



Financial Literacy and Retail Investment Decisions in India and Selected Asian Economies: A Comparative Integrative Review

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KEYWORDS

financial literacy; retail investors; confidence calibration; behavioural finance; risk perception; digital investing; India; comparative review.

ABSTRACT

Purpose: This review examines how financial literacy relates to retail investment decisions in India and selected Asian economies. It distinguishes demonstrated knowledge from confidence and considers risk perception, behavioural biases, advice and digital investing.

Design/methodology/approach: This comparative integrative review interprets 24 illustrative empirical sources: 20 from Asian settings and four external comparators. Studies on retail investment decisions form the core; research on broader financial capability provides context. The sources are grouped by literacy measurement, participation, risk, trading, behavioural bias, demographic variation, advice and digital channels. The selection is purposive and does not claim exhaustive retrieval.

Findings: Objective literacy is associated in several studies with market participation, portfolio choice and planning, while perceived literacy and confidence can influence willingness to act. The link between literacy and decision quality is conditional: overconfidence, herding and loss aversion may persist. Gender and age patterns also reflect confidence, opportunity, experience and household roles. Digital access changes both opportunities and information risks. Evidence for specific biases differs across settings.

Research limitations: Most investor studies in the assembled literature use cross-sectional surveys and self-reported outcomes. Measures and samples vary, direct cross-country comparisons are scarce, and purposive source selection may omit relevant work. The synthesis does not establish causal effects or pooled effect sizes.

Practical implications: Investor education should address product knowledge, realistic confidence, risk appraisal and source verification. Platforms and advisers can support decisions through clear disclosures, suitable prompts and accessible advice, particularly for first-time investors.

Originality/value: The review brings together knowledge, confidence, behavioural control and information quality in a calibrated financial-literacy framework. It specifies why greater knowledge need not translate directly into better investment decisions..

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1. INTRODUCTION

Until recently, buying shares in India often meant calling a broker, completing paperwork and waiting for the transaction and contract note. Many new retail investors now open accounts on mobile phones. Low-cost trading apps, electronic paperwork, accessible mutual-fund platforms and online investor communities have reduced the time and expense of getting started. Similar changes, to varying degrees, are taking place across much of Asia. Wider access also means that decisions are made on screens where price information, personal opinion, advertising and rumour can be difficult to distinguish. In the Securities and Exchange Board of India's Investor Survey 2025, 56% of surveyed investors cited financial influencers on social media as an information source (Securities and Exchange Board of India [SEBI], 2026).

Financial literacy is often presented as a first line of defence against poor investment decisions. The logic is clear: people who understand compounding, inflation, diversification, fees and the relationship between risk and return should be better able to evaluate products and avoid unsuitable exposure. Empirical studies broadly support an association between literacy and stock-market participation, portfolio choice and retirement planning (Sekita, 2011; van Rooij et al., 2011; Chu et al., 2017). The relationship, however, is not automatic. Knowledge must be applied under uncertainty, while confidence, emotions, peers, recent gains and losses, platform design and access to advice also influence decisions.

One reason is that researchers do not always measure the same thing. Objective literacy refers to demonstrated knowledge, usually assessed through answers to financial questions. Perceived literacy refers to a person's assessment of their own skills. The two may be related, but one cannot replace the other. Actual knowledge supports risk assessment; a high self-rating without corresponding knowledge may signal overconfidence. This mismatch can help explain overtrading, herding and the underestimation of downside risk (Allgood & Walstad, 2016; Xia et al., 2014).

The Asian evidence is varied. Indian studies examine literacy, attitudes, intentions and investment bias (Prosad et al., 2015; Raut, 2020; Sivaramakrishnan et al., 2017). Research from China and Japan links literacy with market participation, portfolio choice and retirement planning (Chu et al., 2017; Sekita, 2011; Xia et al., 2014). Pakistani and Malaysian investor studies address overconfidence and other biases, but do not agree on every bias (Bakar & Yi, 2016; Qasim et al., 2019; Rasool & Ullah, 2020). Studies in Cambodia, Viet Nam, Indonesia and Thailand add contextual evidence on savings, financial access and capability rather than direct evidence about every investment outcome (Grohmann, 2018; Morgan & Trinh, 2019; Setiawan et al., 2022). These differences in design, measure and outcome favour an interpretive comparison over statistical pooling.

This review asks how financial literacy is defined and measured among retail investors; how it relates to risk perception and investment choice; how behavioural factors affect the translation of knowledge into action; and whether these relationships vary by demographic group, country and traditional or digital investing channel. The proposed idea of calibrated literacy concerns the alignment of knowledge, confidence and the ability to assess information. Knowledge may be less helpful when confidence is misaligned or information sources are poor.

2. CONCEPTUAL BACKGROUND

2.1 Financial Literacy as Knowledge Capability and Judgement

Early definitions treated financial literacy mainly as knowledge of basic concepts. Later work also considered the ability and confidence to apply that knowledge in real decisions (Huston, 2010; Remund, 2010). OECD surveys distinguish financial knowledge, behaviour and attitudes (OECD, 2023). Common questions test understanding of interest compounding, inflation and risk diversification (Atkinson & Messy, 2012; Lusardi & Mitchell, 2014). Such questions facilitate comparisons but may not capture the product-specific knowledge needed for equities, derivatives, exchange-traded funds or crypto-assets.

For retail investment, literacy has at least four layers. Basic numeracy helps investors compare returns and costs. Conceptual knowledge concerns diversification and the trade-off between risk and return. Product literacy supports the assessment of liquidity, leverage, volatility and fees. Digital investment literacy helps investors evaluate online sources, recognise conflicts of interest, protect credentials and notice interface features that may encourage trading. A respondent may answer basic questions correctly yet remain ill-equipped to assess leveraged or fast-moving products.

2.2 Risk Perception and Behavioural Bias

Expected utility models assume that investors weigh probabilities and choose portfolios in line with stable preferences. Behavioural finance examines why actual choices diverge from this benchmark. Under prospect theory, outcomes are evaluated relative to a reference point, and losses may weigh more heavily than equivalent gains (Kahneman & Tversky, 1979). The disposition effect, overconfidence and herding can also influence choices (Barber & Odean, 2001; Bikhchandani & Sharma, 2000; Shefrin & Statman, 1985). Intention-based studies add attitudes and perceived control to the account of investment choice (Ajzen, 1991; Akhtar & Das, 2019; Raut et al., 2018).

Literacy can reduce some errors by broadening the options an investor considers and improving understanding. It may also increase willingness to enter the market. Participation, however, is not the same as good decision-making. If confidence rises faster than competence, the result may be more trading or more concentrated portfolios rather than better choices. The benefits of literacy therefore depend on calibration, experience and decision context.

2.3 Digital Investment Environments

Digital platforms change who can invest and how decisions are made. They reduce search and transaction costs, provide current information and permit small investments. The same platforms can present notifications, rankings and trending lists that draw attention to short-term price movements; attention itself is relevant to trading behaviour (Seasholes & Wu, 2007). Online communities can provide support, but popularity is not a measure of evidence quality. Work on online trading and responsible digital finance emphasises the role of user capabilities and design (Gopi & Ramayah, 2007; OECD, 2018; Panos & Wilson, 2020).

Digital literacy is therefore considered a moderator rather than an end in itself. It can strengthen the benefits of financial literacy when investors check sources and understand how investment products work. Equating familiarity with an app with skill in investment analysis can undermine those benefits.

3. REVIEW QUESTIONS

Table 1: Review questions and comparative dimensions

Review question	Primary evidence	Comparative lens
RQ1 How is financial literacy defined and measured?	Objective tests, self-ratings, composite scales, product and digital knowledge	India and other Asian economies; general and investment-specific measures
RQ2 How does literacy affect risk perception and investment choice?	Participation, diversification, risk tolerance, planning, product selection and trading	Young and mature investors; first-time and experienced investors
RQ3 Which behavioural biases influence decisions?	Overconfidence, herding, loss aversion, disposition effect and attention bias	Low and high literacy; traditional and digital channels
RQ4 Do findings vary by demographic and national context?	Gender, age, income, education, social norms, access and regulatory context	Male and female investors; India and selected Asian economies

4. REVIEW APPROACH

4.1 Scope and Source Selection

This article is a comparative integrative review, with India as the focal setting. The source set comprises 24 illustrative empirical works displayed in Table 2: 20 from Asian settings and four external comparators. Investor studies were prioritised for evidence on participation, portfolio choice, risk, trading, advice and behavioural bias. Related research on general financial capability, saving and inclusion was used to interpret context, rather than treated as direct evidence on retail investment. The review draws on this selected literature and foundational theory; it does not claim a complete census of publications.

The selected empirical studies were published between 2007 and 2024; earlier works supply foundational theory, and a later official investor survey supplies current Indian context. Sources were considered for the questions in Table 1, their country and participant group, the distinction between objective and perceived literacy, the type of decision outcome and the role of digital channels. Four studies outside Asia provide conceptual or measurement comparisons. Because the source selection was purposive, the review does not report database-screening counts or claim exhaustive coverage.

4.2 Comparative Synthesis

The studies were read across four questions: how literacy is measured, how it relates to decisions and risk, which behavioural factors intervene, and how setting or investor characteristics matter. The synthesis groups recurring arguments into eight themes and records where findings are mixed or outcomes are only indirectly relevant. The conceptual framework is an interpretive proposition drawn from those themes, not an estimated causal model. No pooled effect sizes or formal quality score are reported (Braun & Clarke, 2006).

5. EVIDENCE PROFILE

In the investor studies assembled here, cross-sectional surveys are common, while the Taiwanese trading-record study provides an example of observed behaviour (Barber et al., 2009). Some Chinese and Japanese studies use broader household surveys; research on financial capability in Cambodia, Viet Nam, Indonesia and Thailand addresses adjacent outcomes rather than investors' realised portfolios. Few sources combine objective literacy tests with verified transaction data over time. These differences support a thematic comparison but limit causal or cross-country generalisation.

Table 2: Illustrative studies and contextual comparators

Study	Context	Design or sample	Focus	Main contribution to synthesis
Agarwalla et al. (2015)	Urban India	Working young adults across six cities	Knowledge, behaviour and attitude	Shows demographic and family decision patterns in Indian financial literacy
Prosad et al. (2015)	India Delhi NCR	Individual-investor survey	Behavioural biases	Documents overconfidence, disposition and related biases among retail investors
Mishra & Metilda (2015)	India	Investor survey	Experience, gender and overconfidence	Links investor characteristics with confidence and self-attribution
Sivaramakrishnan et al. (2017)	India	Survey and multivariate modelling	Attitudes, literacy and participation	Shows that attitudes and literacy jointly shape market participation
Akhtar & Das (2019)	India	Prospective individual investors	Knowledge, self-efficacy and intention	Extends planned behaviour by adding knowledge and personality
Raut (2020)	Four Indian states	Questionnaire and structural model	Past behaviour, literacy and decision process	Shows that literacy operates within intention and prior-behaviour pathways
Sekita (2011)	Japan	Nationally relevant survey	Literacy and retirement planning	Connects knowledge with planning and identifies demographic gaps
Chu et al. (2017)	China	Household finance survey	Portfolio choice and well-being	Links literacy with participation, diversification and investment return
Xia et al. (2014)	China	Household survey	Knowledge, overconfidence and participation	Separates objective knowledge from overconfidence
Barber et al. (2009)	Taiwan	Complete trading records	Individual trading performance	Shows the aggregate performance cost of active individual trading
Rasool & Ullah (2020)	Pakistan	300 individual investors	Literacy and behavioural bias	Finds lower reported bias at higher literacy, with a gender literacy gap
Qasim et al. (2019)	Pakistan	Investor questionnaire	Herding and overconfidence	Shows that social and confidence biases enter investment decisions
Bakar & Yi (2016)	Malaysia	Klang Valley and Pahang investors	Psychological factors	Finds significant overconfidence, conservatism and availability bias; herding was not significant
Gopi & Ramayah (2007)	Malaysia	Online trading intention survey	Planned behaviour and online trading	Explains digital adoption through attitudes, norms and perceived control

Study	Context	Design or sample	Focus	Main contribution to synthesis
Lantara & Kartini (2015)	Indonesia	University students	Financial literacy	Contextual student study on literacy; does not assess retail investment decisions
Setiawan et al. (2022)	Indonesia	Adult survey	Digital financial literacy	Contextual evidence on digital literacy and saving or spending behaviour
Morgan & Trinh (2019)	Cambodia and Viet Nam	OECD INFE based surveys	Literacy, saving and inclusion	Provides contextual evidence on literacy, saving and inclusion, not retail investing
Phan & Zhou (2014)	Viet Nam	Individual-investor survey	Behavioural influences	Shows the role of market, herding, prospect and heuristic factors
Grohmann (2018)	Thailand	Emerging middle-class sample	Literacy and behaviour	Contextual Bangkok evidence on literacy and financial behaviour
Al-Tamimi & Kalli (2009)	United Arab Emirates	Investor survey	Literacy and decision factors	Finds literacy differences and heavy reliance on selected information cues
van Rooij et al. (2011)	Netherlands comparator	Household panel	Literacy and stock participation	Establishes a widely cited knowledge participation relationship
Allgood & Walstad (2016)	United States comparator	National survey data	Actual and perceived literacy	Shows that objective and subjective literacy have distinct behavioural roles
Calcagno & Monticone (2015)	Italy comparator	Household data	Literacy and financial advice	Shows that low literacy and advice use can be jointly determined
Bucher-Koenen et al. (2024)	Netherlands comparator	Dutch household survey modules	Gender, confidence and participation	Separates confidence from knowledge in gender and participation gaps

6. FINDINGS BY THEME

6.1 Objective and Perceived Financial Literacy

An important distinction is between what investors know and what they believe they know. Objective tests assess understanding of interest, inflation, diversification and risk. Perceived literacy is often measured through self-ratings of financial skill or confidence. The two measures provide different information about behaviour: objective knowledge supports informed comparison, while perceived competence can influence willingness to act (Allgood & Walstad, 2016; Xia et al., 2014).

Investors who score highly on both measures may be better placed to make informed decisions. Those with low scores on both may avoid the market or rely on advisers. A particularly concerning mismatch is high confidence combined with weak understanding. Xia et al. (2014) examine objective knowledge, overconfidence and stock-market participation in China. Allgood and Walstad (2016) also distinguish actual from perceived literacy in relation to financial behaviour. A single literacy score may conceal these differences.

Indian studies add the importance of family consultation and social context in how knowledge is used. Agarwalla et al. (2015), for example, identify demographic and household differences in financial-literacy dimensions among working young adults in six cities. A knowledgeable investor may still consult relatives, delegate decisions or follow group norms; these choices should not automatically be treated as irrational.

6.2 Risk Perception and Tolerance

Literacy can improve understanding of the risk–return relationship, but it does not necessarily make an investor more risk

tolerant. Greater knowledge may help identify suitable diversification, while awareness of complexity or leverage may encourage caution (Aren & Zengin, 2016; Chu et al., 2017; von Gaudecker, 2015). A larger allocation to risky assets is therefore not, by itself, evidence of higher literacy or better decisions.

Young and first-time investors may have limited market experience while feeling comfortable with digital interfaces. This combination can increase confidence in trading without ensuring an understanding of drawdowns, liquidity or asset correlations. Older investors may have more experience and larger portfolios, but experience can also reinforce self-attribution after favourable outcomes. Risk perception should therefore be considered alongside literacy, experience and potential losses.

6.3 Overconfidence

Overconfidence is one way that literacy can fail to produce more considered behaviour. It includes overestimating one's ability, being too certain about forecasts or believing that one's information is superior to that of others. Trading records associate frequent trading with poorer net performance, while gender differences in confidence help explain some variation in trading (Barber & Odean, 2001; Barber et al., 2009). Asian investor surveys also link confidence and self-attribution with decisions, including work by Mishra and Metilda (2015) in India and Qasim et al. (2019) in Pakistan. Market experience does not necessarily eliminate the bias.

Financial education can correct factual mistakes but may also raise subjective confidence too far. Programmes should therefore test calibration as well as recall. One practical approach asks for both an answer and a confidence rating for each question. A persistent gap between confidence and accuracy may show that familiarity has increased without a corresponding gain in skill.

6.4 Herd Behaviour and Social Influence

Herding means responding to what others appear to be doing. Following others may sometimes convey information, but it becomes a bias when popularity replaces independent judgement. Studies in Pakistan and Viet Nam examine herding or related social signals in investment decisions (Phan & Zhou, 2014; Qasim et al., 2019). The evidence is mixed: a Malaysian investor survey found significant effects of overconfidence, conservatism and availability bias, but no significant herding effect (Bakar & Yi, 2016).

Digital channels can spread herd signals quickly. Popular-stock lists, influencer posts and group messages provide repeated cues that may be mistaken for independent confirmation. Conventional literacy can explain diversification but may do less to help an investor judge a source. Digital investment literacy should therefore address incentives, sponsorship and verification, and distinguish public excitement from evidence about fundamentals.

6.5 Loss Aversion and the Disposition Effect

Loss aversion helps explain why investors turn down suitable risk, sell winners too early and hold on to losers in the hope of getting back to the purchase price. The disposition effect grows out of this reference-dependent evaluation and is well documented in market data (Shefrin & Statman, 1985). Knowing about the bias does not necessarily cure it, since the decision is emotional and depends on the path prices have taken.

Preset allocation rules, rebalancing and attention to overall portfolio risk rather than individual positions may help reduce this bias. Many studies of the disposition effect use Western market data, while Asian surveys often rely on statements about bias rather than observed trades. Linking literacy scores to realised gains and losses, account-level holding periods and rebalancing would strengthen the evidence.

6.6 Gender, Age and Experience

Gender differences in financial-literacy scores require careful interpretation. Exposure to financial decisions, household roles, income, education, confidence and responses to survey questions may all contribute. Women more often choose 'do not know' on some literacy questions, so a raw score combines knowledge and confidence (Bucher-Koenen et al., 2017, 2024). Rasool and Ullah (2020) report a gender-related literacy difference among Pakistani investors. Policy should distinguish gaps in knowledge from gaps in confidence and recognise variation in access to learning.

Age differences are also not linear. Younger investors may be more comfortable with digital tools but have lived through fewer market cycles. Older investors may have more market knowledge and larger portfolios while facing challenges with complex products or digital security. Experience can improve information use, yet a run of successful investments can reinforce overconfidence. Research comparing first-time and experienced investors across both rising and falling markets would clarify these patterns.

6.7 Financial Advice Dependence

Advice can substitute for knowledge, complement it or introduce an agency problem. Investors with little knowledge may benefit from advice but may struggle to assess an adviser's quality. Knowledgeable investors may ask better questions and compare fees, while overconfident investors may avoid advice. Calcagno and Monticone (2015) examine how literacy relates to advice demand; the wider literature also suggests that literacy and advice are not simple substitutes (Stolper & Walter, 2017).

In Asian family and community settings, 'advice' may come from relatives, friends, colleagues, brokers or online peers. Research should distinguish regulated advice from informal influence. Treating all sources as a single category obscures differences between fiduciary or regulated advice and sponsored social-media content.

6.8 Traditional and Digital Investors

Traditional investing often involves steps such as opening an account, contacting a broker and waiting for an order to be processed. Such friction can prevent participation, but it may also create time to seek advice or a second opinion. Digital investors benefit from lower charges, immediate access and detailed portfolio information. They also face rapid feedback, attention-grabbing price movements and continuous opportunities to trade.

The assembled studies do not justify a general claim that digital investors are more or less rational than traditional investors. Low-cost funds, automatic contributions and transparent fee information could support diversification; interface cues might also stimulate trading without improving decisions. Comparing these mechanisms requires direct evidence on behaviour across channels.

7. COMPARATIVE SYNTHESIS

Table 3: Comparative thematic synthesis

Dimension	India	Selected evidence Asian	Young versus mature	Male versus female	Digital versus traditional
Literacy measure	Mixed objective, perceived and composite scales	OECD style measures are more common in national surveys	Young samples often use short quizzes	Raw score gaps may include confidence effects	Digital studies need product and source-verification items
Risk	Knowledge and self-efficacy shape intention	Participation and planning effects recur	Young investors may underweight tail risk	Allocation differences reflect access and confidence as well as preference	Platforms make risk exposure easier and more immediate
Overconfidence	Prominent in investor surveys	Also reported in Pakistan, Malaysia, China and trading data	Interface familiarity may inflate confidence	Men often report higher confidence and turnover	Fast feedback can reinforce self-attribution
Herding	Peers and market cues influence decisions	Evidence from Pakistan and Viet Nam; one Malaysian study found no significant herding effect	Social proof has greater reach among connected investors	Evidence is mixed and context-dependent	Trending lists and online groups amplify common attention
Advice	Family, broker and peer consultation matter	Formal access and trust differ by country	First-time investors depend more on informal sources	Confidence affects willingness to seek advice	Source quality ranges from regulated advisers to anonymous content

Dimension	India	Selected evidence	Asian	Young versus mature	Male versus female	Digital versus traditional
Decision quality	Literacy helps but does not remove bias	Similar questions arise across settings, but measured outcomes are heterogeneous		Experience can help or reinforce past-success bias	Knowledge and confidence are best assessed separately	Outcomes depend on design, disclosure and digital literacy

8. PROPOSED CONCEPTUAL FRAMEWORK

The synthesis leads to a calibrated financial-literacy framework (Figure 1). Objective knowledge strengthens understanding and broadens the options an investor can evaluate. Perceived knowledge influences confidence and willingness to act. Their alignment determines whether that confidence is warranted. Risk perception, advice use and behavioural biases shape the decision process, while digital information quality can change outcomes. Demographic and national contexts condition these relationships.

Figure 1: Calibrated financial literacy and retail investment decision quality

Inputs →	Calibration →	Decision process →	Outcomes
Objective knowledge Product knowledge Digital source literacy	Match between demonstrated knowledge and perceived competence	Risk appraisal Source verification Advice use Portfolio choice	Participation Diversification Trading intensity Suitability
Conditions: confidence, behavioural biases, experience, digital cues, access to advice, demographic factors and national institutions			

Note. Arrows represent proposed relationships. The conditions may influence more than one stage; the framework has not been estimated as a causal model.

The framework expects stronger links between literacy and decision quality when objective knowledge is high, confidence is well calibrated and information sources are credible. It anticipates weaker or potentially adverse links when confidence exceeds knowledge, social signals dominate independent assessment or general literacy tests miss the skills required by a product. This helps explain variation across studies without assuming that financial knowledge has no value.

9. DISCUSSION

Taken together, the evidence gives financial literacy a positive but conditional role. Knowledge can help investors understand diversification, inflation, costs and risk. It is associated with participation and planning in several studies. Yet retail decisions also reflect psychological and social processes that a knowledge test cannot capture.

Separating objective from perceived literacy helps explain apparently inconsistent results. An investor may feel knowledgeable and take on more risk, while another may demonstrate stronger knowledge and make more considered choices. A single combined index cannot distinguish these cases. Future studies should test whether a calibration measure, such as the difference between perceived and objective scores, predicts turnover, concentration or susceptibility to online influence.

India's context includes family involvement in financial decisions, uneven access to financial services, social differences and rapid growth in app-based investing. These conditions shape the information and confidence available to investors; they do not make behavioural biases unique to India. Research from Japan and China provides broader evidence on planning and market participation, while studies from Pakistan, Malaysia and Viet Nam examine participation, herding and other psychological factors. Read together, the countries suggest shared mechanisms operating in different institutional settings.

Digital investing changes the policy question. It is no longer enough to ask whether investors can define diversification; they must also apply that knowledge while encountering persuasive, sometimes sponsored, messages. Source evaluation, basic cyber hygiene, an understanding of leverage and awareness of interface cues all belong in a current definition of investment literacy.

10. THEORETICAL IMPLICATIONS

First, financial literacy should be treated as a multidimensional competence. Objective knowledge, perceived competence, product knowledge and digital source literacy are distinct. Treating them as interchangeable makes estimates of their effects

difficult to interpret.

Second, behavioural biases should be studied as part of the process through which knowledge becomes action, rather than only as control variables. Overconfidence may affect how literacy relates to decisions; herding may replace independent information processing; and loss aversion may shape choices even when investors understand risk in general terms.

Third, national and demographic differences should be linked to plausible mechanisms. Gender may relate to confidence, experience, income and household roles; age to digital fluency and exposure to market cycles; and country to regulation, access, trust and the availability of advice. Models organised around these mechanisms can explain more than simple group comparisons.

11. MANAGERIAL AND POLICY IMPLICATIONS

Investor education should assess whether participants can apply what they learn, rather than only recall definitions. Scenario exercises could ask them to compare fees, identify concentration, assess a drawdown or evaluate an online claim. Confidence ratings alongside answers may help identify overconfidence. Evidence on the persistence of education effects remains limited, so programmes should evaluate behaviour after training (Fernandes et al., 2014; Hastings et al., 2013). Brokers and digital platforms can provide decision support when investment risk is highest. Examples include plain-language leverage warnings, concentration alerts, cooling-off prompts before complex purchases, clear cost displays and access to verified educational material. Their effects on decisions should be evaluated.

Verification of social-media content should be treated as an investor-protection issue. Education can help investors check registration, sponsorship, conflicts of interest and implausible return claims. Enforcement and platform accountability are also needed, since literacy alone cannot place the full burden of detecting misleading promotion on individuals.

Advisers should distinguish clients' knowledge from their confidence. A client who lacks both may need explanation and support. A confident client with weak understanding may benefit from careful questions, comparisons and a clear discussion of possible losses.

12. RESEARCH AGENDA

Table 4: Priority research questions and suitable designs

Gap	Research question	Recommended design	Useful outcome
Calibration	When does confidence exceed objective investment knowledge?	Paired knowledge and confidence measures linked to brokerage records	Turnover, concentration and realised performance
Causality	Does education change behaviour beyond the course period?	Randomised intervention with six- and twelve-month follow-up	Portfolio allocation, fees and risk-adjusted return
Digital design	Which interface features amplify attention and herding?	Field experiment or platform A/B test with ethical safeguards	Trading frequency and reaction to salient cues
Social media	Can source-verification training reduce reliance on misleading content?	Experimental exposure to verified and unverified posts	Claim recognition and investment intention
Gender	How much of the literacy gap reflects confidence and exposure?	Measurement-invariance analysis and decomposed models	Knowledge, confidence and participation
Experience	Does surviving a market downturn improve calibration?	Longitudinal investor panel across a market cycle	Forecast accuracy, turnover and loss realisation
Comparative Asia	Are literacy mechanisms equivalent across countries?	Harmonised instrument and multi-group structural modelling	Comparable path and measurement invariance

Gap	Research question	Recommended design	Useful outcome
Advice	When does regulated advice complement literacy?	Matched client-adviser data or natural experiment	Suitability, diversification and client understanding

13. LIMITATIONS

The studies discussed differ in their literacy measures, investor definitions and outcomes. Convenience samples limit generalisation, and cross-sectional associations cannot show that literacy causes better choices; investment experience may also build knowledge. Self-reported trading and bias measures are vulnerable to recall and social-desirability effects. Coverage across countries and outcomes is uneven. India, China, Japan, Pakistan and Malaysia provide more directly relevant investor studies than some other Asian economies. Sources on Cambodia, Viet Nam, Indonesia and Thailand often measure savings or financial capability rather than investment outcomes. The four non-Asian studies support conceptual comparison but do not establish that the same mechanisms operate unchanged across countries. Because the review uses a purposive source set rather than an exhaustive search, relevant work may be missing. The thematic comparisons and proposed framework should be tested with harmonised measures, investor records and designs that separate knowledge from confidence. Digital-platform practices may also change faster than the published evidence.

14. CONCLUSION

Financial literacy generally supports better retail investment decisions but does not guarantee rational behaviour. Objective knowledge can contribute to participation, diversification and risk appraisal. Perceived knowledge influences willingness to act; when confidence exceeds competence, it may lead to overtrading, concentrated portfolios or reluctance to seek advice.

The Asian evidence shows that investment decisions also reflect overconfidence, herding, loss aversion, social influence and market experience. Demographic differences appear across studies but are better explained through access, confidence, household roles and exposure than treated as fixed traits. Digital platforms expand opportunity while increasing the speed and visibility of behavioural triggers.

Investor education should therefore support calibrated judgement. Investors need factual and product knowledge, realistic confidence and the ability to check online information. Policy and platform design can reinforce these skills. This offers a more convincing account of investment behaviour than assuming that additional knowledge alone will correct every error.

Declarations

Author contributions. Vivek Kumar Singh Jha: Conceptualisation, review design, synthesis and initial draft. Alok Kumar: Review design, supervision and critical revision. Bhaskar: Thematic coding, comparative analysis and critical revision. Abhishek Kumar Mishra: Source extraction, reference checking and manuscript review.

Data availability. No new primary data were collected for this literature review; the cited publications appear in the reference list.

Ethics approval. No new human participants or personal data were involved in this review of published literature.

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