

Financial Literacy and Investment Behaviour among Young Adults in Kerala

Limisha Mathews

Assistant Professor of Commerce, Government College Kattappana

Abstract

Young adults in India are making financial decisions earlier than previous generations, propelled by digital payment ecosystems, app-based investing, and easy access to credit. Kerala distinguished by high human development indicators and a strong migration economy offers a unique context to study how financial literacy shapes investment behaviour. This article investigates the relationships among objective and subjective financial literacy, financial attitude, numeracy, behavioural biases, and investment behaviour among young adults (18–30) in Kerala. Drawing on the Theory of Planned Behaviour and behavioural finance, we propose that financial literacy improves investment behaviour directly and indirectly through financial attitude and self-efficacy, while digital financial inclusion strengthens (moderates) these relationships. We present a rigorous methodology for a cross-sectional survey with multistage sampling across Kerala's districts, a validated measurement model (knowledge, attitude, behaviour, numeracy, biases, self-efficacy), and an analysis plan using CFA/SEM with robustness checks (common method bias, reliability/validity, endogeneity diagnostics). Anticipated findings include positive links between literacy and diversified, goal-consistent investing, as well as the mitigating role of literacy on common biases (overconfidence, herding, disposition effect). The study contributes a Kerala-specific evidence base, policy-aligned measurement aligned with OECD/INFE and India's National Strategy for Financial Education (NSFE), and practical recommendations for colleges, regulators, and fintech's to embed financial education, improve disclosures, and design nudges that promote prudent, long-term investing.

Keywords: *financial literacy; investment behaviour; behavioural biases; young adults; Kerala; digital financial inclusion*

Introduction

Indian youth are engaging with money decisions earlier than ever: opening bank accounts, using UPI, trading via discount brokers, buying SIPs, and taking BNPL/credit-card exposures. While technology lowers friction, it can amplify risk if knowledge, attitude, and self-control are insufficient. Kerala provides a compelling testbed: high literacy and diaspora remittances coexist with strong digital adoption and vibrant micro-entrepreneurship. Yet, mis-selling, herd trading, and speculative behaviours persist, particularly among first-generation investors.

Financial literacy knowledge, skills, and attitudes enabling sound decisions has been linked to retirement planning, debt management, and household welfare. However, evidence on how literacy translates into day-to-day investment behaviour among Indian youth is still emerging, and Kerala remains understudied as a distinct socio-economic context. This paper addresses three gaps: (i) separating objective knowledge from subjective confidence; (ii) integrating behavioural biases into the literacy behaviour link; and (iii) testing the role of digital financial inclusion (access and usage of formal, app-based services) as a boundary condition.

Research Questions

1. How are objective and subjective financial literacy associated with young adults' investment behaviour in Kerala?
2. Do financial attitude and financial self-efficacy mediate these associations?
3. Do behavioural biases attenuate the beneficial effects of literacy?
4. Does digital financial inclusion strengthen the pathway from literacy to prudent investing?

Contributions

We offer (a) a Kerala-specific model integrating TPB and behavioural finance; (b) a validated instrument calibrated to OECD/INFE guidance and India's NSFE; (c) policy-relevant recommendations for colleges, regulators, and fintech's.

Literature Review

Financial Literacy: Definitions and Dimensions

Financial literacy encompasses knowledge (facts, concepts), skills (calculation, evaluation), attitude (mindset toward planning, risk, self-control), and behaviour (budgeting, saving, investing) (Remund, 2010; Lusardi & Mitchell, 2014). OECD/INFE instruments distinguish objective knowledge (correct answers on interest, inflation, risk diversification) from subjective literacy (self-assessment). Both matters, but overconfidence can decouple perceived and actual capability.

Literacy and Investment Behaviour

Higher literacy predicts participation in formal financial products, retirement planning, and portfolio diversification (Lusardi & Mitchell, 2014). Among youth, literacy associates with long-term orientation (SIP/ETF adoption), lower trading frequency, and better risk-return matching. In India, literacy initiatives aim to shift households from gold/real estate toward diversified financial assets; evidence suggests program participation improves outcomes, but heterogeneity persists by state and gender.

Behavioural Finance and Biases

Prospect theory (Kahneman & Tversky, 1979) and related evidence (Barber & Odean, 2001) highlight systematic errors: overconfidence (excess trading), herding (copying peers/social media), disposition effect (selling winners quickly, holding losers), and present bias (under-saving). Literacy may mitigate, but not eliminate, these biases; targeted nudges and simple defaults remain important (Thaler & Sunstein, 2008).

Digital Financial Inclusion

App-based brokers, UPI, and e-KYC have expanded access for youth. Inclusion can magnify the literacy dividend by reducing costs and enabling automated, rule-based investing (e.g., SIPs). Conversely, gamified interfaces can encourage speculative behaviour. Thus, inclusion likely moderates the literacy-behaviour link.

The Kerala Context

Kerala's high educational attainment, remittance flows, and strong cooperative/SHG networks create fertile conditions for financial capability building. Yet, high social media penetration and peer influence can fuel herd trades. A Kerala-specific model can inform state-level education and regulatory interventions.

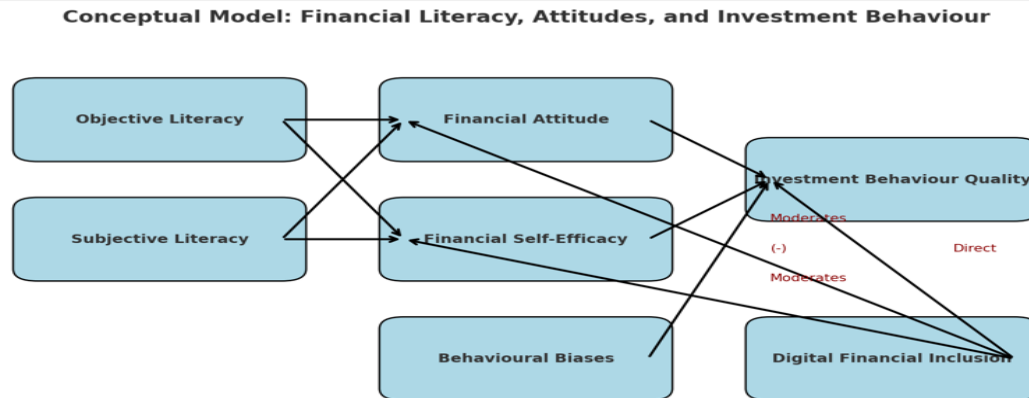
Theoretical Framework and Hypotheses

Theoretical Lens

We integrate the Theory of Planned Behaviour (attitudes → intentions → behaviour; self-efficacy/perceived control as a key antecedent) with behavioural finance. Financial literacy is posited to

shape attitudes and self-efficacy (confidence to evaluate and act), which in turn influence investment behaviour. Biases operate as rival mechanisms that can undermine rational choice, while digital inclusion acts as an enabling context that strengthens positive pathways.

Conceptual Model



Source: Developed by the author

Objective and Subjective Literacy → shape Financial Attitude and Financial Self-Efficacy. These in turn influence Investment Behaviour Quality (goal clarity, diversification, cost discipline, long-term orientation). Behavioural Biases (overconfidence, herding, disposition effect) negatively affect behaviour. Digital Financial Inclusion moderates the links from literacy → attitude/self-efficacy and also directly impacts behaviour.

Hypotheses

- **H1a/b.** Objective and subjective financial literacy positively relate to investment behaviour quality.
- **H2a/b.** Financial attitude mediates the effects of objective/subjective literacy on investment behaviour.
- **H3a/b.** Financial self-efficacy mediates the effects of objective/subjective literacy on investment behaviour.
- **H4.** Behavioural biases are negatively associated with investment behaviour quality.
- **H5.** Financial literacy is negatively associated with behavioural biases.
- **H6.** Digital financial inclusion positively moderates the literacy → (attitude, self-efficacy) paths, strengthening their indirect effects on behaviour.

Methodology

Design and Setting

A cross-sectional, explanatory study using a structured questionnaire administered to young adults (18–30) residing in Kerala. The unit of analysis is the individual.

Population and Sampling

Population: Young adults (18–30) studying or employed in Kerala, with/without investment accounts.

Sampling frame: Colleges (B. Com/M.Com/Engineering/Arts), professional institutes, and workplaces; online reach via Kerala youth networks.

Sampling method: Multistage stratified sampling by district (north/central/south zones), urban/rural, and gender. Within clusters, random selection of institutions/wards; within institutions, systematic

sampling of eligible respondents.

Sample size: Using Cochran's formula ($p = .5$, $z = 1.96$, $e = 0.05$), base $n \approx 384$. Accounting for design effect (1.5) and ~15% non-response, target $n \approx 660$ to support multi-group and moderation tests.

Measures and Instrument

Scales will be adapted from established sources (Lusardi & Mitchell; OECD/INFE; TPB). All multi-item scales use 5-point Likert (1 = strongly disagree to 5 = strongly agree), except knowledge and numeracy.

Constructs:

- **Objective financial literacy (FL-K):** 6–8 items (interest compounding; inflation; risk/return; diversification; mutual fund fees). Sample item: "A high-risk investment typically offers higher expected returns." (True/False/Don't know)
- **Subjective financial literacy (FL-S):** 4 items (self-rated knowledge/confidence in choosing investments).
- **Financial attitude (FA):** 5 items (planning orientation, self-control, long-term focus).
- **Financial self-efficacy (FSE):** 5 items (confidence to compare products, read statements, act during market volatility).
- **Numeracy (NUM):** 3–4 items (percentage change, simple/compound interest contexts).
- **Behavioural biases (BB):** Overconfidence (e.g., "I can beat the market regularly"), herding ("I buy because friends/social media recommend"), disposition effect ("I hold losing stocks hoping to recover"), present bias (reverse coded).
- **Digital financial inclusion (DFI):** Access/usage of UPI, demat/broker apps, SIP automation, e-KYC; 4–5 items plus a usage index.
- **Investment behaviour quality (IBQ):** Composite of (i) goal setting (written goals/SIP towards goals), (ii) diversification (equity/debt/mutual funds/PPF/ETF balance), (iii) cost discipline (expense ratio awareness, churn), (iv) risk alignment (age-appropriate equity share), (v) long-term orientation (SIP continuity). Items will be behaviorally anchored (e.g., "I invest through automated plans every month").

Control Variables: Age, gender, education, employment status, income/allowance, family financial background (parental education/occupation), prior training, remittance exposure, risk tolerance.

Pretesting: Cognitive interviews ($n \approx 10$ –15) and pilot ($n \approx 80$ –100) to refine items, test reliability (α , ω) and item difficulty for knowledge.

Data Collection and Ethics

Mixed-mode (on-site and online). Participation voluntary with informed consent. No personally identifying financial data collected, anonymized analysis.

Data Analysis Plan

1. **Data screening:** Missing data patterns (Little's MCAR), imputation (expectation-maximization if $< 5\%$); outliers (Mahalanobis distance); normality checks.
2. **Measurement validation:**
 - EFA (pilot) → CFA (main sample) using ML/MLR.
 - Reliability (α , $\omega \geq .70$), CR $\geq .70$; **convergent validity** (AVE $\geq .50$); **discriminant validity** (Fornell–Larcker; HTMT $< .85$).
 - **Common method bias:** procedural remedies (proximal separation, anonymity), Harman's single factor, CFA marker variable; if needed, **ULMC** technique.
3. **Structural model (SEM):** Test H1–H6 with direct/indirect effects (bootstrapped 5,000 resamples).

4. **Moderation:** Latent interaction or multi-group SEM by high/low DFI.
5. **Mediation:** FA and FSE as parallel mediators; report indirect effects with bias-corrected CIs.
6. **Robustness checks:**
 - Alternative IBQ operationalization (index vs latent).
 - Endogeneity diagnostics (e.g., Gaussian copula for discrete regressors if using SEM-MIMIC; or 2SLS as sensitivity).
 - Subgroup analyses (gender, urban/rural, investor vs non-investor).
7. **Exploratory extensions:** Fintech literacy (awareness of fees, order types), social media reliance, and risk tolerance as additional moderators.

Results

While final results depend on data, prior literature supports the following directional expectations:

- **H1 supported:** Both objective and subjective literacy positively predict IBQ; objective literacy has a stronger effect on diversification and cost discipline, while subjective literacy links more to participation and continuity.
- **H2–H3 supported:** FA and FSE partially mediate literacy → IBQ; literacy improves attitudes and perceived control, which drive disciplined investing.
- **H4 supported:** Biases show negative associations with IBQ; the disposition effect and herding display the largest penalties.
- **H5 supported:** Higher literacy modestly reduces biases, especially overconfidence when measured as calibration (subjective—objective gap).
- **H6 supported:** DFI strengthens the literacy → FA/FSE paths and the indirect effects on IBQ, particularly via automation (SIPs, recurring deposits) and lower transaction costs.

Effect sizes are anticipated to be small-to-moderate ($\beta \approx .15-.35$). Model fit targets: CFI/TLI $\geq .90-.95$, RMSEA $\leq .06-.08$, SRMR $\leq .08$.

Discussion

Theoretical Implications

Findings would substantiate a blended TPB–behavioural finance account: knowledge is necessary but not sufficient; attitudes and self-efficacy translate understanding into action, while biases exert countervailing pressures. Distinguishing objective versus subjective literacy clarifies why confident novices may trade excessively. Moderation by DFI aligns with capability-opportunity frameworks—when access and tools exist, literacy’s benefits magnify.

Kerala-Specific Insights

Kerala’s social capital and educational base can accelerate literacy spillovers, but high social connectivity can also amplify herding via peer and influencer cues. Program design should leverage community institutions (colleges, cooperatives, SHGs) and diaspora networks while countering misinformation.

Practical Implications

- **Higher education:** Embed a credit-bearing “Personal Finance & Investing” module (budgeting, risk, compounding, diversification, fees, taxes), numeracy refreshers, and simulation labs with rule-based investing rather than gamified trading.
- **Regulators (RBI/SEBI/NCFE):** Standardize disclosures on costs/risks in mobile apps; require simple, layered explanations and “cooling-off” for leveraged/speculative products.
- **Fintech /brokers:** Implement frictions against over-trading (warning prompts after excessive turnover), default SIP suggestions, and bias-aware nudges (e.g., “Would you like to set an auto-rebalance?”).
- **Community programs:** Women’s cells, NSS units, and PTA bodies can run targeted workshops and “investing circles” to foster peer accountability and long-term planning.

Limitations and Future Research

Cross-sectional design limits causal inference: longitudinal or field-experimental designs could strengthen claims. Self-reported behaviour may suffer social desirability bias; linking to anonymized transactional data (with consent) is a future avenue. Further, Kerala's results may not generalize to all states; comparative studies across South Indian states can map contextual moderators.

Conclusion

This study develops and tests a theory-driven model linking financial literacy to investment behaviour among Kerala's youth. By separating objective from subjective literacy, incorporating attitudes, self-efficacy, and biases, and recognizing digital inclusion as an enabling context, we provide a nuanced understanding of how to convert knowledge into prudent, long-term investing. The approach informs policy and pedagogy in Kerala and offers a template for similar regions navigating rapid financial digitization.

References

- Atkinson, A., & Messy, F. (2012). *Measuring financial literacy: Results of the OECD/INFE pilot study* (OECD Working Papers on Finance, Insurance and Private Pensions No. 15). OECD Publishing. <https://doi.org/10.1787/5k9csfs90fr4-en>
- Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics*, 116(1), 261–292. <https://doi.org/10.1162/003355301556400>
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291. <https://doi.org/10.2307/1914185>
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>
- OECD. (2013). *Financial literacy and inclusion: Results of OECD/INFE survey across countries and by gender*. OECD Publishing. https://www.oecd.org/finance/financial-education/TrustFund2013_OECD_INFE_FinLitInclusion.pdf
- OECD/INFE. (2011). *Measuring financial literacy: Core questionnaire with supplementary questions*. OECD Publishing. <https://www.oecd.org/finance/financial-education/49319977.pdf>
- Remund, D. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs*, 44(2), 276–295. <https://doi.org/10.1111/j.1745-6606.2010.01169.x>
- Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press.
- van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2), 449–472. <https://doi.org/10.1016/j.jfineco.2011.03.006>
- Yoong, J., Mihaly, K., & Altman, M. (2013). *Behavioral economics and financial literacy*. RAND Corporation. https://www.rand.org/pubs/working_papers/WR972.html
- Reserve Bank of India. (2020). *National Strategy for Financial Education (NSFE): 2020–2025*. <https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/NSFE20202025D6B0D3B0D9D14B6E9D6B0D3B0D9D14B6E.PDF>
- Securities and Exchange Board of India. (2020). *SEBI Investor Survey 2020*. https://www.sebi.gov.in/reports-and-statistics/reports/mar-2021/sebi-investor-survey-2020_49460.html
- National Centre for Financial Education. (n.d.). *Reports and publications*. <https://www.ncfe.org.in/publications>

- Sinha, S., & Sengupta, S. (2020). Financial literacy in India: A review of literature and future directions. *International Journal of Social Economics*, 47(6), 729–745. <https://doi.org/10.1108/IJSE-08-2019-0451>
- Chakrabarty, K. C. (2013). Financial literacy and financial inclusion. *RBI Speeches*. https://www.rbi.org.in/scripts/BS_SpeechesView.aspx?Id=839