they are riskier	1	
I am very willing to make risky investments to ensure long term financial stability	2	
The overall safety of an investment is more important than the growth potential of the investment	3	
I am not willing to risk financial losses	4	

Please tick if you have ever done the following:

Please select all that apply.

- ☐ Purchased a large number of shares in one company
- ☐ Paid down credit card debt with new money
- ☐ Ignored fees when making investment decisions
- ☐ Consolidated superannuation funds
- ☐ Ignored credit card debt to save for something
- ☐ Purchased a diversified managed share fund
- ☐ Owned multiple superannuation accounts at the same time
- ☐ Carefully compared fees across different investments

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In the debriefing that follows on the next screen, we will explain important elements of the survey you just completed. It is important that you read this thoroughly as some of the advice you have just seen could be considered 'bad' advice.

After that, we will ask four questions about the debriefing. If you answer the questions correctly, you will be eligible to enter another prize draw for a bonus 50 reward points. Your chance of winning the draw increases the more questions you answer correctly.

Do you understand what you have just read?

- ☐ Yes
- ☐ No

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Thank you for participating in today's session. Your responses will be kept completely confidential and anonymous. Be aware that the scenarios we presented are extremely simplified versions of actual financial situations you might face that would require you to make a financial decision for yourself. Given that each individual faces a unique set of personal circumstances, the advice you have seen may not be suitable for your own situation. In fact, the advice you have just seen in the scenarios may be "good" or "bad" advice depending on the person. As well, the advisors you have just seen are actors and have no affiliation with the Financial Planning Association of Australia. **Please seek the advice of a professional financial planner when making your own personal financial decisions.**

Now we will highlight the four pieces of advice that for most people would be considered bad advice by advice topic.

1. Investment Diversification Advice. One advisor said:

"I understand you need help regarding how to invest your superannuation money. Did you know money invested in shares can go up and down? That is why it is good to invest in something you know and can easily monitor. Therefore, I recommend that you invest your money in one blue chip company."

For most people, this would be considered bad advice because investing in one share does not provide 'diversification'. When you invest in a large number of different types of companies you can reduce the risk of your overall investment. This is because in a 'diversified' portfolio, company shares that go down are often balanced out by company shares that go up.

2. Debt Consolidation Advice. One advisor said:

"It is hard to save big sums of money so it is important to think about your special savings goals when making this decision. Therefore, I recommend you ignore your credit card debt for now and put your inheritance in a separate savings account."

For most people, this would be considered bad advice because typically the interest gained on savings account is far smaller than the high interest expense of not paying down your credit card debt. Thus, it is important to pay off credit card debt to eliminate the high interest charges.

3. Fees in Share Index Funds Advice. One advisor said:

"These various share index funds provide an almost identical product but some fund managers have better reputations than others and you get what you pay for. Therefore, I recommend that you avoid the share index funds with low management fees."

For most people, this is not good advice because it does not make sense to pay more in fees for one managed share index fund when these funds are essentially the same product. Therefore, it often makes sense to look for the funds with low fees.

4. Superannuation Consolidations. It was noted in one piece of advice that people are charged regular administrative fees for each superannuation account they own. In relation to having several superannuation accounts, one advisor said:

"Despite that, I recommend that you not roll all of these accounts together so you are diversified across different superannuation funds."

For most people, this is not good advice because rolling accounts into one fund removes extra fees.

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Based on the information you have read on the previous screen, please answer the following questions:

	True	False
If you have multiple superannuation accounts with different superannuation funds you should roll all of these accounts together so you are not paying extra fees	☐	☐
For many people, it is better to spread your money across a variety of shares in different types of companies and industries	☐	☐
It is better to AVOID the share index funds with LOW management fees	☐	☐
If you have a large credit card debt but recently inherited money, you should ignore your credit card debt and put your inheritance in a separate savings account	☐	☐

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You have answered 2 of the previous questions correctly and are eligible for 2 entries into the draw for a bonus 50 reward points.

This concludes the survey. If you have any comments please type them below. Thank you for your time!

Please click ">>" to be re-directed to the panel incentive page.

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Web Appendix B: Experimental Design

Usually, a full factorial design is the most desirable choice when designing an experiment. However, in our case this is infeasible because the three different adviser characteristics (age, gender, certification) lead to $28 (= \binom{2^3}{2})$ possible combinations of advisers, the four different topics make $16 (= 4^2)$ possible sequences of good (G) and bad (B) advice and $24 (= 4!)$ possible sequences of topics, resulting in a total of 9,216 possible conditions. From this complete design, we chose a subset that was most informative for the identification of learning type.

Since we are focusing on client traits rather than on adviser characteristics, we only included four adviser pairings, where each adviser was the mirror image of the other (i.e., the older, female, certified adviser was paired with the younger, male, non-certified adviser). We also rendered the overall objective quality of the advisers to be neutral by only including six sequences of good and bad advice orders — those where each adviser gives two objectively good, and two objectively bad, recommendations. Even though all advisers can thus be considered to be low quality, Agnew et al. (2018) found that clients considered advisers trustworthy and competent even if giving two pieces of bad advice. In contrast to advice orders where one adviser would be clearly superior to the other (e.g., by providing three or four pieces of objectively good advice), these six sequences should result in similar posterior beliefs about both advisers for participants who subjectively rate all topics as clear (unambiguous). As such, variations in response patterns for these advice orders are powerful in detecting participants' subjective perceptions of topic ambiguity as well as their learning mechanism. Ideally, we would use all 24 possible financial topic sequences in our experimental conditions. Due to feasibility constraints, we include the six topic sequences that we rate as most informative for identifying

learning and subjective ambiguity: those that present an equal number of high ambiguity (index fund fees and stock diversification) and low ambiguity (account consolidation and debt repayment) financial topics. Note that our definition of topic ambiguity here refers to the aggregate ambiguity of the topic and is based on the number of incorrect answers to these topics. Individual participants' perception of topic clarity may deviate from these aggregate classifications - a possibility that we capture in our model (equations (5) and (6)). While we acknowledge the possibility that participants may confidently hold wrong beliefs about a topic (i.e., perceive a topic to be clear while at the same time identifying bad advice incorrectly as good and vice versa), our model-free analysis in the paper, as well as the model itself, assumes that if a topic is clear to a participant, they will hold correct beliefs about the advice related to that topic. When we combined the four possible pairs of advisers with the six possible sequences of objective advice quality and the six possible sequences of financial topics, we arrived at a design with $6 \cdot 6 \cdot 4 = 144$ conditions. We randomly assigned at least 10, and up to 14, participants to each condition.

TABLE B1: *Experimental Design*

Panel A: Design of adviser pairs								
Adviser L					Adviser R			
Pair	Gender	Age	Certification		Gender	Age	Certification	
1	Female	Young	Yes		Male	Old	No	
2	Female	Old	No		Male	Young	Yes	
3	Male	Young	No		Female	Old	Yes	
4	Male	Old	Yes		Female	Young	No	

Panel B: Sequence of advice topics				
Sequence	Choice 1	Choice 2	Choice 3	Choice 4
1	Diversification	Fees	Consolidation	Debt
2	Consolidation	Debt	Diversification	Fees
3	Diversification	Consolidation	Fees	Debt
4	Consolidation	Diversification	Debt	Fees
5	Diversification	Consolidation	Debt	Fees
6	Consolidation	Diversification	Fees	Debt

Panel C: Design of sequence of advice quality								
Advice from Adviser L					Advice from Adviser R			
Quality Sequence	1st topic	2nd topic	3rd topic	4th topic	1st topic	2nd topic	3rd topic	4th topic
1	G	G	B	B	B	B	G	G
2	G	B	G	B	B	G	B	G
3	G	B	B	G	B	G	G	B
4	B	G	G	B	G	B	B	G
5	B	G	B	G	G	B	G	B
6	B	B	G	G	G	G	B	B

Notes: Each participant in the experiment makes four choices of financial advice where the design of the four choice sets consists of: one row from Panel A (adviser characteristics); one row from Panel B (sequence of advice topics); and one row from Panel C (sequence of delivery of good or bad advice from Adviser L and Adviser R). Panel A shows the combinations of adviser characteristics: each pair of advisers consisted of an adviser with three characteristics (gender, age, certification) and an adviser with the reverse. Adviser L appeared on the left-hand side of the choice set screen, and Adviser R appeared on the right-hand side. Each participant saw the same two advisers for the entire experiment, and each adviser stayed on the same side of the screen. Panel B shows the sequence of advice topics for each condition in the experiment. Panel C shows sequences of advice quality for each condition where “G” stands for objectively good advice and “B” stands for objectively bad advice.

Web Appendix C: Sample Demographics

TABLE C1: *Sample Demographics*

	Survey Sample	18-79 yrs Aust. Pop'n		Survey Sample	18-79 yrs Aust. Pop'n
Gender			Marital Status		
Male	50%	49%	Never married	26%	30%
Female	50%	51%	Divorced/separated	10%	13%
Age			Widowed	2%	3%
18-24 years	8%	10%	Married or long-term relationship	62%	54%
25-29 years	8%	10%	Personal Income		
30-34 years	12%	10%	\$1-\$20,799 (i.e., less than \$399 a week)	24%	25%
35-39 years	12%	10%	\$20,800-\$51,999 (i.e., \$400-\$999 a week)	35%	32%
40-44 years	12%	10%	\$52,000-\$103,999 (i.e., \$1,000-\$1,999 a week)	25%	23%
45-49 years	9%	10%	\$101,000 (i.e., \$2,000 a week) or more	7%	7%
50-54 years	12%	10%	Negative or nil Income	9%	6%
55-59 years	12%	9%	Not stated	0%	7%
60-64 years	13%	8%	Highest Level of Education		
65-69 years	2%	6%	High school or less	26%	40%
70-79 years	0%	8%	Vocational/Technical certificate	21%	20%
Work Status			Tertiary diploma		
Employed	62%	63%	Bachelor degree	23%	15%
Unemployed	8%	3%	Graduate certificate, diploma or degree	19%	6%
Not in the labor force	18%	29%	Not stated	0%	10%
Retired	12%	n.a.			
Not stated	0%	5%			

Notes: This table presents the demographics of the sample of 2003 participants drawn from a nationally representative online panel by email invitation in 2014 with the 2011 (most recent at the time of the experiment) Australian census.

Web Appendix D: Prior Beliefs of Adviser Quality, Perceptions and Interpretations of Advice Signals, And Belief Updating

In the experiment, participant i receives a sequence of adviser quality signals delivered by two different advisers, $a \in (L, R)$, appearing on the left or right of the participant's screen. The signals of adviser quality come in the form of advice on four different financial topics, one for each choice set, $c = 1, \dots, 4$. Participants (subjectively) perceive quality signals as either clear ($\tau_{i,c} = clr$) or ambiguous ($\tau_{i,c} = amb$), depending on the topic of the advice. Our definition of ambiguity thereby differs from the one used in Fryer, Harms, and Jackson (2019): The signal in our experiment has an objective quality, whereas in their model ambiguous signals are objectively up to interpretation. A more general model would allow for degrees of ambiguity. We use a binary classification to help identification of the estimated parameters in the model.

Let $q_{i,c,a} \in (\bar{g}, \bar{b})$ indicate the **objective** quality of the advice given at choice set c by adviser a where $\bar{g}$ indicates objectively good advice and $\bar{b}$ indicates objectively bad advice. Let $\sigma_{i,c,a} \in (g, b, gb)$ indicate participant i 's **subjective** interpretation of the signal at choice set c by adviser a : g indicates an interpretation that the advice is good, b indicates an interpretation that advice is bad; and gb indicates an undefined interpretation.

We assume that at choice set c , participant i holds a prior probability that adviser a is good quality denoted by $\lambda_{i,(c-1),a}$. We assume that if i perceives advice to be clear ($\tau_{i,c} = clr$) their interpretation of the quality of the advice will be consistent with the objective quality, $q_{i,c,a} \in (\bar{g}, \bar{b})$. This assumption precludes participants from confidently holding an incorrect belief about a signal's quality. If i thinks the advice is ambiguous ($\tau_{i,c} = amb$) their interpretation of the quality of the advice will be consistent with their prior belief about the adviser $\lambda_{i,(c-1),a}$, interpreting advice from the adviser they hold in higher esteem as good and the advice from the adviser they

rate lower as bad. As such, $\sigma_{i,c,a}$ depends on both subjective perceptions of clarity or ambiguity and prior belief about the advisers, so that,

$$\sigma_{i,c,a} = \begin{cases} g, & \text{if } \tau_{i,c} = clr \text{ and } q_{i,c,a} = \bar{g}, \text{ or } \tau_{i,c} = amb \text{ and } \lambda_{i,(c-1),a} > \lambda_{i,(c-1),\neg a}, \\ b, & \text{if } \tau_{i,c} = clr \text{ and } q_{i,c,a} = \bar{b}, \text{ or } \tau_{i,c} = amb \text{ and } \lambda_{i,(c-1),a} < \lambda_{i,(c-1),\neg a}, \\ gb, & \text{if } \tau_{i,c} = amb \text{ and } \lambda_{i,(c-1),a} = \lambda_{i,(c-1),\neg a}, \end{cases} \quad (D1)$$

where $\neg a$ denotes the other adviser presented to the participant. We further assume that the advice given by an adviser carries a signal strength s of the adviser's quality, that is the same for all participants. The signal strength s , ($s > 1/2$) equals the probability that a good adviser gives objectively good advice, $P(\bar{g}|G) = s$, and that a bad adviser gives objectively bad advice, $P(\bar{b}|B) = s$. Thus, the probability of receiving an objectively bad (good) signal from a good (bad) adviser is $P(\bar{b}|G) = 1 - s$ ($P(\bar{g}|B) = 1 - s$). To enable us to identify parameters, we set s to an arbitrary value greater than 0.5 and check the sensitivity of our estimation to alternative choices. The results we report use $s = 0.75$.

Conditional on signal strength, s , updated beliefs depend on the participant's learning process and their perception of whether a signal is clear or ambiguous. Bayesian learners will update beliefs according to the Bayes rule and ignore their subjective interpretation of the advice if the signal is ambiguous:

$$\lambda_{i,c,a} = \begin{cases} \frac{s\lambda_{i,(c-1),a}}{s\lambda_{i,(c-1),a} + (1-s)(1-\lambda_{i,(c-1),a})}, & \text{if } \tau_{i,c} = clr \text{ and } \sigma_{i,c,a} = g, \\ \frac{(1-s)\lambda_{i,(c-1),a}}{(1-s)\lambda_{i,(c-1),a} + s(1-\lambda_{i,(c-1),a})}, & \text{if } \tau_{i,c} = clr \text{ and } \sigma_{i,c,a} = b, \\ \lambda_{i,(c-1),a} & \text{if } \tau_{i,c} = amb, \end{cases} \quad (D2)$$

That is, Bayesian learners will update beliefs of adviser quality only when they perceive the signal as clear. But limited memory learners will use all signals—both clear and ambiguous—to update their beliefs about the quality of the advisers. Limited memory learners update using their readily available interpretation of ambiguous signals. Based on Fryer, Harms, and Jackson (2019), we assume that a limited memory learner updates beliefs according to:

$$\lambda_{i,c,a} = \begin{cases} \frac{s\lambda_{i,(c-1),a}}{s\lambda_{i,(c-1),a} + (1-s)(1-\lambda_{i,(c-1),a})}, & \text{if } \sigma_{i,c,a} = g, \\ \frac{(1-s)\lambda_{i,(c-1),a}}{(1-s)\lambda_{i,(c-1),a} + s(1-\lambda_{i,(c-1),a})}, & \text{if } \sigma_{i,c,a} = b, \\ \lambda_{i,(c-1),a}, & \text{if } \sigma_{i,c,a} = gb. \end{cases} \quad (D3)$$

Equations D2 and D3 show how ambiguous signals create an opportunity for confirmation bias to operate. Bayesian learners ignore ambiguous signals and form posterior beliefs using clear signals that generally will align with the objective quality of the financial advice. Thus, they gradually uncover the true quality of the adviser. However, limited memory learners use their interpretation of both clear and ambiguous signals to update their beliefs. Since their interpretation of the ambiguous signal can diverge from objectivity, being guided by prior beliefs, limited memory learners tend to have confirmation bias. Equations 2 and 3 imply that beliefs about the two advisers are negatively correlated, irrespective of learning type.

Table D1 gives a simplified example that compares the learning processes for one sequence of four choice sets for participants starting with neutral beliefs about the advisers. After four sets of advice, where an adviser delivered two signals that were objectively good and two that were objectively bad, but where both learners' subjectively perceived the signals at choice sets 2 and 3 as ambiguous, the Bayesian learner has not changed their overall assessment of the

adviser's quality and the limited memory learner holds a more strongly positive posterior belief of the adviser's quality.

TABLE D1: *Illustration of Belief Updating by Bayesian and Limited Memory Learner*

			Learning Process			
			Bayesian		Limited Memory	
Choice set	Objective quality	Clarity of advice	Beliefs updated	Posterior beliefs	Beliefs updated	Posterior beliefs
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Good	Clear	Up	+	Up	+
2	Bad	Ambiguous	No	+	Up	++
3	Good	Ambiguous	No	+	Up	+++
4	Bad	Clear	Down	$\pm$	Down	++

Notes: The illustrative example should be read top to bottom, following the sequence of advice choices in column 1. Column 2 shows the objective quality of the advice given by an advisor, while column 3 shows the clarity of the topic and correspondingly whether advice signal is perceived as clear or ambiguous. Columns 4 and 6 show how the individual beliefs are updated, and columns 5 and 7 use graphical symbols to represent the probability assigned by the individual for the adviser to be high quality, for the Bayesian and limited memory learner respectively.

Web Appendix E: Sequential Adaptive Bayesian Learning (SABL) Estimation

The likelihood function presented in Experimental Approach Section in the main text exhibits discontinuities, resulting from threshold based belief updating mechanisms described in Equation (2) and Equation (3). These discontinuities in the likelihood function cause implementation problems due to the inherent computational difficulty for maximum likelihood estimators (see also Chernozhukov and Hong 2004). We overcome these difficulties with Bayesian estimation methods. More specifically, we use sequential adaptive Bayesian learning (SABL) proposed by Durham and Geweke (2014). The basic idea of the SABL algorithm is to generate the posterior distribution of parameters by adding information from the data in an adaptive and controlled way. A key feature of the SABL algorithm is that most of it is parallel and therefore able to exploit the benefits of multiple processing units. When used for Bayesian inference, SABL is a posterior simulator.

In a nutshell, SABL iterates through cycles in which draws from an initially flat prior distribution are transformed into draws from the posterior distribution. Draws are organized into different groups, the purpose of which becomes evident below. The cycles reflect Bayesian updating, whereby the weight given to the information contained in the data and used in the Bayesian updating increases with each cycle (i.e., adaptive and controlled adding of information). Each cycle thus consists of three phases and is performed independently on each group of draws (i.e., parallel computation). These three phases are the correction phase (which adjusts the calculation of weights of the draws by incorporating the new information), the selection phase (which applies multinomial residual resampling to obtain new draws), and the mutation phase (which is a Metropolis random walk that accepts or rejects the new draw). The cycles end once the information from the data has been given full weight.

SABL does not require the modeler to specify conjugate priors. But as with any Bayesian estimation approach, SABL requires the user to specify the prior distributions for the parameters to be estimated. We chose uninformative priors. We assumed that the prior for each parameter of interest is independent normal with a mean of zero and a standard deviation of five. We evaluated the sensitivity of prior influence by a careful visual examination of the posterior distribution against the prior distribution.

SABL is robust to multimodal posteriors, which can arise in high dimensional problems (Jasra, Stephens, and Holmes 2007) such as ours. A further advantage of using SABL (or a Bayesian approach in general) is that the posterior distribution of draws can help in assessing the identification of the model parameters. More specifically, a high correlation between the posterior draws of two parameters may suggest that these are not separately identified by the choice data. In addition to including different covariates in the different model parts (see also discussion in Experimental Approach Section) and specifying different uninformative priors, we used this correlation matrix check to further assess the identification of our model.¹

Web Appendix F: Sketch of Parameter Identification

A formal analysis of identification is not feasible for our complex, nonlinear learning model. Here, we sketch our identification strategy for the key model parameters.

First, consider participant i 's initial prior probability of adviser a 's quality, that is, $\lambda_{i,(c-1),a}|c = 1$. This prior influences the choices i makes at $c = 1$: we assume that (up to a random error) if participant i subjectively interprets the signal from a at $c = 1$ to be ambiguous, $\tau_{i,c} = amb$, they will choose the adviser with the higher value of $\lambda_{i,(c-1),a}|c = 1$. Since the experimental design shows participants any of the four possible topics at $c = 1$, some participants will find their assigned topic difficult, and thus view the advice signal as ambiguous (Panel B in Appendix B), and interpret the signal using their initial prior. Variation in topic ambiguity at the first choice set thus identifies initial priors and how the prior depends on advisers' certification and participants' trust (β_0).

We identify the parameter β_2 via the initial prior $\lambda_{i,(c-1),a}|c = 1$ and assumed signal strength s . These two parameters jointly define the updated probabilities $\lambda_{i,c,a}$, so we treat them as predetermined covariates when participants face an ambiguous topic $\tau_{i,c} = amb$. Choices made in choice sets with ambiguous signals can thus identify β_2 . Choices made in choice sets with clear signals $\tau_{i,c} = clr$ identify β_1 .

Participants' choices of financial advice allow us to identify membership of the 16 latent classes τ_{Clarity} . Specifically (up to uncertainty in the choice process), if the participant selects adviser R ($y_{i,c} = 1$), when R gives an objectively bad quality signal $q_{i,c,R} = \bar{b}$, we can conclude that the signal was ambiguous for that participant, $\sigma_{i,c,R} = gb$. (We cannot make a similar inference if the participant selects R when R gives an objectively good quality signal, $q_{i,c,R} = \bar{g}$, as this could imply either that i treated the signal as subjectively clear, $\tau_{i,c} = clr$, or that i treated the signal as

ambiguous, $\tau_{i,c} = amb$, but $\lambda_{i,(c-1),R} > \lambda_{i,(c-1),L}$.) The combined information of posterior beliefs of adviser quality and objectively incorrect choices of advice thus allows us to identify $\tau_{Clarity,i}$.

Since $\lambda_{i,(c-1),a}|c = 1$ can be inferred from the data without any assumptions about participants' learning type, and since signal strength s is fixed, we can calculate the posterior beliefs $\lambda_{i,c,a}$ for both learning types. The posterior belief associated with the higher likelihood then helps to determine $\tau_{Learner}$.

Web Appendix G: Proportion of Participants in Latent Classes

TABLE G1: *Proportions of Participants in Latent Classes*

Latent Class					Segment Size (%)
<i>Learning process</i>					
Bayesian updater					37.11
Limited memory updater					62.89
<i>Clarity of topics</i>					
Clarity class	Consolidation	Diversification	Fees	Debt	
1	1	1	1	1	18.2
2	1	1	1	0	2.2
3	1	1	0	1	21.9
4	1	1	0	0	4.5
5	1	0	1	1	6.9
6	1	0	1	0	1.4
7	1	0	0	1	14
8	1	0	0	0	4.8
9	0	1	1	1	3.1
10	0	1	1	0	0.6
11	0	1	0	1	6.4
12	0	1	0	0	2.3
13	0	0	1	1	2
14	0	0	1	0	0.7
15	0	0	0	1	7.2
16	0	0	0	0	3.8

Notes: This table shows the estimated posterior belief percentage of participants assigned to 2 latent classes differentiated by the learning process (Bayesian or limited memory) and 16 latent classes differentiated by the clarity or ambiguity of the four advice topics. A “1” indicates that participants in that class treated the topic as clear, and “0” indicates that they treated the topic as ambiguous. For example, the model assigns 18.2% of participants to latent class 1 (row 1), which treats all topics as clear, and assigns 3.8% of participants to latent class 16 (row 16), which treats all topics as ambiguous. We infer latent classes from estimation of the choice model (Equation 9) – see Table 5 in paper for estimation results.

Web Appendix H: Estimated Marginal Effects of Client Characteristics

We examine how personal characteristics, financial literacy and knowledge change the probability that participants follow one of the two latent learning processes, or perceive topics as clear or ambiguous. We set all other variables in the respective equations at their mean values and calculate the probabilities at the minimum and maximum values for the variable of interest. Figures H1 to H4 display the probabilities and the associated 95% CIs, reflecting the marginal influence of each factor. The blue arrows display the difference when the factor confidence intervals do not overlap and the parameters from the CIs in Table 5 of the paper exclude zero.

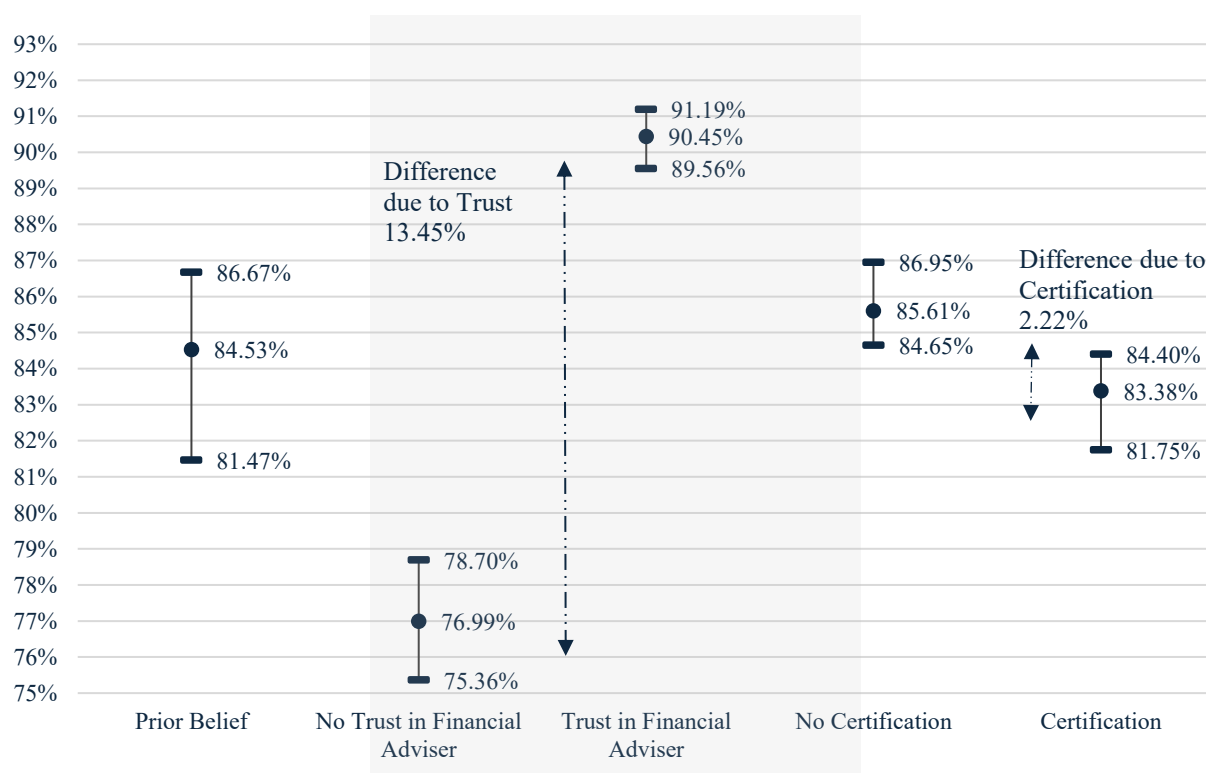


Figure H1: Factors Influencing Prior Beliefs that the Financial Adviser is Good. This figure displays the probabilities and associated 95 percent CIs affecting participants' prior beliefs given different factors. The blue arrows display the difference between the probabilities reflecting the marginal influence of each factor. Rounding may result in the displayed difference being slightly different than the calculated. Blue arrows are displayed when the factor CIs do not overlap and the parameters from the CIs found in Table 5 of the paper exclude zero.

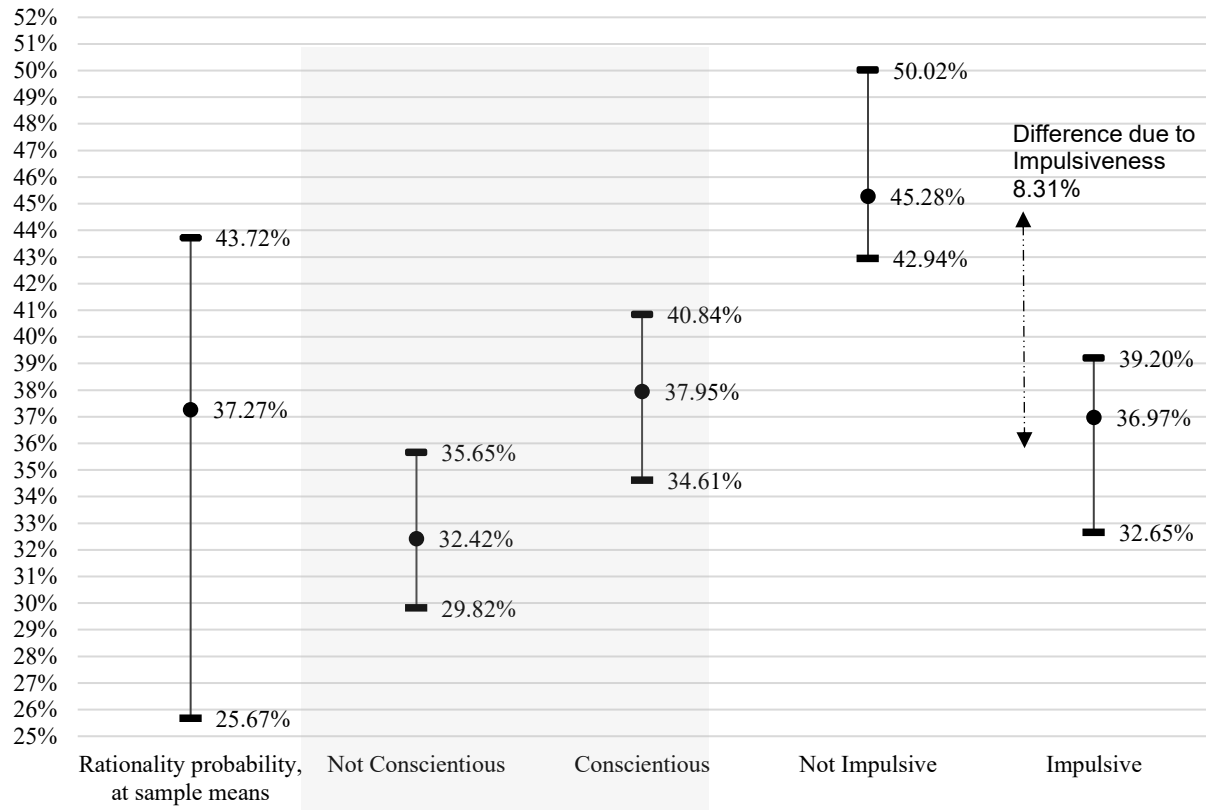


Figure H2: Probability of Being a Rational Bayesian Updater. This figure displays the probabilities and associated 95% CIs that a participant is a rational Bayesian updater given certain personality traits. The blue arrows display the difference between the probabilities reflecting the marginal influence of each factor. Rounding may result in the displayed difference being slightly different than the calculated. Blue arrows are displayed when the factor CIs do not overlap and the parameters from the CIs found in Table 5 of the paper exclude zero.

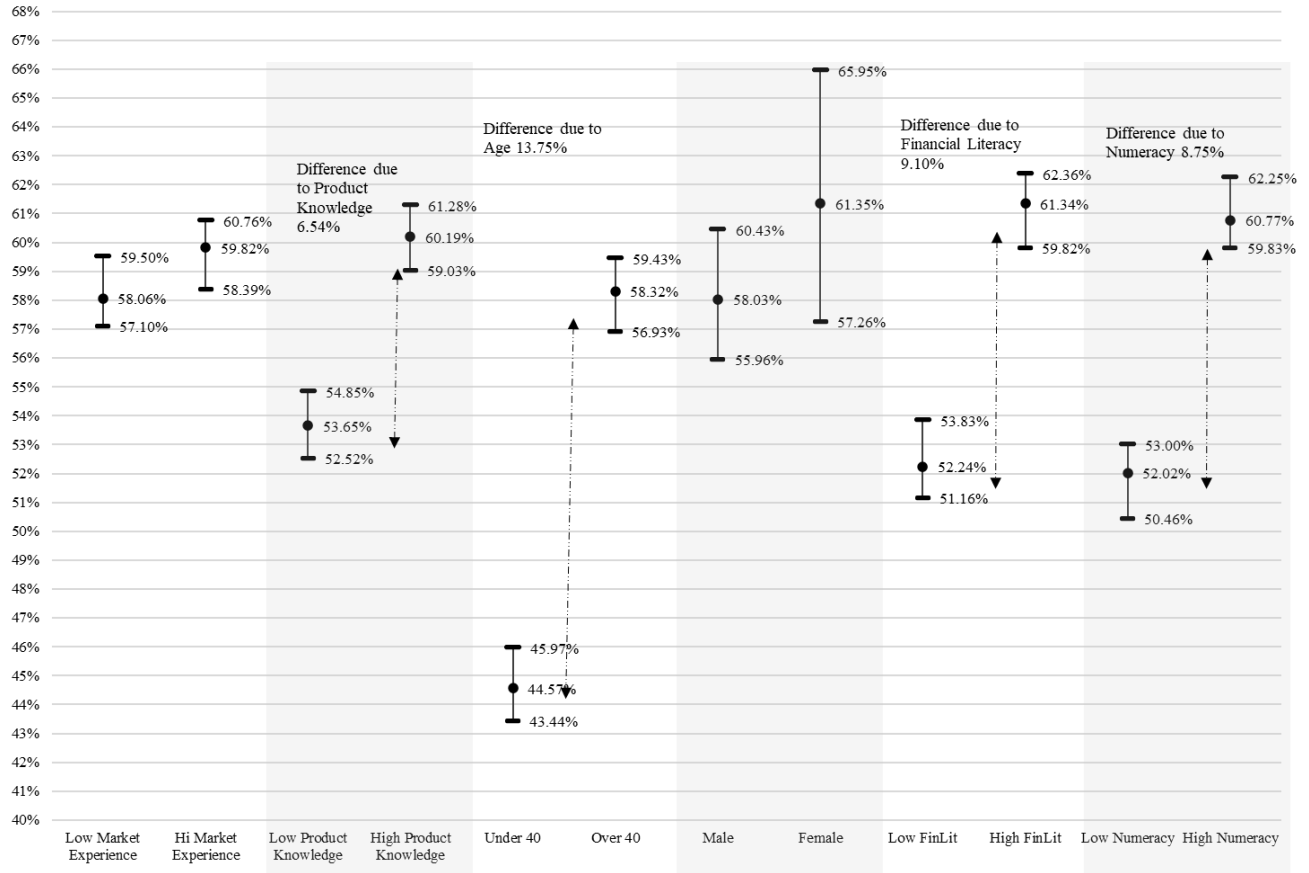


Figure H3: Probability Participant Views Topic as Clear. This figure displays the probabilities and associated 95 percent CIs that reflect whether participants view a topic as clear given different factors. The blue arrows display the difference between the probabilities reflecting the marginal influence of each factor. Rounding may result in the displayed difference being slightly different than the calculated. Blue arrows are displayed when the factor CIs do not overlap and the parameters from the CIs found in Table 5 of the paper exclude zero.

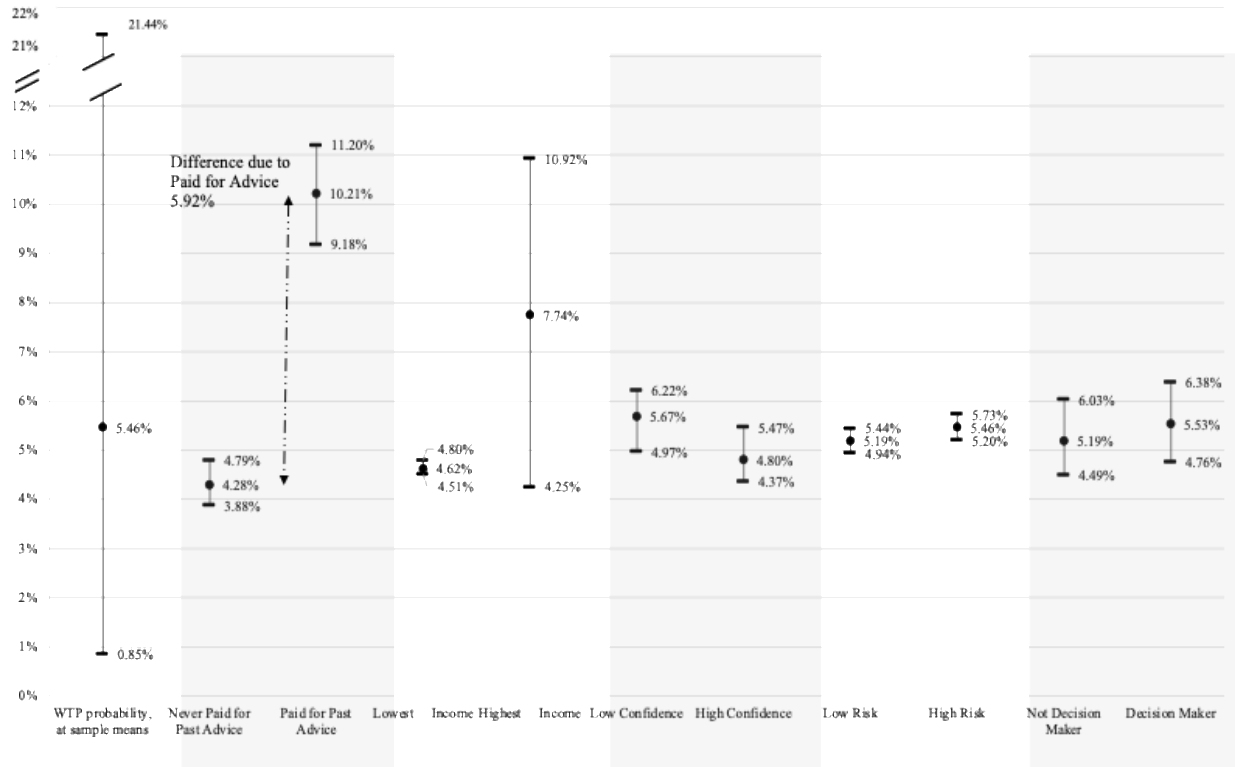


Figure H4: Factors Affecting Willingness-to-Pay for the Adviser. This figure displays the probabilities and associated 95 percent CIs affecting participants' willingness-to-pay given different factors. The blue arrows display the difference between the probabilities reflecting the marginal influence of each factor. Rounding may result in the displayed difference being slightly different than the calculated. Blue arrows are displayed when the factor CIs do not overlap and the parameters from the CIs found in Table 5 of the paper exclude zero.

Notes

1. We run SABL using its MATLAB interface. A detailed explanation of SABL and its implementation in the SABL software can be found in Geweke (2016); Geweke and Durham (2019). SABL itself can be downloaded from http://www.quantosanalytics.org/garland/mp-sps_1.1.zip. The time to estimate our model using SABL is approximately 60 minutes.

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