



The Study of AI on Customer Trust among New SBI YONO Young Users in Tirupati

N.Sivadatta¹, Dr. D .Prasanna Kumar²

¹BBA Third Year Student, KL Business School, Koneru Lakshmaiah Education Foundation (KLEF), Andhra Pradesh, India

²Assistant Professor, KL Business School, Koneru Lakshmaiah Education Foundation (KLEF), Andhra Pradesh, India

ABSTRACT :

This study compares how much young users of SBI's YONO app in Tirupati, Andhra Pradesh trust a human bank advisor versus the app's AI assistant. Data came from a structured Likert-scale questionnaire (n = 120, aged 18–30) and were analysed with a paired-samples t-test and a chi-square test. Trust in the AI assistant is highest for simple balance checks, but falls sharply for loans, investments and complaints, where the human advisor is trusted significantly more ($p < 0.001$). Age group is also significantly associated with preferred channel ($p = 0.022$). Banks should use AI as a fast first layer and keep an easy path to a human for high-stakes decisions.

Keywords: *Trust, YONO SBI, AI assistant, human advisor, digital banking, young customers*

1. Introduction

YONO (You Only Need One) is one of India's largest banking apps. It offers two ways to get help: a human bank advisor (branch, phone or relationship manager) and an in-app AI chat assistant. Both solve the same problems, but customers do not trust them equally.

Trust decides whether a customer follows financial advice. Young customers are the fastest adopters of technology, so their trust decisions will shape how far banks can rely on AI. This study does not test whether the AI works correctly; it tests whether young customers believe it enough to rely on it for money matters, in Tirupati, a Tier-2 city.

2. Review of Literature

Nine studies (2017–2025) were reviewed, from early algorithm-aversion research to recent India-focused chatbot work.

Author(s) & Year	Country	Key Finding
Prahl & Van Swol (2017)	USA	Advice is discounted after an algorithm errs, even if overall accuracy is high.
Følstad et al. (2018)	Norway	Chatbots are trusted more when fast, accurate on intent, and able to hand off to a human.
D'Acunto et al. (2019)	USA	Robo-advisors reduce biases and improve diversification, especially for novices.
Hildebrand & Bergner (2020)	Switzerland	Chat-style interfaces build more affective trust than static forms.
Ben David et al. (2021)	Israel	Clear explanations of how AI works raise adoption, especially after a mistake.
Mahmud et al. (2022)	Finland	Fairness, transparency and prior experience best predict algorithm acceptance.

Alagarsamy & Mehroliya (2023)	India	Chatbot trust explained ~39% of variance in usage intention (SBI, HDFC, ICICI, Axis).
Fatima & Chakraborty (2024)	India	Indian investors stay cautious of robo-advisors; trust, anxiety and preference for humans are barriers.
Bosompim et al. (2025)	USA	Young adults using online networks trust AI advice more; offline ties strengthen trust in human experts.

Table 1: Summary of Reviewed Literature

3. Research Gap

Trust in AI is highest for simple, low-risk tasks and lowest for complex, high-stakes or emotional ones. However:

- Chatbot studies rarely test trust against a human-advisor benchmark for the same tasks.
- The two Indian studies do not break trust down task-by-task within one app.
- Neither is set in a Tier-2 city like Tirupati.

This study measures trust separately for five banking tasks inside YONO, among young Tirupati users, directly against a human advisor.

4. Conceptual Framework

Four determinants – perceived competence, security and privacy, empathy or warmth, and prior experience with digital tools – shape trust in the human advisor and in the AI assistant, which together shape channel preference.

Figure 4: Conceptual Research Framework Used in This Study

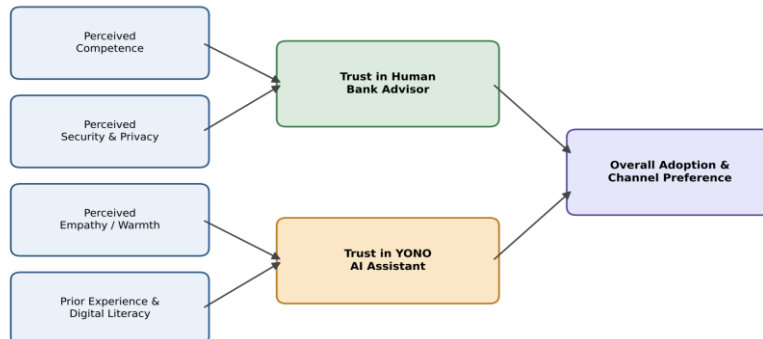


Figure 1: Conceptual Research Framework

5. Objectives, Research Questions and Hypotheses

Objectives

- Measure trust in a human advisor vs the in-app AI assistant among young YONO users in Tirupati.
- Compare trust across five banking tasks, from simple to complex.
- Test whether age relates to channel preference (human, AI or both).
- Suggest how SBI can combine human and AI channels to build trust.

Research Questions

- Is trust in a human advisor significantly different from trust in the AI assistant?
- Does the gap change by task type?
- Is age group associated with preferred channel?

Hypotheses

- **H1:** No significant difference between mean trust in the human advisor and the AI assistant (paired t-test).
- **H2:** No significant association between age group and preferred channel – Human / AI / Both (chi-square test).

6. Research Methodology

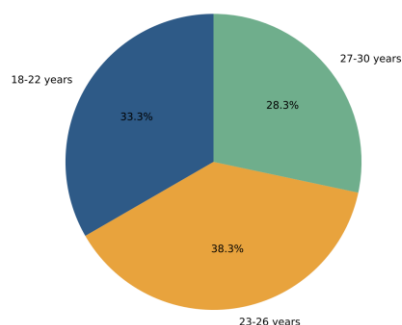
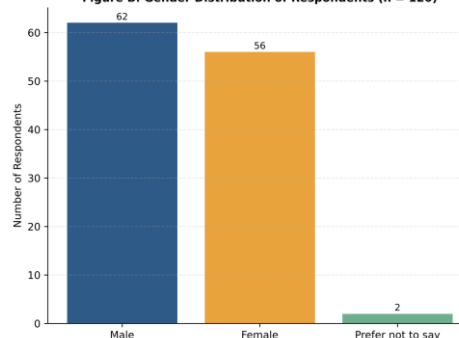
Element	Details
Design	Quantitative, descriptive, cross-sectional
Population	Young YONO SBI users in Tirupati, Andhra Pradesh, aged 18–30
Sample	120 respondents; age groups 18–22, 23–26, 27–30
Sampling	Convenience sampling (college networks, YONO user groups, local SBI branch customers)
Instrument	Google Forms questionnaire, 32 questions; trust items on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree)
Analysis	Frequencies, percentages and means; paired t-test (H1); chi-square test of independence (H2); run in R
Ethics	Academic use only; purpose disclosed; no personal identifiers; aggregate, anonymised analysis

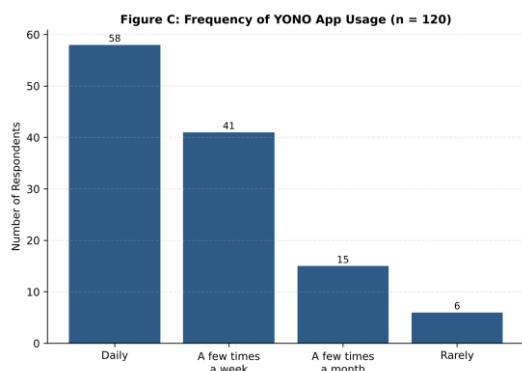
Table 2: Methodology Summary**7. Data Analysis and Interpretation**

Note: The dataset analysed below is an illustrative dataset built to demonstrate the statistical method, following response patterns reported in the literature. It is structured like live survey data, so the same analysis can be re-run on real responses.

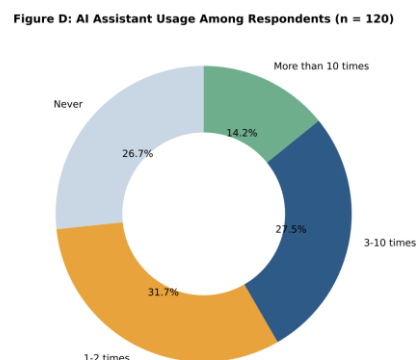
7.1 Respondent Profile and Usage

- Age: 23–26 largest (46, 38.3%), then 18–22 (40, 33.3%), 27–30 (34, 28.3%).
- Gender: 62 male (51.7%), 56 female (46.7%), 2 preferred not to say (1.6%).
- Usage: 58 (48.3%) use YONO daily and 41 (34.2%) a few times a week – an active-user sample.
- AI assistant: 88 (73.3%) have used it at least once; 32 (26.7%) never – so low trust on complex tasks is not just unfamiliarity.

Figure A: Age Distribution of Respondents (n = 120)*Age distribution (n = 120)***Figure B: Gender Distribution of Respondents (n = 120)***Gender distribution (n = 120)*



YONO usage frequency (n = 120)



AI assistant usage (n = 120)

Figure 2: Respondent profile and usage

7.2 Trust by Task Type

Task	Human	AI	Result
Balance & transaction check	3.6	4.3	AI preferred
Loan advice	3.9	3.2	Human preferred
Investment planning	4.1	2.9	Human preferred
Fraud / complaint resolution	4.4	2.6	Human strongly preferred
Complex financial grievance	4.5	2.3	Human strongly preferred

Table 3: Mean Trust Scores by Task Type (1–5)

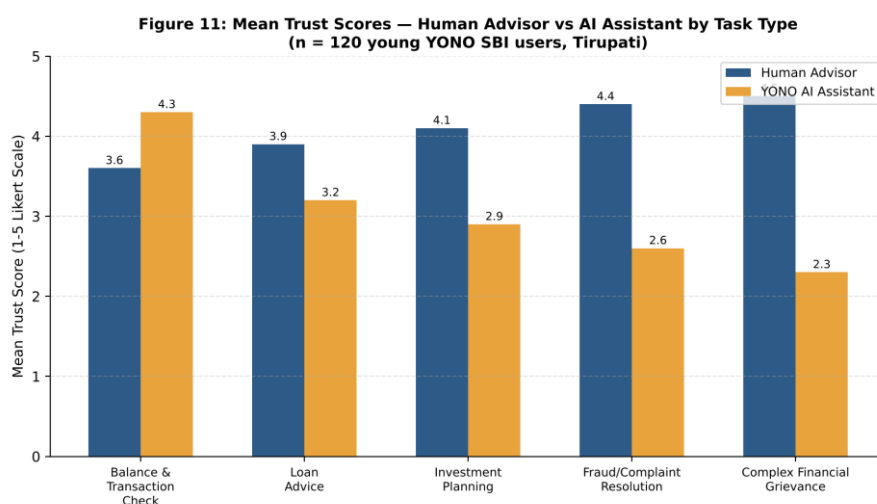


Figure 3: Mean Trust – Human Advisor vs AI Assistant by Task

AI trust is highest for balance checks ($M = 4.3$) and falls as risk rises, to $M = 2.3$ for complex grievances. Human trust moves the other way, from 3.6 to 4.5. This fits algorithm appreciation for simple tasks and aversion for high-stakes ones (Prah & Van Swol, 2017; Mahmud et al., 2022).

7.3 Overall Perception

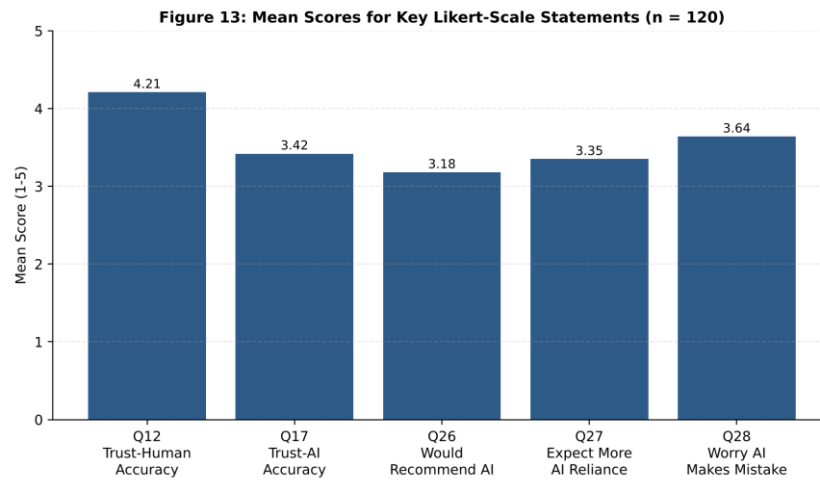


Figure 4: Mean Scores for Key Likert Statements (n = 120)

The human advisor scored highest on accuracy ($M = 4.21$) versus the AI assistant ($M = 3.42$). Willingness to recommend the AI assistant was the lowest item ($M = 3.18$), and worry about AI mistakes was high ($M = 3.64$).

7.4 Hypothesis Testing

- Overall trust – Human Advisor: $M = 4.10$, $SD = 0.52$
- Overall trust – AI Assistant: $M = 3.06$, $SD = 0.61$

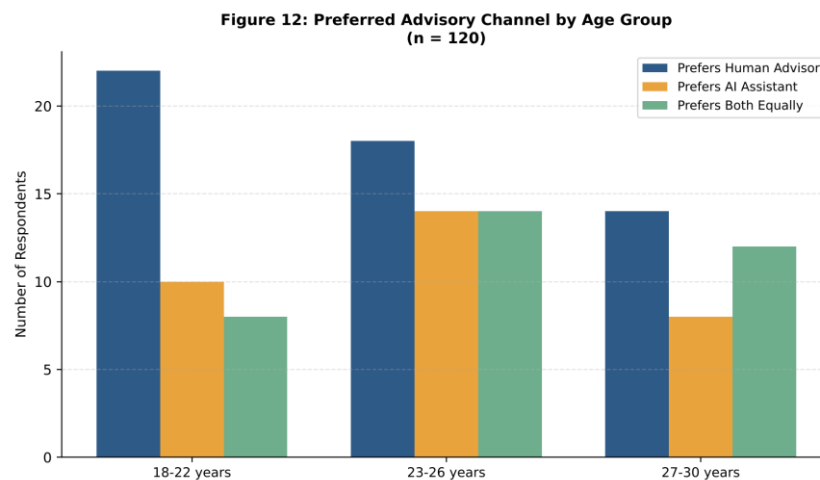


Figure 5: Preferred Advisory Channel by Age Group

Hypothesis / Test	Statistic	p-value	Decision
H1 – Paired t-test (Human vs AI trust)	$t(119) = 14.87$	< 0.001	Rejected H_{10} – Human higher
H2 – Chi-square (Age $\times$ Channel)	$\chi^2(4, N = 120) = 11.42$	0.022	Rejected H_{20} – significant association

Table 4: Hypothesis Test Results

H1: Human advisors receive significantly higher overall trust than the AI assistant. H2: Age group is significantly associated with preferred channel; 18–22 lean more toward human or hybrid support, while AI-only preference is slightly higher in the 23–26 band.

8. Findings

- Sample: 120 respondents, 71.6% aged 18–26; 82.5% use YONO at least a few times a week.
- Overall trust is higher for human advisors ($M = 4.10$ vs 3.06 , $p < 0.001$).
- AI is trusted more than humans for one task only: simple balance and transaction checks.
- Human trust rises as tasks get riskier or more emotional, peaking for fraud/complaints and grievances.
- Age is significantly associated with preferred channel ($\chi^2 = 11.42$, $p = 0.022$).
- 73.3% have tried the AI assistant, so low trust is not due to unfamiliarity.

9. Recommendations

- **Position AI as a fast first layer** for routine tasks like balance checks and mini statements.
- **Add a one-tap handoff to a human** for loans, investments and complaints, without restarting the chat.
- **Show short explanations of how the AI works** (Ben David et al., 2021) to build trust on moderately complex tasks.
- **Target the 23–26 group** for trust-building campaigns; they show the highest AI preference.
- **Keep a visible human option** for fraud and grievances, where AI trust is lowest.

10. Implications

Practical: The trust gap depends on the task, not blanket AI aversion, so SBI should design task-level AI/human routing inside YONO rather than one app-wide trust campaign.

Theoretical: The study adds task-level evidence from a Tier-2 Indian city to the literature on algorithm aversion, extending Alagarsamy & Mehroliya (2023) and Fatima & Chakraborty (2024).

11. Limitations and Future Research

- The dataset is illustrative, built to match patterns in the literature, not a fielded live survey.
- Convenience sampling in one city limits generalisation.
- Self-reported trust can reflect a respondent's most recent app experience.
- Only YONO SBI is covered, not other banks' assistants.

Future work: field the questionnaire to a live sample and re-run the analysis; extend to other Tier-2/3 cities; study trust recovery after a visible AI mistake; compare YONO with HDFC EVA, ICICI iPal and Axis Aha.

12. Conclusion

Trust in YONO's channels is not all-or-nothing; it depends on the task. Young customers let the AI handle simple, everyday tasks but want a human when money, risk or a problem is involved. The best YONO experience lets AI handle speed and human advisors handle trust. Because the data are illustrative, findings must be validated with real survey data before being treated as conclusive.

REFERENCES

- Alagarsamy, S., & Mehroliya, S. (2023). Exploring chatbot trust: Antecedents and behavioural outcomes. *Heliyon*, 9(5), e16074. <https://doi.org/10.1016/j.heliyon.2023.e16074>
- Ben David, D., Resheff, Y. S., & Tron, T. (2021). Explainable AI and adoption of financial algorithmic advisors. *Proc. 2021 AAAI/ACM Conf. on AI, Ethics, and Society*, 390–400. <https://doi.org/10.1145/3461702.3462565>
- Bosompim, P., Essieku, R., & Letkiewicz, J. (2025). In whom we trust? Social networks and trust in AI vs. human experts financial advice. *Finance Research Letters*, 91, 109437. <https://doi.org/10.1016/j.frl.2025.109437>
- D'Acunto, F., Prabhala, N., & Rossi, A. G. (2019). The promises and pitfalls of robo-advising. *Review of Financial Studies*, 32(5), 1983–2020. <https://doi.org/10.1093/rfs/hhz014>
- Fatima, S., & Chakraborty, M. (2024). Adoption of artificial intelligence in financial services: The case of robo-advisors in India. *IIMB Management Review*, 36(2), 113–125. <https://doi.org/10.1016/j.iimb.2024.04.002>
- Følstad, A., Nordheim, C. B., & Bjørkli, C. A. (2018). What makes users trust a chatbot for customer service? In *Internet Science: INSCI 2018* (pp. 194–208). Springer.

-
- Hildebrand, C., & Bergner, A. (2020). Conversational robo advisors as surrogates of trust. *Journal of the Academy of Marketing Science*, 49, 659–676.
 - Mahmud, H., Islam, A. K. M. N., Ahmed, S. I., & Smolander, K. (2022). What influences algorithmic decision-making? *Technological Forecasting and Social Change*, 175, 121390. <https://doi.org/10.1016/j.techfore.2021.121390>
 - Prahl, A., & Van Swol, L. (2017). Understanding algorithm aversion: When is advice from automation discounted? *Journal of Forecasting*, 36(6), 691–702.