

Trust In AI and Human Financial Advisors

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Abstract

As Artificial Intelligence (AI) is increasingly integrated into financial decision-making, understanding when and why people trust AI advice over humans' becomes critical. This paper examines how the perceived urgency and importance of financial decisions affect preference for AI or human financial advisors, while also reviewing existing research on the neuroscience behind human trust, the distinct traits of AI and human advisors, and how honest communication of confidence or uncertainty shapes trust. A survey was conducted where 10 participants assessed 10 financial scenarios, and selected between two AI-generated recommendations that were labeled as AI or human generated. Then, participants rated each scenario's perceived urgency and importance. Participants selected AI over human-labeled advice 54% of the time. The mean perceived importance was similar for AI and human-labeled selections, while mean urgency was higher for AI rather than for human-labeled selections. This discrepancy suggests that the urgency, rather than importance of a financial scenario, may be more closely related to advisor preference. These findings are relevant for individuals seeking financial advice, because understanding the driving factors of trust in AI can help with making informed choices about relying on AI advice. However, these results should be interpreted with caution due to the limited sample size and findings should be regarded as preliminary.

Introduction

Trust plays a major role in decision-making when people face uncertainty and must rely on someone else despite the risk that comes with doing so (Pauls et al., 2016). Finance is an especially important area for studying trust because investment decisions involve uncertainty, risk, and large amounts of money. At the same time, artificial intelligence has become more common in finance through tools such as robo-advisors, automated investment recommendations, and other AI financial services (Zhang et al., 2021). As these tools spread, people must decide whether to rely on automated systems, traditional human experts, or some combination of the two. Current research has examined trust in human financial advisors and in AI systems such as robo-advisors separately. However, one important question remains less clear: whether people's trust changes depending on how quickly an investment decision must be made and how much money is at stake. This study therefore asks, how do the urgency and scale of investments influence human trust in AI advisors versus human financial advisors?

What neural networks are involved in processing risk and reward when making decisions?

Trust is a complicated process that uses many regions of the brain to help people evaluate risk, predict outcomes, and understand the intentions of others (Pauls et al., 2016). Trust does not rely on a single brain region, and is instead formed by neural systems, or networks of nerves, that also shape social reasoning, risk-reward processing, and learning from previous experiences. During situations of uncertainty, these neural systems help people determine the potential rewards and risks of trusting other people, and figure out what their true intentions are (Pauls et al., 2016).

Research in neuroscience has identified multiple brain regions involved in these processes. In an fMRI study of social interactions, Krueger et al. (2007) found that building a trusting relationship activated the paracingulate cortex, which drives humans' social decision making, while conditional trust activated the ventral tegmental area, which is responsible for the body's dopamine production. These findings suggest that trust depends not only on evaluating

another person's intentions but also on weighing the good and bad outcomes of trusting them. These neural systems allow people to evaluate trust as they make decisions in uncertain situations.

How is trust gained or lost in terms of neuroscience?

It is widely known that trust is not fixed, and can change when people gain new knowledge or experiences with others (Krueger et al., 2007). Positive interactions strengthen trust because they reinforce expectations that another person is reliable, while negative interactions cause individuals to reevaluate those expectations, which in turn decreases trust levels between people (Pauls et al., 2016). Neuroscience shows that this process happens through learning mechanisms that compare expected outcomes with actual outcomes, allowing people to make future decisions based on their previous experiences (Krueger et al., 2007). As a result, trust tends to develop gradually rather than appearing immediately.

The amount of risk in a decision also affects how easily trust is established (Pauls et al., 2016). Decisions involving more uncertainty or larger potential losses usually require higher trust levels before individuals are willing to rely on others (Pauls et al., 2016). Understanding how the brain builds and updates trust is foundational when analyzing and comparing trust levels between people but also with AI.

What does AI have to build trust that humans don't, and vice versa?

Artificial intelligence has created a modern problem: people now must decide whether to trust recommendations coming from a computer more than another person. Although AI systems do not have emotions or personal experiences, they still have many characteristics that increase users' trust. AI can process large amounts of information quickly, give consistent recommendations, and avoid emotional biases that would influence a human's judgment (Mehrotra et al., 2024). These characteristics make AI appear more objective, especially when decisions depend on analyzing complex data. However, AI programs lack human social interactions, meaning that in some situations, they may not effectively account for human emotions (Zhang et al., 2021). This makes AI advisors much faster and unbiased, but sometimes emotionally incompetent.

Human advisors, on the other hand, offer qualities that AI cannot replicate. Human advisors can respond to their client's feelings and personal circumstances when giving advice (Pauls et al., 2016; G P & Dsa, 2024).

Because of this, trust in AI might be decided by whether users prefer consistency or interpersonal understanding, which shows that both human advisors and AI systems each have strengths that may be trusted differently depending on the situation.

How effective is anthropomorphism?

Researchers have also examined whether making AI seem more human can increase trust. Anthropomorphism refers to giving AI systems human-like traits, such as conversational language, names, or human-like voices and personalities. Large language models, or LLMs, naturally communicate using human language, making interactions with them feel similar to conversations with another person. Research has found that providing explanations, and expressing confidence or uncertainty in a decision can increase users' trust by making AI recommendations easier to understand and seem more human (Mehrotra et al., 2024). However, these same features sometimes cause people to put too much trust in AI, even when its recommendations should be questioned. So, researchers suggest that AI systems should promote appropriate trust rather than maximizing trust (Mehrotra et al., 2024).

How do user age, AI literacy, and risk tolerance affect trust levels?

Trust in AI also depends on characteristics of the user. Younger individuals are more familiar with AI technology because they have grown up using digital tools, while older adults may be less comfortable using AI for important decisions (Sidoti & Gottfried, 2025). Additionally, people with better AI literacy often have a better understanding of AI's capabilities and its limitations, allowing them to make more informed decisions about when to rely on AI recommendations (Mehrotra et al., 2024).

Individual attitudes toward risk also influence trust in AI (Aini). People who are more comfortable making decisions under uncertainty evaluate AI recommendations differently than individuals who tend to avoid risk (Aini, 2025). This evidence suggests that trust in AI depends not only on the characteristics and ability of the technology but also on the personality and traits of the person using it. These fast-changing factors become especially important in financial decision-making, where the consequences of trusting AI can lead to gaining or losing large amounts of money.

How does trust between humans affect financial decisions?

Trust plays an important role in financial decision-making because investors depend on others to explain information and help them make choices involving risk. Some examples of financial decisions are choosing investments, planning for retirement, or deciding how big of a risk to take. Investors must decide whether they trust an advisor to be knowledgeable and reliable when providing guidance (G P & Dsa, 2024).

Trust in financial advice does not only depend on the skills of the advisor. A person can trust an advisor personally even if they don't trust the company they are working for or the financial advice industry in general (Pauls et al. 2016). Because of this, an investor's willingness to follow advice can depend on trust in both the individual and the organization they work for (Pauls et al., 2016).

Trust also develops through experience. Positive experiences can strengthen the belief that an advisor is reliable, while negative experiences cause an investor to doubt future recommendations (Fareri, 2019). As discussed previously, trust is not permanent and can change as people compare what they expected to happen with what actually happened. Investors continuously evaluate their advisor's judgment and past performance to decide how much to trust them in the future (Pauls et al., 2016).

What are investors trusting advisors to do?

Investors trust financial advisors to do more than choose investments that might increase in value. Research on the role of financial advisors shows that these professionals can shape investment decisions by helping investors organize information and understand the possible consequences of different choices (G P & Dsa, 2024). Investors are also trusting advisors to understand them personally. Two people may have similar incomes but completely different financial responsibilities, goals, and levels of comfort with risk. A human advisor can ask questions about these differences and change a recommendation based on information that is not obvious from just financial data.

Another important responsibility is explaining uncertainty. Advisors cannot guarantee success for an investment, so they have to help their client understand the possible benefits and risks of their recommendations. So, an advisor can gain trust not by claiming to be completely certain, but by clearly explaining what is known, what remains uncertain, and why they made a recommendation.

What is AI's role in finance today?

Investors rely on AI advisors because they can process large amounts of information and produce recommendations both quickly and consistently. Unlike humans, AI systems do not become tired or let emotions influence the judgment and calculations they make. These characteristics make AI advisors seem like the better option when a decision depends more heavily on comparing large amounts of data and possible outcomes (Mehrotra et al., 2024).

Robo-advisors, AI chatbots that give generalized advice, can make financial guidance more accessible. Instead of meeting directly with a human advisor, users can tell the program about their goals and risk preferences through an online system. The system can then use that information to give recommendations. The information may include the investor's goals, investment timeline, financial circumstances, and tolerance for risk.

AI can also support human financial advisors instead of replacing them. A human advisor can use AI to organize information, or identify patterns in data before discussing the results with a client. In this situation, AI is involved in part of the analysis, while the human advisor interprets the information and communicates with their client. This creates a hybrid approach that takes advantage of both the analytical power of AI and the interpersonal skills of humans.

How do people choose between human and AI advice?

Perception of certain institutions can also influence whether someone prefers human or AI advice. Bosompim et al. (2026) suggests that trust in an advisor may be influenced not only by the quality of their recommendations, but also by the people or institutions surrounding the person giving that advice. For example, if a client has had a negative experience with human or AI advisors, that may cause them to shy away from one of the options. Similarly, if a client had a positive experience or has seen promotional advertisements, they will be drawn towards one of the options.

These many factors, whether it be the urgency of a situation or pre-existing beliefs in an institution, make it difficult to always pick the right advisor for a given situation. On top of that, with humans and AI having their clear advantages and disadvantages, human and AI advisors may be more effective when used together. However, the balance between the two depends on the scale of the decision being made and what the most important traits are to the investor.

Present Study

The context of a financial decision can also affect whether someone prefers advice from a human or AI advisor. However, it is unclear how different factors of a financial situation, like urgency or importance, affect preference for human or AI advisors. To find out, I conducted a survey with ten separate financial situations. For each situation, participants chose between two pieces of AI advice. However, for each situation, one piece of advice was labeled as AI advice and the other as human advice. Participants were then asked to rate each situation based on both how urgent and how important the decision felt, on a scale of one to five. I hypothesized that in general, participants would choose AI advice in situations they considered more urgent, while they would choose human advice in situations they considered more important.

Methods

Participants

Ten participants were recruited through family and friends for this survey, and they all responded to the same 10 financial scenarios.

Procedures

For each scenario, participants were shown two pieces of advice, with one labeled as advice from an AI financial Advisor and the other labeled as advice from a human advisor. Participants selected which recommendation they preferred and then rated how urgent and

important the financial scenarios felt on a scale from one to five, giving a separate rating for each one.

Analysis

After all the data was collected, the average urgency and importance ratings for AI and human selections were calculated, and these results were assessed to determine whether perceived urgency or importance was related to preference for human or AI financial advice.

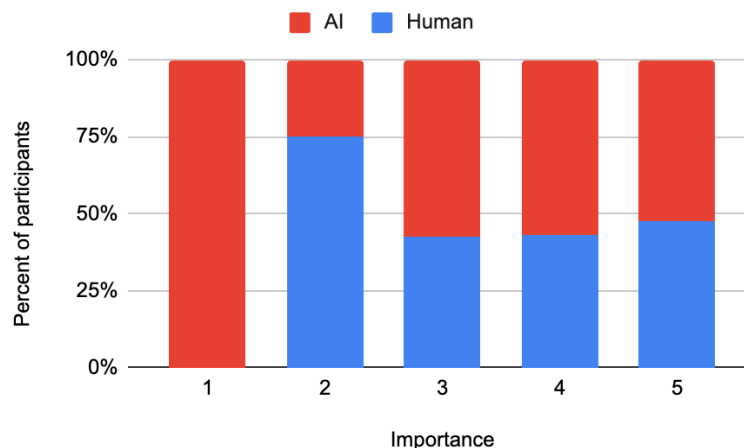
Results

How does the importance of the decision affect trust levels in advice from humans and AI?

In this survey, participants chose AI over human advice 54% of the time. Out of these responses, the average importance value when choosing AI advice is 3.65, versus 3.59 when choosing human advice. This suggests that the perceived importance of a decision does not greatly affect preference for human or AI advice. This is highlighted when looking at responses to individual questions. (see **Figure 1**).

Figure 1.

Human vs. AI advisor selections based on importance.



Note. Total N = 10; 1 is the lowest perceived importance, and 5 is the highest perceived importance.

For example, in question three, where a recently graduated college student chooses between a paid job over the summer and an auspicious unpaid-internship (3.9/5 perceived Importance), seven out of the 10 participants selected the AI response. On the other hand, participants averaged an importance value of 3.6 out of five in question eight, where the participant chooses between a temporary transportation solution by paying a monthly train fee, or buying an affordable used car. All 10 participants chose the human advice. Additionally, out of all scenarios where the perceived importance was rated as 1 out of 5, which is the lowest perceived importance, 100% of participants chose AI advice. This shows that in situations with especially low importance levels, there may be a stronger preference for AI advisors. These results suggest that although there is no significant trend between perceived importance and advisor preference, and situations with similar levels of importance can create preferences for both human and AI advice, importance may still become a factor at extremely low levels of importance.

How does the urgency of the decision affect trust levels in advice from humans and AI?

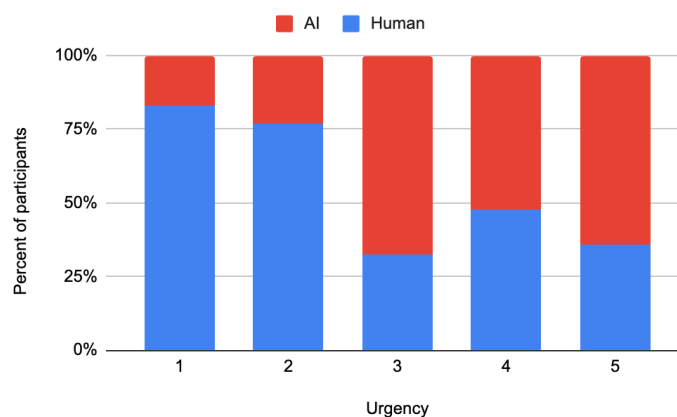
The survey results show a clearer relationship between urgency and preference for AI advice, with AI advice appearing more frequently in situations that respondents viewed as more urgent.

For example, in question 10, where a college student chooses between repairing their laptop or buying a new one, the average urgency score was 3.5. In this scenario, eight out of 10 participants selected AI advice.

Additionally, similar to the average importance value, the average urgency value for all AI advice selections was 3.46. However, the average urgency value dropped to 3.04 when calculated with the human advice selections. This data suggests that participants choose AI advice over human advice in situations they deem more urgent.

Figure 2.

Human vs. AI advisor selections based on urgency.



Note. Total N = 10. 1 is the lowest perceived urgency, and 5 is the highest perceived urgency.

Discussion

This study looked at how the urgency and importance of a financial decision affect human trust in AI and human financial advisors. To study this, a survey was conducted where 10 participants responded to 10 financial situations, chose between advice labeled as AI or human generated, and rated each situation's urgency and importance on a scale of one to five. Overall, participants chose AI advice 54% of the time. The average importance values were similar between AI and human selections, while the average urgency value was higher when participants chose AI advice. These results suggest that urgency may play a larger role than importance in determining preference for human or AI financial advice.

One reason could be that one of AI's main advantages is its ability to provide information quickly. When someone needs to make a decision in a shorter amount of time, receiving an immediate recommendation feels more assuring.

However, not all situations that leaned towards AI advice were considered urgent by respondents, as some situations that were considered relatively urgent still resulted in a preference for human advice.

While this survey does suggest the impact of urgency on the preference of human or AI advisors, it also shows that there are factors other than just perceived importance or urgency

that alter trust levels in financial advisors. These findings relate to previous research, and show that AI is trusted to quickly process large amounts of information, while human advisors are valued more for interpersonal understanding. The preference for AI in urgent situations reflects this idea, since faster, analytical recommendations become more reliable when there is less time to make a decision. On the other hand, the lack of a clear relationship between perceived importance and advisor preference suggests that when choosing between human and AI advice, people prioritize the type of support they want over how important the decision feels.

Future Directions and Limitations

Another area to be explored by future research is studying how the way AI communicates its recommendations affects trust in financial advice. Research has found that explanations that show confidence or uncertainty can increase trust by making AI advice easier for users to understand (Mehrotra et al., 2024). However, these same characteristics can sometimes cause users to place too much trust in AI, even when its recommendations should still be questioned. A future experiment could build on this idea by changing how confidently an AI advisor presents the same recommendation across financial situations with different levels of urgency and importance. This could help researchers find out whether explaining uncertainty makes financial advice more or less convincing.

There were also several limitations to the survey conducted in this study. First, the survey only recorded results from ten participants who each responded to ten financial situations, making the amount of analyzable data rather small. Because of this small sample size, the findings should be treated as preliminary trends rather than conclusive findings. In a study with more resources, a power analysis could be conducted to determine an optimal sample size before recruiting respondents.

Another limitation was the diversity of the participant pool. Participants were primarily recruited through family and friends, meaning the survey did not have a broad range of backgrounds and experiences. A future experiment could distribute the survey to a wider group of people to see whether the results remain consistent across different populations.

Finally, the survey was limited to ten questions to keep the questionnaire manageable for respondents, since they were not being compensated for their time. However, with additional funding, future researchers could compensate participants and include more scenarios, which would allow for a wider range of financial scenarios included in the survey.

Together, these changes would create a more complete follow-up experiment that looks into not only whether people prefer human or AI financial advice, but also how confidence or uncertainty demonstrated by advisors can influence that preference. Existing research already shows that trust in AI depends partly on how clearly and honestly explanations are communicated, making this a key area for further research as AI becomes more involved in financial decision-making (Mehrotra et al., 2024).

Conclusion

This paper looks at how the urgency and importance of a financial decision affects human trust in AI and human financial advisors. Our discussion was centered around human trust, which is built through neural processes that calculate risk, reward, and past experiences. Human trust is greatly shaped by personal factors such as AI literacy and risk tolerance. For this reason, financial trust doesn't only depend on the advisor's expertise, but also on their ability to clearly and accurately communicate risk and uncertainty. AI offers quick decisions and the power to process large amounts of data, while humans offer interpersonal understanding. Offering a hybrid approach to get the benefits of both types of advisors could be useful. In the



survey conducted, it was observed that importance didn't play as big of a factor as urgency when determining trust levels, with urgency making people lean towards AI advisors more. However, this survey was limited by its small sample size and lack of diversity in its participants, which future studies can work on. Looking ahead, emerging research can also look into how different levels of demonstrated confidence or uncertainty can affect trust. These findings allow financial advisors and AI developers better understand when people are most likely to rely on AI, and would help them create tools that support more appropriate trust.

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