A Comprehensive Review of Prominent Biases and Other Factors Influencing Retail Investors' Decision-Making

Saurabh Singh [1]
Ipsa Bharti [2]
Preeti Maurya [3]

Abstract

Purpose : In the modern investment era, the emerging field of behavioral finance seems to have challenged the rational decision-making assumption of finance. The study focused on highlighting and consolidating the biases and other prominent factors that influence the decision-making of retail investors' investments.

Methodology : A systematic literature review (SLR) followed the PRISMA 2020 guidelines. A total of 134 articles indexed in the SCOPUS database from 2007 to 2025 were retrieved, out of which 47 were systematically reviewed. A bibliometric analysis was employed to explore the subject's research landscape.

Findings : Through the in-depth analysis, various behavioral biases and other prominent factors that influence the decision-making of retail investors were observed and consolidated. Furthermore, the intellectual research structure identified the underlying themes and collaborative patterns within the behavioral finance domain.

Implications : This research offered insights into behavioral biases and other factors that shape the decision-making of retail investors, enhancing both academic and practical understanding. The role of financial literacy was highlighted, and financial institutions were urged to address hidden biases and promote rational investment decision-making.

Originality : Most studies emphasized behavioral biases. Our study not only shed light on the biases but also identified other factors that affected the decision-making of retail investors.

Keywords : **behavioral finance, PRISMA, retail investors, behavioral biases, bibliometric analysis, systematic literature review**

JEL Classification Codes : D91, G40, G41, G53

Paper Submission Date : January 15, 2025 ; Paper sent back for Revision : May 12, 2025 ; Paper Acceptance Date : June 5, 2025 ; Paper Published Online : July 15, 2025

The current era economy has witnessed a surge in the financial markets and services. The retail investor is significant in financial markets for improving liquidity and depth (Lakshmi et al., 2013). According to Seth et al. (2020), the availability of retail financial services for individual investors has risen significantly in recent times. Several platforms for individual investors exist (Brière & Thomadakis, 2024). However, it has been observed that retail investors lack the knowledge, experience, or expertise required to make independent

[1] *Assistant Professor,* Department of Finance and Business Economics, University of Delhi, South Campus, Benito Juarez Road, New Delhi - 110 021. (Email : singh.saurabh7@gmail.com) ; ORCID iD : https://orcid.org/0000-0002-0994-6551
[2] *Research Scholar (Corresponding Author),* Department of Management, Jamia Millia Islamia, New Delhi - 110 025. (Email : ipsabharti29@gmail.com) ; ORCID iD : https://orcid.org/0009-0000-4762-2390
[3] *Research Scholar,* Department of Finance and Business Economics, University of Delhi, South Campus, Benito Juarez Road, New Delhi - 110 021. (Email : preetimaurya@south.du.ac.in) ; ORCID iD : https://orcid.org/0009-0004-2995-4753

investment decisions and evaluate risks (Stankovic & Todorovic, 2014). Modern finance theories (such as the efficient market hypothesis) are likely to be based on the assumptions of "rationality" (Fama, 1970).

A newly emerging field of behavioral finance, with its formal beginnings around the 1980s (Paisarn et al., 2021), combining three disciplines, including "economics, finance, and psychology" (Huang et al., 2016), has challenged the rationality concept with the aspect of imperfect rationality (Kawadkar, 2024). Behavioral finance has become dominant in Indian financial research (Ludhani & Kumar, 2023). According to Kandpal and Mehrotra (2018), investment decisions are affected by psychological and emotional factors. As Talwar et al. (2021) highlighted, behavioral finance examines "the rationally inexplicable" behavioral aspects. It has been emphasized that investors often make irrational decisions influenced by psychological factors, leading to systematic errors that can affect security prices and even make inefficient allocations of resources (Huang et al., 2016). Besides psychological biases, external and moderating factors also affect decision-making (Gupta et al., 2025). Annapurna and Basri (2024) also recognized the impact of emotions on investor behavior, and Mandal and Riyat (2024) evaluated the effect of six cognitive biases on retail investors' decisions. Studies show that psychological biases and social factors influence retail investors from making rational decisions, as acknowledged by Raut and Das (2015) and Dangi and Kohli (2018). An experimental study conducted by Dzung et al. (2021) shows that biases like loss aversion and anchoring significantly impact investor decisions, reinforcing the role of behavioral factors in financial choices. Supporting this, a study by Suresh and Loang (2024) highlighted that both rational (self-attribution, noise trading, and social influence) and irrational (spurious herding, illusion of control) drivers contribute to herding behavior among Indian retail investors. This observation aligns with Gupta and Kohli's (2021) findings that confirmed significant herding behavior among Indian investors during and after the 2008 financial crisis. Further, studies focused on exploring the impact of financial literacy (Siddiqui et al., 2025; Sunil & Kumar, 2025). However, it has been observed that biases and other prominent factors have not been consolidated, leaving a wide gap in the previous literature. Hence, the research question for the current study has been:

- ***RQ*** **:** What behavioral biases and other prominent factors impact and/or jeopardize retail investors' rationality during investment decision-making?

The motivation for conducting this review is that investors' biases persistently and systematically influence asset prices, as they do not cancel out each other in the aggregate (Brenncke, 2018). Thus, understanding how individuals think and make decisions in financial markets necessitates examining the intricacies of individual psychology. The current research sought to achieve the following objectives:

- To identify biases and other prominent factors influencing retail investors' decision-making.
- To understand the intellectual landscape of the research field related to behavioral finance.

The study followed the sections on research methodology and bibliometric analysis. A discussion, conclusion, implications, limitations, and future scope of the study follow this.

Research Methodology

Type of Study

A systematic literature review was conducted using the PRISMA ("Preferred Reporting Items for Systematic Reviews and Meta-Analysis") methodology (Page et al., 2021). PRISMA is preferred over existing SLR methods

due to its transparency and comprehensiveness. It also ensures the reliability and validity of the study because PRISMA uses a systematic approach to reporting the research (Liberati et al., 2009).

To add to the robustness of the study, bibliometric analysis was performed (Öztürk et al., 2024), enabling us to evaluate the existing literature within the field, helping uncover the key contributors, leading organizations, citation trends, publication patterns, and the underlying themes. Bibliometric analysis counted the number of documents and helped us understand the research growth pattern and the trending topics, hence identifying the potential research areas.

Inclusion and Exclusion Criteria

Inclusion and exclusion criteria help ensure that only relevant and high-quality studies are included in analyses by defining their characteristics and relevance to the study's objective. Table 1 details the inclusion-exclusion criteria that were used in this research.

Search Query

Table 2 states the search query used for shortlisting the studies as of March 10, 2025, from the SCOPUS database from 2007 to 2025. Considering the current study's objective, various keywords were used to frame the search query.

Search Strategy

The studies that addressed retail investors' decision-making and behavioral biases were included in the analyses. Further, studies highlighting and mentioning relevant factors apart from biases in the context of retail investment

Table 1. ***Inclusion and Exclusion Criteria***

Inclusion Criteria	Exclusion Criteria
Articles indexed in the Scopus database.	Books, book chapters, conference papers, conference reviews, articles in languages other than English, articles outside the scope of behavioral finance, and retracted documents.
Articles written in English	
Articles focused on behavioral finance and related domains (Economics, Finance, Psychology, Decision Sciences)	
Both global and local documents	
Final publications and articles in the press	

Table 2. ***Search Query***

Query
(("behavioral finance" OR "behavioural finance" OR "investor psychology" OR "investment behavior") AND ("retail investors" OR "individual investors" OR "private investors" OR "non-institutional investors") AND ("investment decision*" OR "financial decision-making" OR "portfolio choice" OR "trading behavior" OR "individual trading") AND ("behavioral bias*" OR "cognitive bias*" OR "emotional bias*" OR "decision heuristics" OR "risk perception" OR "financial literacy" OR "market sentiment" OR "personality traits" OR "financial emotions" OR "socioeconomic factors" OR "investor confidence" OR "decision framing" OR "psychological factors" OR "risk-taking behavior" OR "overconfidence" OR "loss aversion" OR "mental accounting"))

decisions were included in the study. Other publications extracted but found not aligned with the objectives of the current study were excluded.

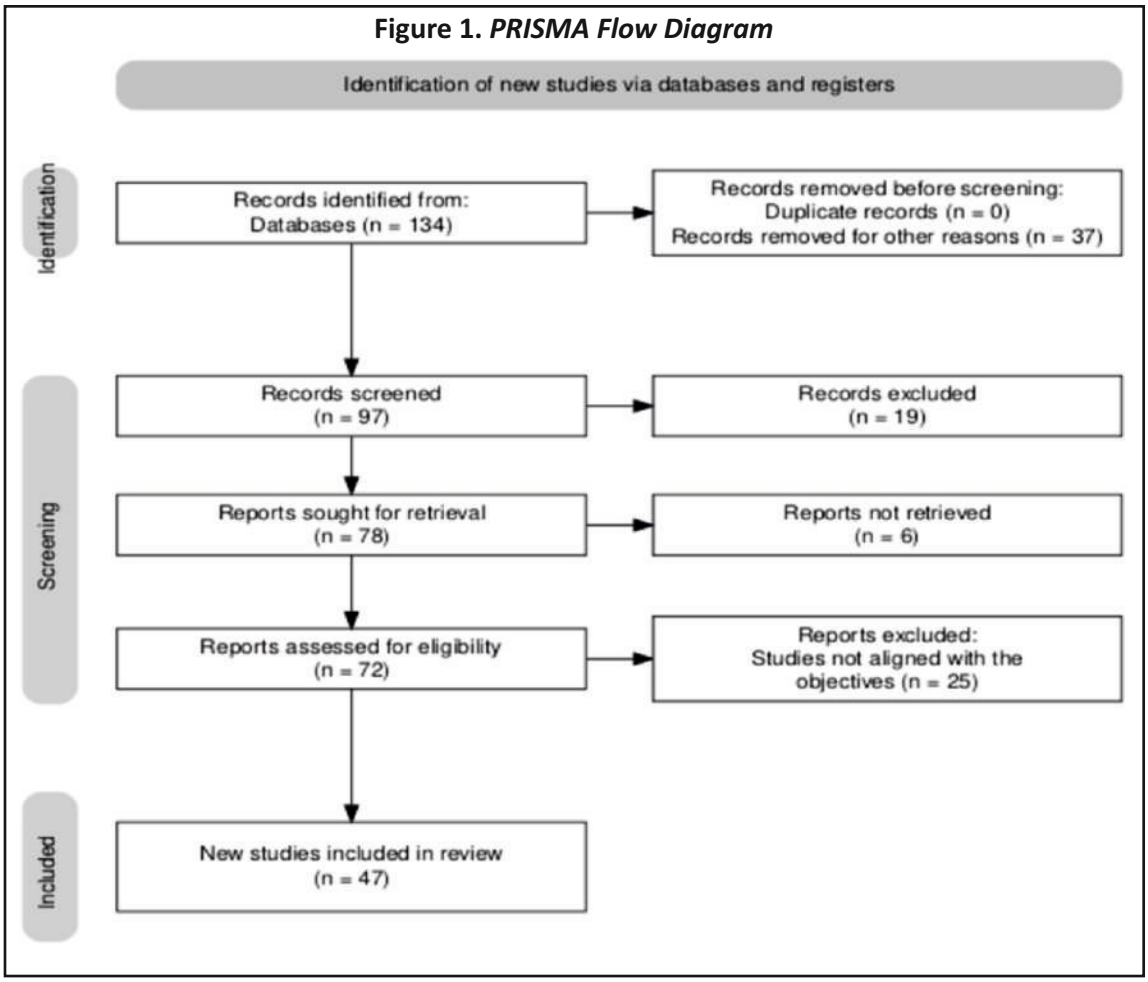
Selection Process

Based on the PRISMA guideline, the selection process was developed, which is represented in Figure 1. Out of 134 studies obtained from the SCOPUS database at the identification stage, 26 were removed based on document type, 10 were removed based on subject area and source type, and one was removed based on language. At the screening stage, 19 studies were excluded based on the screening of title and abstract, six were removed because of non-availability of complete texts, and 25 studies were eliminated as they did not align with the current study objectives. Thus, 47 out of 134 studies could finally be used for further analysis and review.

Elimination of Study Biases

Selection bias must be addressed to ensure robustness and transparency in the study selection process. Selection bias was addressed following the systematic review approach, defining the search protocol and clearly outlining the inclusion-exclusion criteria. The SCOPUS database was used to identify the research papers. The risk of

Figure 1. ***PRISMA Flow Diagram***



publication bias was minimized due to the accessibility to diverse journals. The retrieved records were carefully screened and evaluated using a multi-reviewer approach, ensuring reliability and reducing potential researcher bias.

Synthesis Methods

Microsoft Excel was used to organize the extracted data and support descriptive statistics. Software VOSviewer was also employed as a bibliometric package on RStudio (Biblioshiny) to generate network maps.

Bibliometric Analysis

Various indicators, such as citation trends, influential publications, and other key metrics, were examined to understand the intellectual development of behavioral biases and investment decisions of retail investors. Bibliometric analysis helps to uncover the underlying patterns in the published literature.

Descriptive Statistics

Based on the analysis of the selected studies, a year-wise publication graph was plotted, represented in Figure 2. From 2007 to 2018, the graph shows a slow start, with very few published research papers. An increase began in 2019 with five publications. The following two years, 2020 and 2021, saw a publication dip. A sharp surge was witnessed in 2023 and 2024, with 10 and 15 publications, respectively.

Furthermore, an exponential trendline was used to analyze the growth pattern. The line, representing an equation $y = 0.4897e^{0.137x,}$ shows that research in this area is growing over time. The R^2 value of 0.5887 depicts that this exponential model explains 58.87% of the variance in publication numbers, suggesting a moderate fit.

Figure 2. ***Year-Wise Publication(s)***

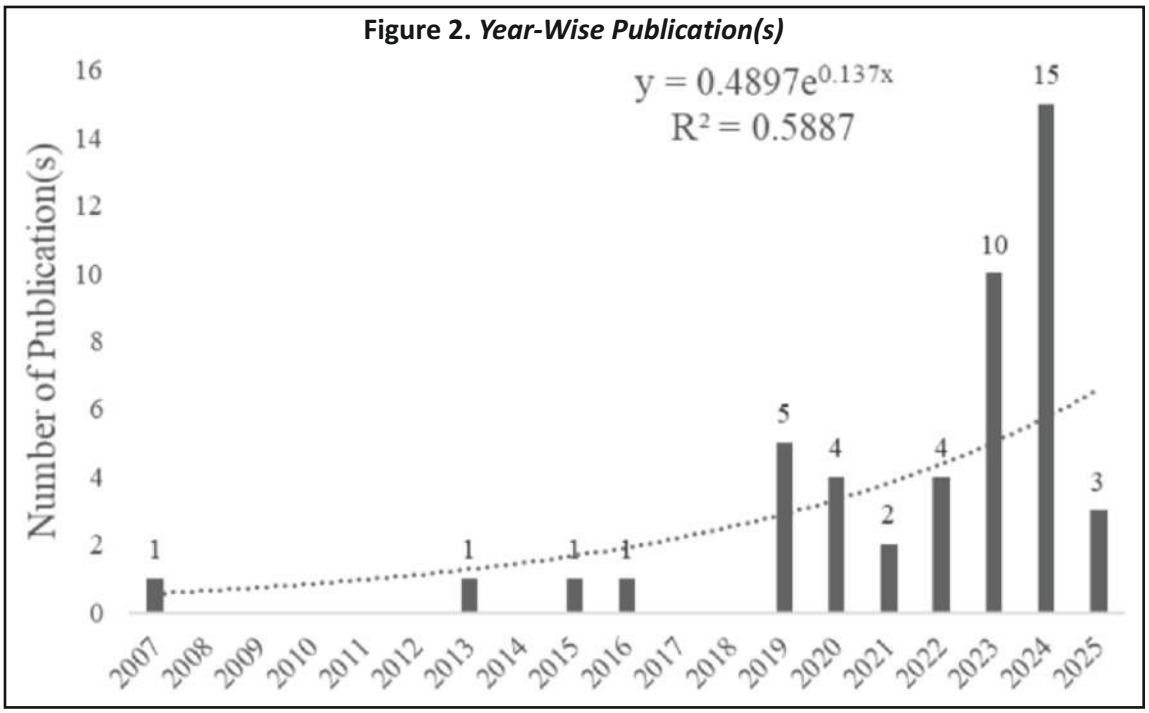


Figure 3. ***Journal-Wise Publication(s)***

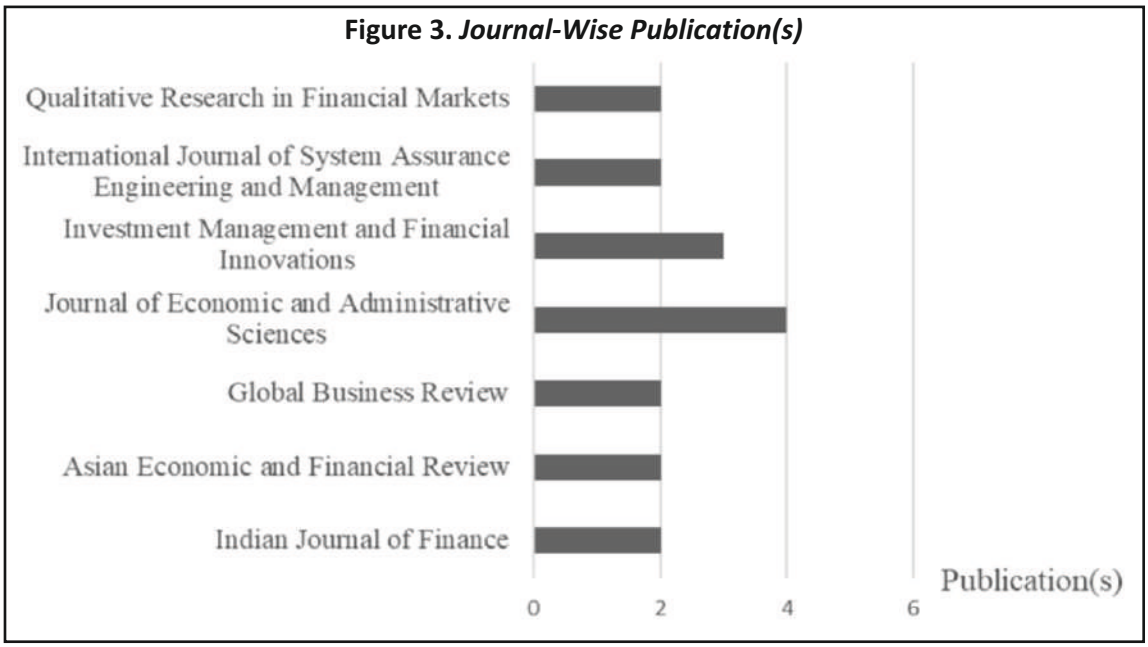


Figure 4. ***Global Contribution***

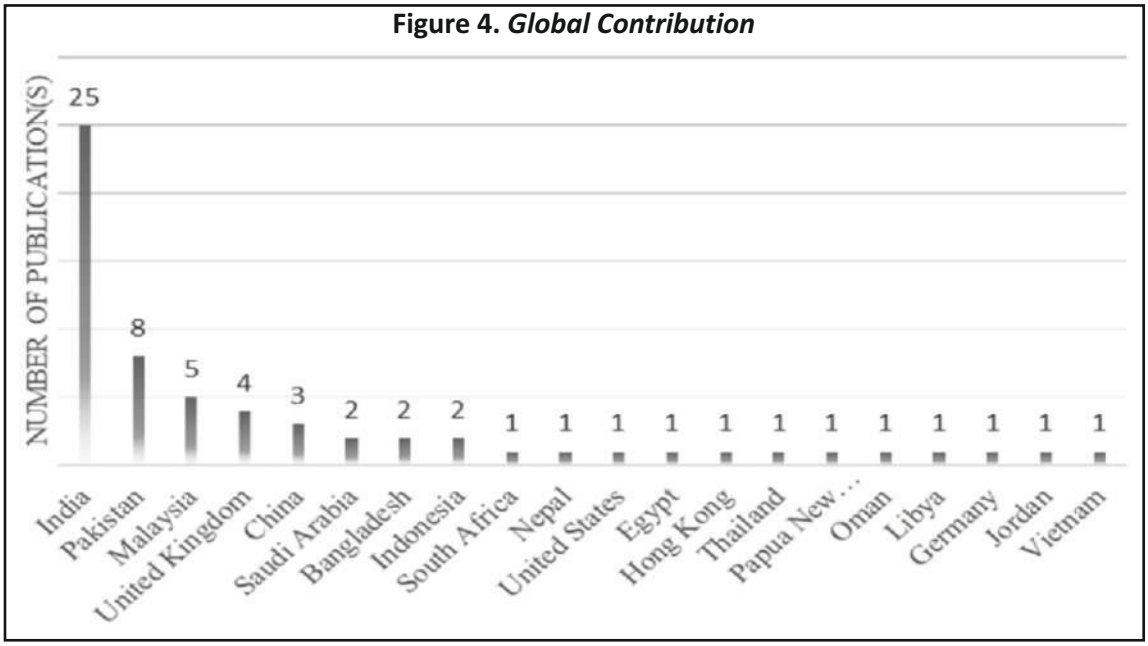


Figure 3 represents the distribution of publications across various journals. The selected documents were published in 37 journals. Two of the 37 journals have a higher proportion of publications—the *Journal of Economic and Administrative Sciences* has the highest number of publications, followed by *Investment Management and Financial Innovations*.

Figure 4 shows the global contribution (country-wise publications) to the current study area. India has been observed to be the leading contributor, followed by Pakistan in second place and Malaysia in third place. The result highlights that Asian countries are the major contributors, which aligns with a study conducted by Badola et al. (2024).

Citation Trend

From Figure 5, it has been observed that behavioral finance and retail investor decision-making have been an area with mixed responses. The citation count (70 in 2007) continuously declined and touched zero in 2015, followed by a steep growth, touching a count of 173 in 2019, and again taking a declining trend till 2024. A shift in focus to pandemic-related research (Cosentino et al., 2022; Raynaud et al., 2021) might contribute to the declining trend post-2020. Citation of 2025 is relatively low, eight only, as the year has just begun.

Top Cited Research Papers

Table 3 presents the five most influential research papers on behavioral biases and retail investors' investment decisions. These papers are highly cited among the selected studies, which indicates their significance in providing direction for understanding the comprehensive frameworks and theories employed in this domain.

Figure 5. ***Citation Trend***

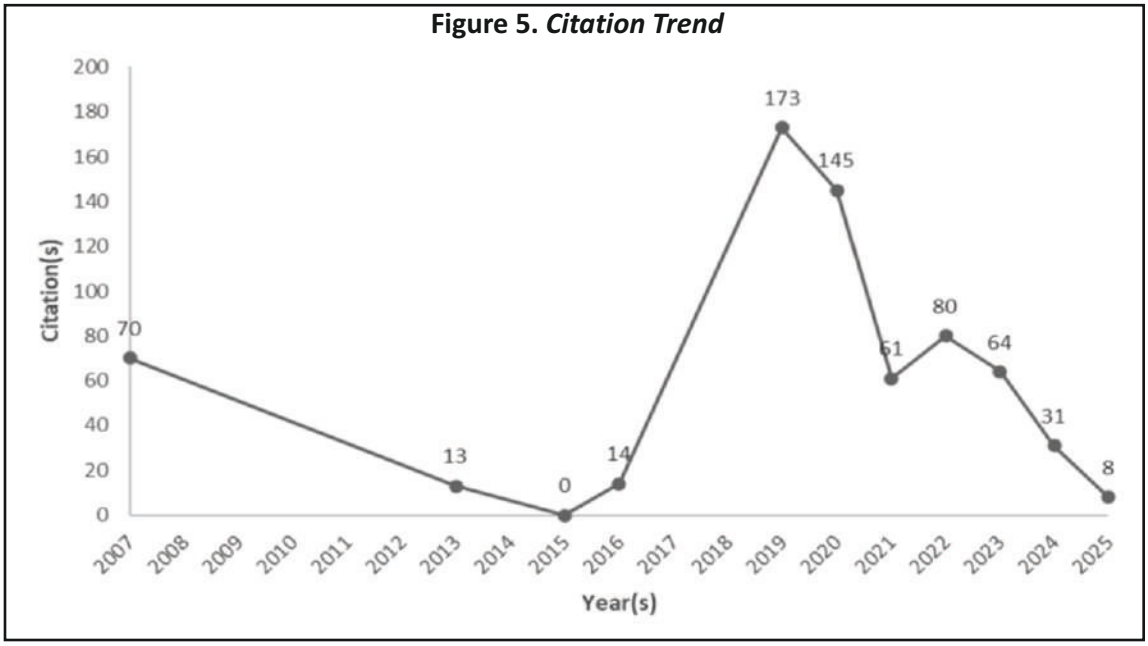


Table 3. ***Top-Cited Research Papers***

References	Journal Title	Title	Country	Citations
Metawa et al. (2019)	*International Journal of Islamic and Middle Eastern Finance and Management*	"Impact of Behavioral Factors on Investors' Financial Decisions: Case of the Egyptian Stock Market"	United States	97
Ahmad & Shah (2022)	*Journal of Economic and Administrative Sciences*	"Overconfidence Heuristic-Driven Bias in Investment Decision-Making and Performance: Mediating Effects of Risk Perception and Moderating Effects of Financial Literacy"	Pakistan	74
Diacon & Hasseldine (2007)	*Journal of Economic Psychology*	"Framing Effects and Risk Perception: The Effect of Prior Performance Presentation Format on Investment Fund Choice"	United Kingdom	70
Parveen et al. (2020)	*Borsa Istanbul Review*	"Exploring Market Overreaction,	Pakistan	63

		Investors' Sentiments, and Investment Decisions in an Emerging Stock Market"		
Kartini & Nahda (2021)	*Journal of Asian Finance, Economics and Business*	"Behavioral Biases on Investment Decision: A Case Study in Indonesia"	Indonesia	46

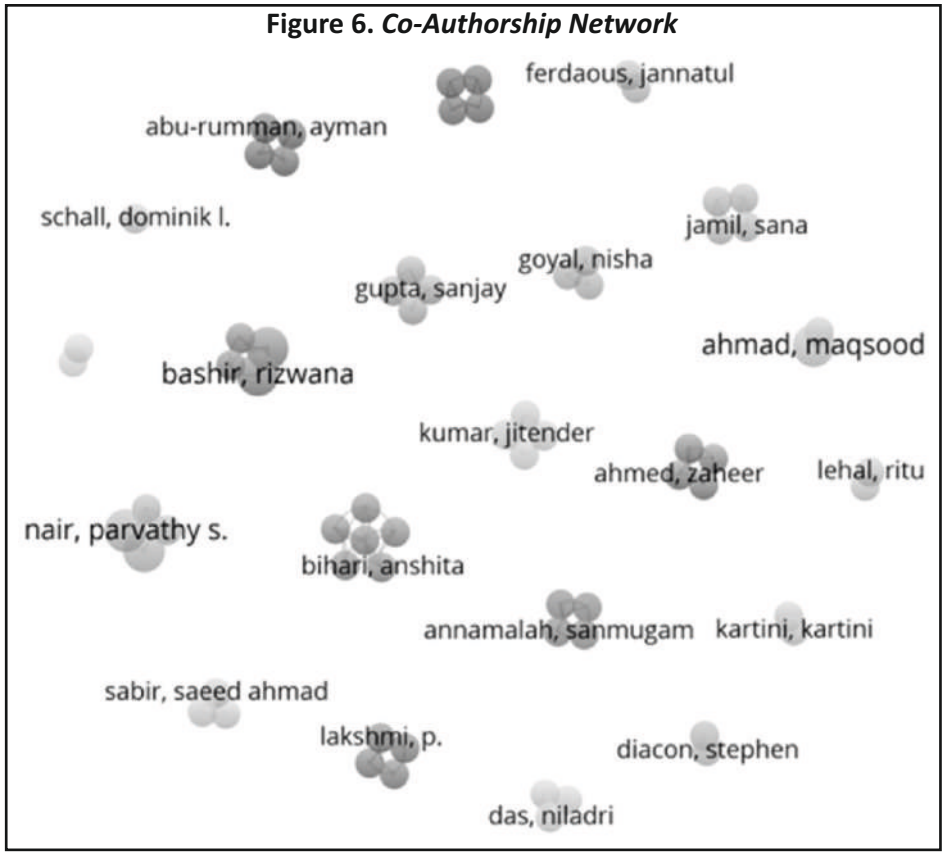
Co-Authorship Network

VOSviewer was used to construct an author-level co-authorship network map, as shown in Figure 6. Each node in the clusters represents an individual author, the node size symbolizes the citation volume, the edges reflect collaborative ties (co-authored publications), and the color-coded clusters highlight collaborative research groups.

The total thresholds were set to a minimum of 1 document and five citations per author. Based on this, 68 out of 134 authors met the criteria, indicating active contributions with meaningful academic impact. Authors like Parvathy S. Nair, Atul Shiva, and Zaheer Ahmed, with citation scores of 31, 31, and 15, suggest they contributed significantly to the collaboration network.

Several small, distinct clusters in the map indicate that the collaboration structure is fragmented rather than unified. Authors such as Anshita Bihari, Zaheer Ahmed, and Rizwana Bashir are part of tightly-knit subgroups. In contrast, Maqsood Ahmad and Ritu Lehal appear relatively isolated or part of smaller, close-knit groups. The map highlights the potential for further integration among the authors as the collaborative efforts are scattered. This might encourage knowledge exchange and cross-institutional research.

Figure 6. *Co-Authorship Network*

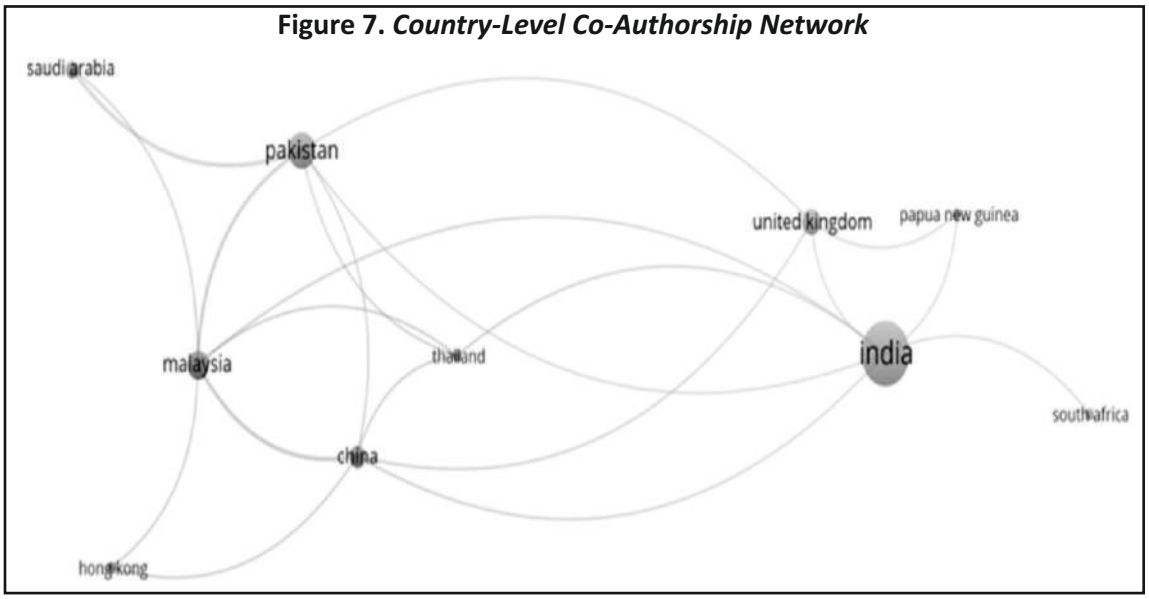


Country-Level Co-Authorship Network

A country-level co-authorship analysis (Figure 7) was conducted by setting a minimum threshold of one document, and 20 countries have qualified. This analysis informs about international collaboration patterns based on shared authorship affiliations and focuses on regional collaboration patterns.

The biggest cluster is represented by India and is linked to countries like the United Kingdom, Papua New Guinea, and South Africa, reflecting diverse international collaborations. Clusters representing Pakistan and Saudi Arabia show bilateral connections and moderate cross-cluster collaboration. Countries like Malaysia, China, Thailand, and Hong Kong indicate a strong regional collaboration within Asia. Countries like Germany, Indonesia, and Jordan have fewer or no visible collaborative links in this network view.

Figure 7. ***Country-Level Co-Authorship Network***



Co-Occurrence of the Author's Specific Keywords

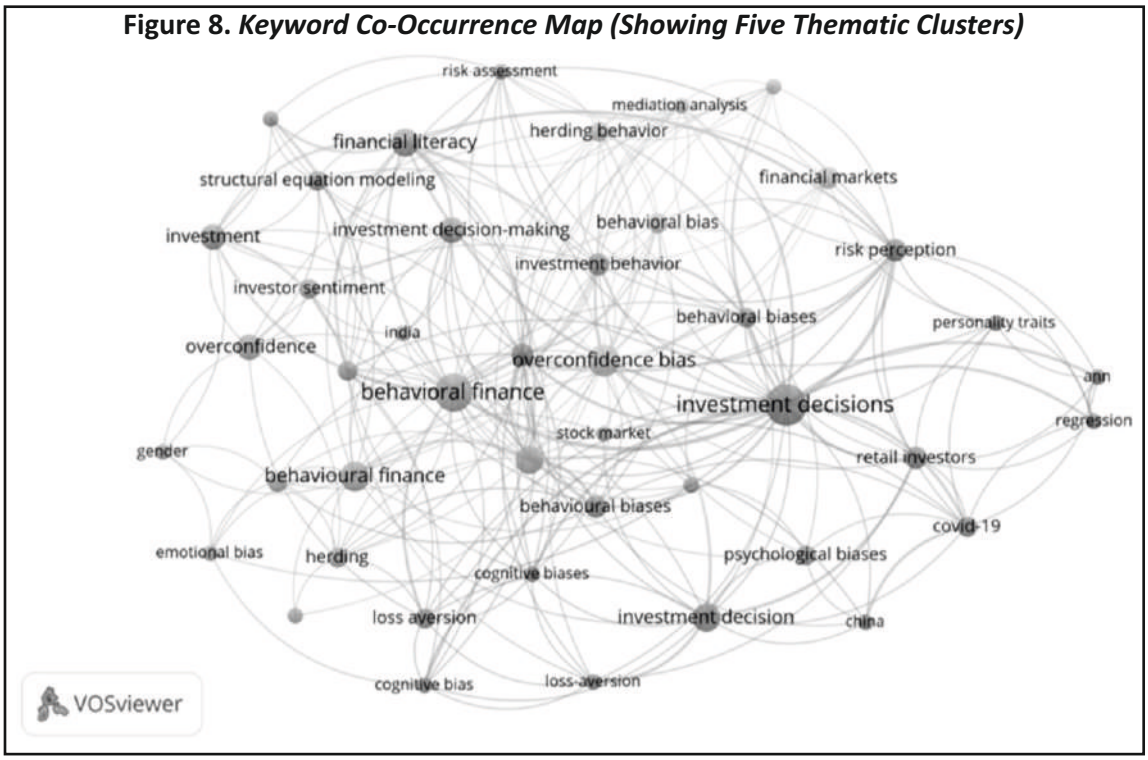
A keyword co-occurrence network map was generated to uncover key research themes and how frequently specific concepts appear within the literature. A minimum threshold of two occurrences was applied. Out of 200 keywords, 44 met the criteria. The map (Figure 8) reveals that the most frequently occurring keywords are "investment decisions" (13 occurrences, link strength: 45), "overconfidence bias" (8 occurrences, link strength: 32), and "behavioral finance" (11 occurrences, link strength: 30). There are different clusters of keywords based on their co-occurrence patterns. The nodes represent keywords. The node's size reflects the frequency, and the link thickness indicates the co-occurrence strength with other terms. There are five major clusters, as illustrated in Figure 8.

↳ Cluster 1: The cluster focuses on terms like "investment decisions," "risk perception," "retail investors," "COVID-19," and "personality traits."

↳ Cluster 2: This cluster centers around behavioral finance and biases, containing terms such as "overconfidence," "herding," "emotional bias," "loss aversion," and "gender."

↳ Cluster 3: This cluster emphasizes methodological terms and financial literacy, with keywords including "investment decision-making," "structural equation modeling," and "financial literacy."

Figure 8. ***Keyword Co-Occurrence Map (Showing Five Thematic Clusters)***



↳ Cluster 4: This cluster includes psychological and cognitive biases that influence decision-making, such as "loss aversion," "cognitive bias," and "behavioral biases."

There is a cluster that appears around overconfidence bias as a connecting point, bridging behavioral and methodological discussions. As observed, "psychological constructs," "decision-making behavior," and "investment patterns" are tightly interlinked, indicating that behavioral finance research is interdisciplinary.

Co-Citation of Cited References

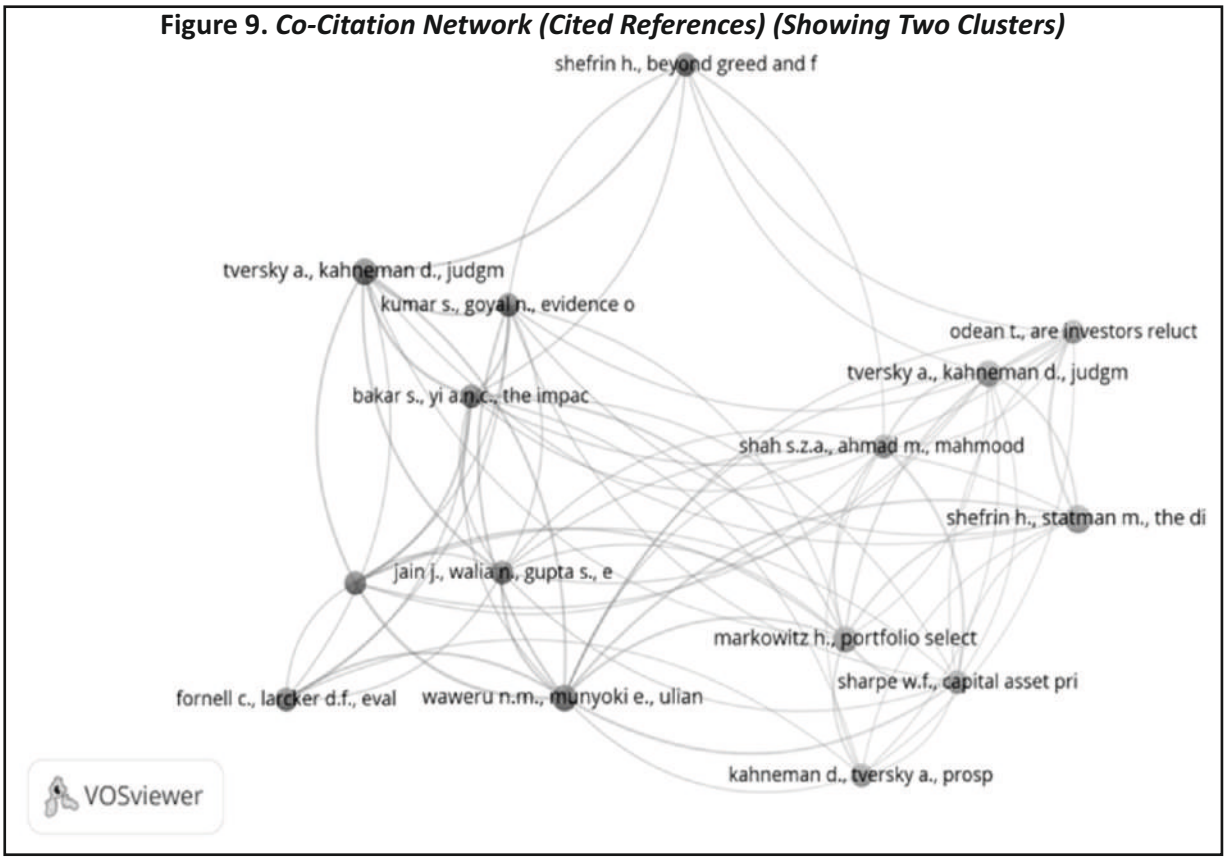
A cited reference co-citation analysis has been conducted using VOSviewer to understand the intellectual foundations of the research field. Out of 2,945 references, the minimum citation threshold was set to five; 15 were identified as the most frequently co-cited studies.

The analysis presents two distinct clusters, which are interconnected but still represent different streams of thought within the literature, as demonstrated in Figure 9. Cluster 1 represents the works by Tversky and Kahneman, Shefrin, and Walia et al., which primarily focus on judgment, biases, and heuristics that influence how individuals perceive risk and make investment choices.

Cluster 2 reflects traditional financial theories, with key contributions from Markowitz, Sharpe, and Odean, emphasizing quantitative models, portfolio selection, and market behavior. It reflects a more structured and formulaic approach to understanding investor decisions.

It has also been observed that some references, such as Tversky and Kahneman, appear in both clusters. The cluster acts as a conceptual bridge between psychological and economic perspectives, indicating that modern investment behavior research does not exist in isolation. Instead, it uses insights from both behavioral science and behavioral finance.

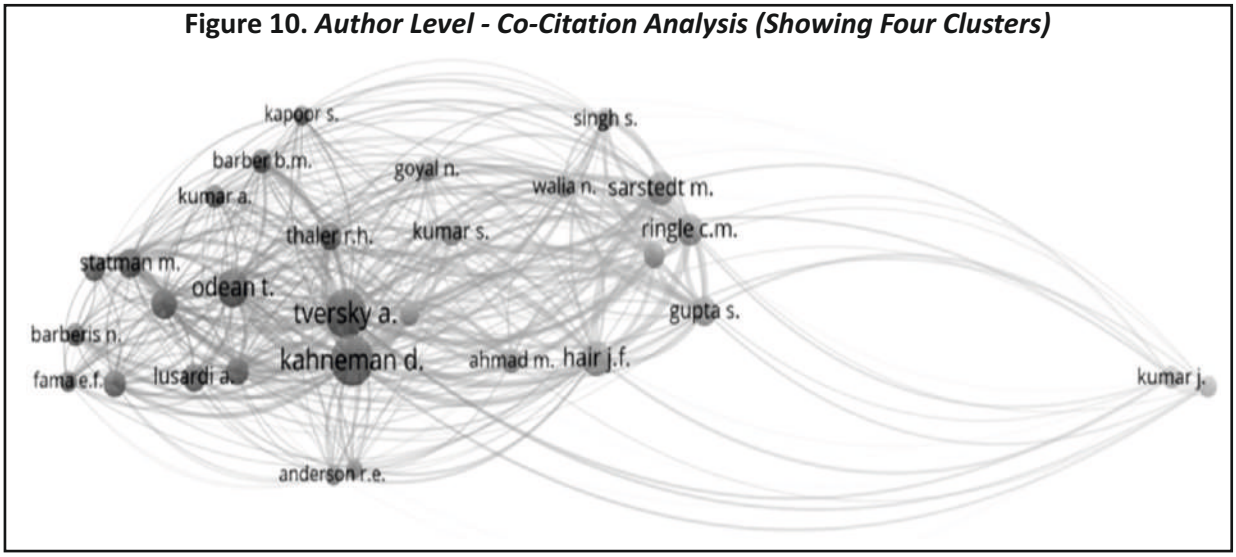
Figure 9. ***Co-Citation Network (Cited References) (Showing Two Clusters)***



Author-Level - Co-Citation Analysis

A co-citation analysis (Figure 10) was conducted to identify influential authors based on how frequently they were cited together in the literature. While conducting an author-level co-citation analysis, a minimum citation threshold was set at 15, resulting in 30 authors out of a total of 4,763 authors.

Figure 10. ***Author Level - Co-Citation Analysis (Showing Four Clusters)***



D. Kahneman, A. Tversky, and T. Odean, with 95, 87, and 54 citations and a total link strength of 2,348, 2,112, and 1,471, respectively, emerged as the most frequently co-cited authors, indicating their centrality and foundational role in the field. Four clusters have been identified in Figure 10.

- Cluster 1: Authors in the middle cluster, such as Kahneman, Tversky, Thaler, and Odean, reflect strong work in behavioral economics, investor psychology, and financial decision-making.
- Cluster 2: The cluster located in the right includes J. F. Hair, M. Sarstedt, C.M. Ringle, and S. Gupta, demonstrating a focus on marketing research methodologies and structural equation modeling.
- Cluster 3: The cluster in the extreme right, centered around J. Kumar, appears to play a bridging role among the fields, suggesting interdisciplinary influence.
- Cluster 4: The cluster below Cluster 1 includes R. E. Anderson, a more isolated but still connected author who likely represents a niche or complementary research area.

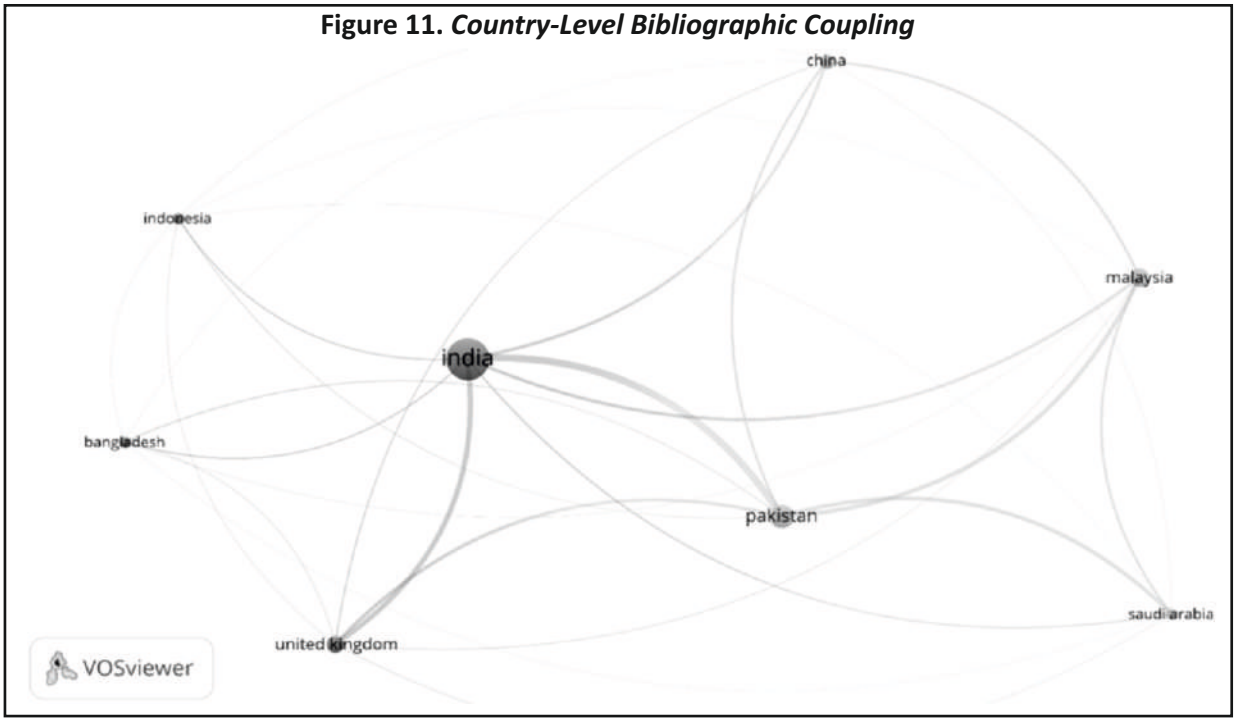
This co-citation network map shows the influential authors and highlights the thematic groupings within the literature and their relationships.

Bibliographic Coupling

Figure 11 shows the bibliographic coupling among countries based on shared references in published literature. The larger a node is, the larger the number of publications it indicates. The connecting lines represent bibliographic ties. Thicker connecting lines suggest countries that cite similar sources in their research often.

From 2007 to 2025, India stood out with the highest number of publications, emerging as the central hub for research. Prominent bibliographic ties among India, the United Kingdom, Pakistan, and China, as shown in Figure 11, indicate a higher degree of thematic similarity and shared academic interests.

Figure 11. ***Country-Level Bibliographic Coupling***



Factorial Analysis

A multiple correspondence analysis (MCA) was conducted to identify the conceptual structure of the literature. The analysis was based on the authors' keywords. The analysis groups the related keywords and helps visualize their proximities in a two-dimensional space. The conceptual structure map reveals three different clusters, as shown in Figure 12:

The largest cluster shows fundamental themes in behavioral finance, including behavioral biases, cognitive biases, herding behavior, investor psychology, investment behavior, and financial literacy. This cluster reflects that psychological factors influence individual investment decisions, drawing on theoretical and empirical work.

The smaller cluster in the right comprises keywords such as "COVID-19," "personality traits," "regression," and "ann." These keywords suggest that methodological and theoretical themes emerge within the research field. This reflects recent studies examining behavioral patterns using advanced models or responding to contemporary events like the COVID-19 pandemic. The smallest cluster at the bottom with a single keyword, "mediation analysis," indicates a niche yet growing interest area within behavioral finance research.

The first two dimensions extracted through MCA account for approximately 30.15% (Dim 1) and 21.17% (Dim 2) of the variance. The dimensions represent the underlying themes that explain how the keywords or concepts are grouped and distributed across the literature. It captures the key differences in thematic orientation. From Figure 12, it appears that Dimension 1 distinguishes between behavioral biases like overconfidence biases and herding behaviour, and broader demographic factors like gender and country. Whereas, Dimension 2 reflects the contrast between sociocultural contexts and methodological orientation, like mediation analysis. The nearness between the keywords within each cluster means conceptual closeness, and the spatial distance between clusters suggests thematic divergence.

Figure 12. ***Conceptual Structure Map (Showing Three Clusters)***

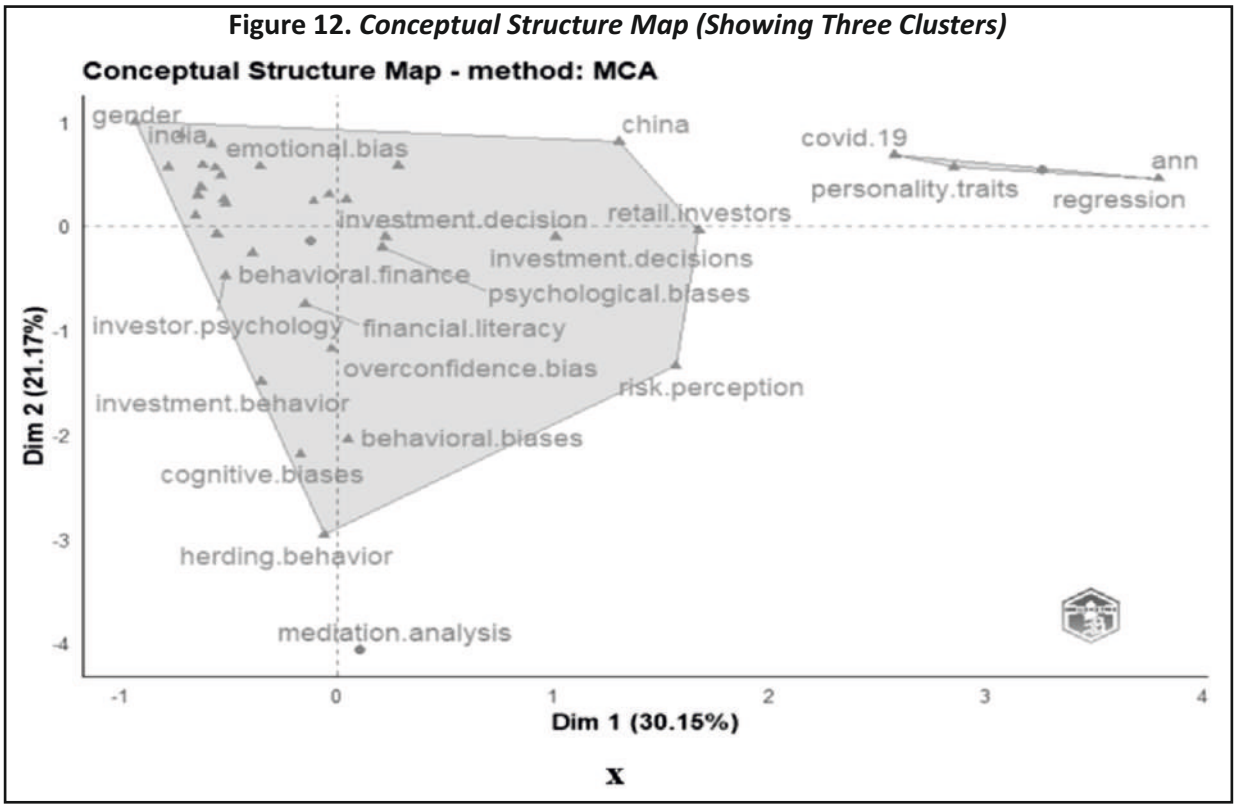


Figure 13. ***Topic Dendrogram (Showing Hierarchical Clusters)***

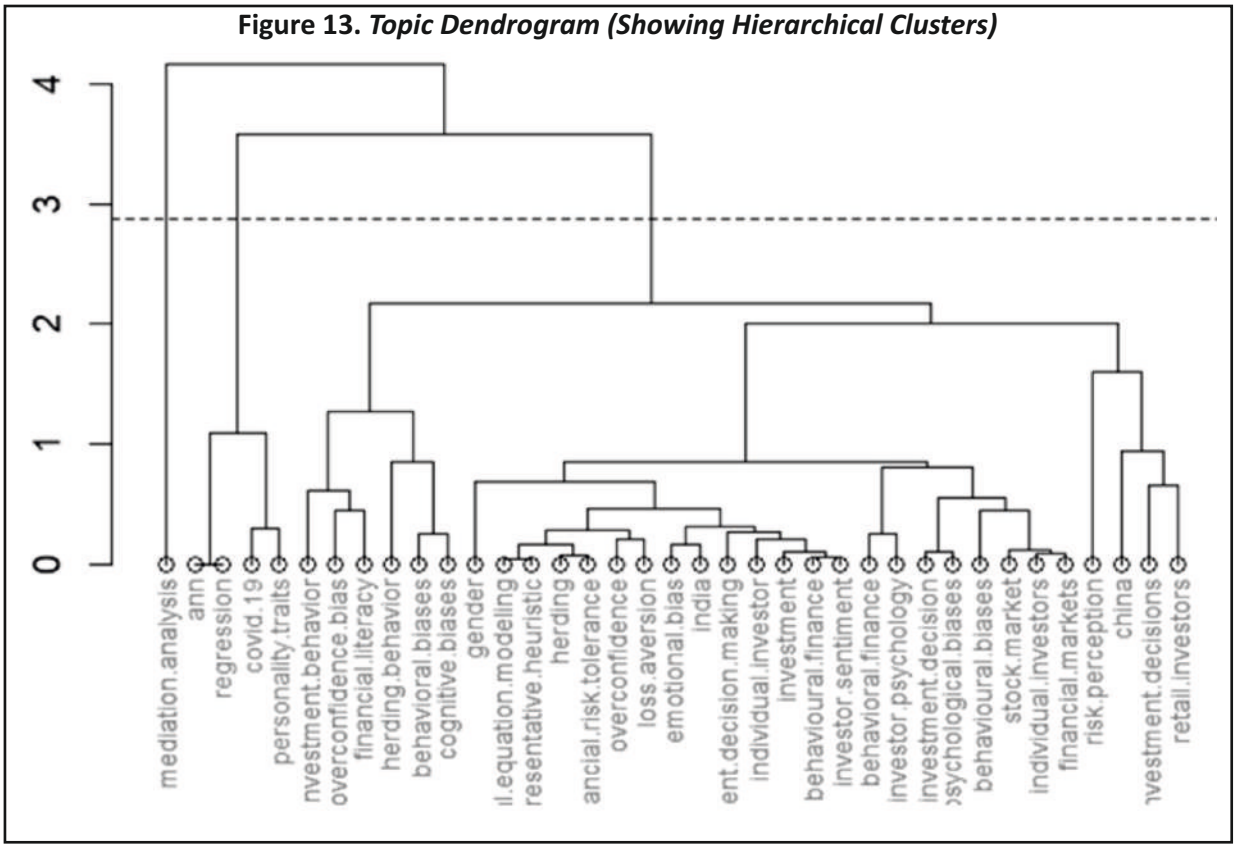


Figure 13, a dendrogram, presents a hierarchical clustering of keywords based on their conceptual similarity. It offers a tree-like structure representing how themes in the literature are nested and interconnected. This visualization enhances the conceptual structure map and provides a top-down perspective of thematic proximity by highlighting how keywords evolve into broader topic families and subfields within the literature.

Overview of the Study Characteristics

In this section, a detailed, structured summary of the characteristics of 47 shortlisted studies has been compiled in Table 4.

Table 4. ***Characteristics of the Studies***

References	Behavioral Biases and Other Factors Influencing Investors' Decisions	Gender Distribution (% Represents Male)	Sample Size (Number of Respondents)	Data Type	Data Analysis Technique(s)	Sampling Technique(s)
Agarwal & Singh (2024)	Overconfidence, representativeness, herding, availability, anchoring, mental accounting, loss aversion, disposition	81%	497	Primary	SEM	Purposive and Snowball
Ahmad & Shah (2022)	Overconfidence, financial literacy, and risk perception	86.3%	183	Primary	Correlation, Regression Analysis, Cronbach's Alpha	Purposive

					Test, Descriptive Statistics, Baron and Kenny Method, and SEM	
Ahmad (2021)	Heuristic-driven bias (underconfidence)	89.7%	203	Primary	SEM	Convenience
Ahmed et al. (2021)	Financial literacy and financial risk tolerance	82.9%	384	Primary	SEM, Exploratory, and Confirmatory Factor Analysis	Multi-Stage Random and Convenience
Ahuja & Kumar (2025)	Portfolio diversification, stock picking priorities (company specific, technical indicators, news, advice from third parties, gut feeling, growing sector, use of screeners), home/ familiarity bias, anchoring bias, negativity bias, attitude towards loss/ loss aversion, tendency to rely on own skills, managing emotions (being patient, stop-loss strategy, self-reliance), managing risk (diversification, rotation of funds, hedging)	70%	10	Primary	Content Analysis Technique	Purposive
Almansour et al. (2025)	Herding, disposition, overconfidence, risk perception, blue-chip, and financial literacy	88%	315	Primary	SEM	Purposive
Annamalah et al. (2019)	Financial status, risk-taking behavior, investment revenue, and availability of information	43.1%	202	Primary	Multiple Regression Analysis	Convenience
Areiqat et al. (2019)	Overconfidence, loss aversion, risk perception, and herding	N/A	150	Primary	Multiple Regression and Hierarchical Regression Analysis	Convenience
Banerji et al. (2022)	Factor 1 (confirmation, anchoring bias, recency, overconfidence), factor 2 (loss aversion, endowment effect, risk aversion, status quo), factor 3 (hindsight, herding, house money, gambler's fallacy)	77%	500	Primary	Exploratory Factor Analysis and Confirmatory Factor Analysis	Systematic Random

Bihari et al. (2025)	Overconfidence, Barnum effect, loss aversion, and regret aversion	80.40%	337	Primary	Multiple Linear Regression and ANN	Convenience
Bushra et al. (2024)	Overconfidence, anchoring, herding, loss aversion, mental accounting, and demographic factors: age, gender, and educational level	51.9%	806	Primary	Independent Sample *T*-tests and ANOVA	Purposive
Sharma (2025)	Financial literacy, financial risk tolerance, social stigma, and emotional intelligence	53%	761	Primary	Descriptive Statistics, Reliability, and Validity Tests, SEM, Exploratory and Confirmatory Factor Analysis	Purposive and Snowball
Chishti et al. (2023)	Heuristic variables (availability, overconfidence, gambler's fallacy, representativeness, anchoring), prospect variables (loss aversion, regret aversion, and mental accounting), market variables (fundamentals of underlying stocks, price changes, passing trends of stocks, market information), herding variables (impacts of other investor's decisions: buying, speed, selling, volume, and choice of trading stocks)	N/A	442	Primary	SEM	Delineated Arbitrary Testing
Dar & Kumar (2023)	Demographic variables (gender, marital status, occupation, income), psychological variables (cognitive, overconfidence), economic variables (investment goals, risk perception), social variables (saving orientation, decision influencers)	75%	392	Primary	*T*-Test, ANOVA, and Logistic Regression	Convenience
Diacon & Hasseldine (2007)	Framing effect and risk perception	33%	292	Primary	ANOVA	N/A
Singh et al. (2016)	Overconfidence, anchoring/ reference point, self-attribution, framing effect, overreaction, regret avoidance, and gender	63.53%	521	Primary	*T*-Test, Descriptive Statistics, and Chi-Square Test	Convenience and Judgmental

Hii et al. (2023)	Representativeness, overconfidence, disposition, and herding	54.5%	308	Primary	Multiple Linear Regression Analysis	Convenience
Hossain & Siddiqua (2024)	Loss aversion, overconfidence, herding, risk perception	95.4%	281	Primary	Descriptive Analysis, Chi-Square Test, Paired-Samples *T*-test, One-Way ANOVA	N/A
Imthiyas et al. (2015)	Heuristics (representativeness, overconfidence, anchoring, and adjustment/ conservatism and aversion to ambiguity), frame dependence (money illusion, loss aversion, regret minimization, and self-control), inefficient markets (representativeness, frame dependence, anchoring, and adjustment/conservatism, and overconfidence)	83.2%	573	Primary	Mean, Median, and Standard Deviation	Convenience
Jan et al. (2022)	Overconfidence, availability, representative, anchoring, and information availability	N/A	281	Primary	Confirmatory Factor Analysis	Snowball
Joshi et al. (2022)	Loss aversion, status quo, optimism, and gender	N/A	378	Primary	Exploratory Factor Analysis, Confirmatory Factor Analysis, and Path Analysis	Purposive
Kamath et al. (2023)	Investors' sentiments and personal characteristics/ personality traits (neuroticism, conscientiousness, extraversion, agreeableness, and openness to experience)	62.98%	181	Primary	PLS-SEM	Simple Random
Kartini & Nahda (2021)	Anchoring, representativeness, loss aversion, overconfidence, optimism, and herding behavior	57%	165	Primary	One-Sample *T*-Test	Snowball
Khilar & Singh (2019)	Overconfidence, media response, and disposition	54%	91	Primary	Descriptive Analysis	Convenience
Kumar et al. (2024)	Herding, overconfidence, loss aversion, investment intention, and FOMO (fear of missing out)	57.28 %, 58.27%	405, 393	Primary	PLS-SEM	Purposive
Lakshmi et al. (2013)	Herding, cognitive dissonance, social contagion, disposition, representative heuristic, risk aversion, and overconfidence	73.90%	318	Primary	SEM	N/A

Mahmood et al. (2024)	Overconfidence, risk aversion, herding, disposition, representativeness, anchoring, and financial literacy	80.5%	261	Primary	Hierarchical Regression Analysis	Convenience
Manzoor et al. (2023a)	Personality traits (neuroticism and conscientiousness) and demographic factors: gender, age, income, and education	62.5%	315	Primary	Two-Stage Analysis (Regression Analysis and ANN)	Purposive
Manzoor et al. (2023b)	Personality traits (conscientiousness, neuroticism), risk perception, and perceived COVID-19 disruption	68.30%	315	Primary	Regression and ANN	Multi-stage
Metawa et al. (2019)	Investor sentiment, herd behavior, overreaction and underreaction, overconfidence, and demographic factors: age, experience, gender, and education level	78.65%	384	Primary	Partial Multiple Regression	N/A
Munir et al. (2024)	Information factors, home, geographical, investor sentiment, salience, and over/under reaction	73.7%	281	Primary	PLS-SEM	Simple Random
Nair & Shiva (2023)	Four dimensions for overconfidence bias, i.e., positive illusions, accuracy, past investment success, and perceived control	73%	489	Primary	Exploratory Factor Analysis and PLS-SEM	Snowball
Nair et al. (2023)	Mobile applications	57.98%	507	Primary	Variance-Based PLS-SEM	Snowball
Parveen et al. (2020)	Overconfidence and representative heuristic	N/A	446, 301 (Companies)	Primary and Secondary	SEM and Path Analysis	N/A
Pathak & Thapa (2024)	Overconfidence, representative, availability, anchoring, and adjustment, perceived market efficiency	80.13%	403	Primary	SEM	Purposive
Raj (2025)	Mental accounting, overconfidence, herd behavior, and demographic factors: age, gender, and income	44%	385	Primary	PLS-SEM	Snowball
Raut et al. (2018)	Social influences (herding, information cascades, contagion) and psychological influences (anchoring, representativeness, and overconfidence)	73%	396	Primary	SEM, Descriptive and Inferential Analysis	N/A

Sabir et al. (2019)	Overconfidence, past investment experience, herding behavior, and financial literacy	N/A	352	Primary	Partial least squares regression	Cluster
Sachdeva & Lehal (2023)	Personality traits (neuroticism, extraversion, conscientiousness, agreeableness, openness to experience), financial satisfaction, and gender	47.04%	406	Primary	SEM	Snowball
Sathya & Prabhavathi (2024)	Overconfidence, herding behavior, social media use, and risk perception	50%	500	Primary	Descriptive Statistics, Correlation Analysis, and Regression Analysis	N/A
Schall (2020)	Socio-psychological factors (gender, age, marital status, children, education, income, community size, location, religion), psychographic variables (risk attitude, environmental beliefs, attitude and behavior, active citizenship and political interest), (project variables (technology, financial characteristics, time, public support used to estimate financial return)	81%	266	Primary	Logistic Regressions and Factor Analysis	N/A
Singh & Chakraborty (2025)	Social facilitation of investors, social sharing among investors, social norms of the community of investors, intimacy of investors, and fear of missing out among the investors	62.5%	6, 2 (Fund Managers)	Primary	Qualitative Thematic Analysis	Purposeful (Purposive)
Sood et al. (2025)	Overconfidence and optimism, loss aversion, regret aversion, representativeness, anchoring, information availability, and herding	87.60%	467	Primary	Fuzzy Analytic Hierarchy Process	Purposive
Sutyanto et al. (2022)	Demographic factors: gender, age, occupation, and income	N/A	3,911	Secondary	ANOVA	N/A
Vu et al. (2024)	Needs of information, information credibility, information quality, attitude towards information, and information quantity	72.2%	512	Primary	SEM	Convenience
Wang & Zou (2024)	Financial literacy, availability, herding behavior, overconfidence, loss aversion,	N/A	2,000	Primary	Multiple Regression Analyses	N/A

	and confirmation					
Yasmin & Ferdaous (2023)	Cognitive dissonance, regret aversion, representativeness, hindsight, loss aversion, overconfidence, illusion of control, self-attribution, and herd instinct	67.7%	196	Primary	Factor Analysis, Kaiser-Meyer-Olkin Test, Correlation Matrix Analysis, Bartlett Test	Snowball, Quota, and Convenience

Note. SEM* Structural Equation Modeling, PLS-SEM* "Partial Least Squares Structural Equation Modeling," ANN* "Artificial Neural Network," N/A* Not Available.

Discussion

For any individual, decision-making is a complex process that may vary depending on several factors. Financial investments are no stranger to the complexity of decision-making when it comes to investment by retail investors. By introducing psychological perspectives to traditional finance models, behavioral finance has provided a better understanding of real-world financial market practices and assisted researchers in understanding individuals' irrational financial behaviors.

One of the study's objectives was to identify the biases and other prominent factors influencing retail investors' decision-making. In this direction, the systematic literature review performed in the current research on the shortlisted studies has revealed the following:

- The majority of studies utilized primary data.
- Primarily, studies used non-probability sampling techniques, such as convenience, snowball, and purposive sampling. Only a few studies employed systematic random sampling or multi-stage sampling methods.
- The sample sizes ranged from small qualitative interviews to surveys with about 2,000 respondents.
- The most common techniques used for analysis include structural equation modelling (SEM).
- Limited studies applied qualitative methods.
- Overconfidence bias was frequently examined as a key behavioral construct. Nair and Shiva (2023) identified four dimensions of overconfidence bias: positive illusions, accuracy, past investment success, and perceived control.
- Other factors studied were loss aversion, anchoring, representativeness, and availability bias. However, biases, such as home, geographical, and mental accounting, were less common, revealing that these are the underexplored areas within the literature.
- It was also worth noting that gender distribution was heavily skewed toward the male participants, ranging from 33% to 95%, which revealed a gap in gender-balanced perspectives on investment behavior.
- The domain showed heavy dependence on cross-sectional survey designs, with limited application of longitudinal, experimental, or multi-method approaches, suggesting a potential future research area, possibly revealing a more detailed and real-time understanding of the evolving behavior of retail investors.
- Other than biases, some prominent factors impacting retail investors' decisions were demographic factors, social aspects, risk perception, risk tolerance, investment goals, and social media.

To address the other objective of the study, to understand the intellectual structure of the literature on

behavioral biases and other influential factors and their impact on investors' financial decisions, we analyzed network maps consisting of co-authorship, co-occurrence, co-citation, and factorial analysis. The bibliometric analysis provided some valuable insights into the intellectual landscape of the research field. The exponential trend line in Figure 2 reveals that academic interest in the financial behavior field is growing. The country-level co-authorship network map and country-level analysis indicated that India had been a key contributor. A regional convergence research focus is also witnessed among India, Pakistan, and China in bibliographic coupling analysis. The conceptual structure map identified three dominant clusters: behavioral biases, methodological advancements, and other factors. Hence, the findings of the bibliometric analysis highlighted that there has been a gradual shift from biases towards other factors like psychological, social, demographic, and technological factors that might have contributed to retail investors' rationality during investment decision-making, expanding the intellectual boundaries of the research field.

Conclusion

The present study contributes to the existing literature by organizing the fragmented literature using an SLR technique to enhance the understanding of behavioral biases and other factors impacting the rational decision-making of retail investors. Most studies discuss behavioral biases, but current research goes beyond identifying other behavioral factors influencing decision-making. The current study states well-established behavioral biases (loss aversion, overconfidence, herding, and anchoring) and highlights the growing role of demographic, social, emotional, and situational factors. A shift toward multidimensional frameworks is also increasing because factors, such as financial literacy, social interaction, personality traits, and information-related influences, are now being integrated for further analysis and research.

Lastly, financial knowledge's role has been highlighted recently (Ahmed et al., 2021; Sharma, 2025). Studies provide evidence that financial literacy strongly impacts investment behavior (Sharma, 2025) and improves the quality of investors' investment decisions (Ahmad & Shah, 2022) as well as reduces susceptibility to behavioral biases, particularly herding and availability bias (Wang & Zou, 2024). Thus, retail investors should try to become more aware and may undergo financial literacy to mitigate the negative impact of behavioral biases and other factors to some extent.

Implications of the Study

In the academic landscape, the current study has contributed by consolidating behavioral biases in the context of retail investor decision-making and gathering and consolidating the other prominent factors influencing retail investors. Based on the SLR and bibliometric analysis, evolving patterns have been identified and highlighted. Hence, the current study enhances the understanding of behavioral biases and other influencing factors relevant to retail investor decision-making and paves the way for future research by highlighting the less explored factors.

In the managerial context, the current study has contributed by revealing the hidden biases and other behavioral factors that influence retail investment decisions, which tend to impact the rationality of retail investors while investing. This exposé will help them better understand the retail investors and prepare and provide investment or portfolio management services accordingly. Also, by educating retail investors, such organizations may gain investors' confidence and prepare them for several aspects of investment that will help them make rational investment decisions.

During the SLR, it was observed that financial literacy is an important parameter that should be focused on to address behavioral biases and other identified factors; thus, not only financial services providers but also the government and policymakers may pay heed to this aspect to safeguard retail investors in the investment world.

Limitations of the Study and Scope for Further Research

Acknowledging the limitations of the current systematic literature review, future scholars may address the following concerns: specifically, multiple databases may be used to ensure the consistency of systematic reviews in behavioral finance. Though efforts were made to select studies for the SLR based on a clearly defined search query, there remains a possibility that some studies published around the same review period were missed due to the absence of relevant search terms in their titles, abstracts, and keywords. Furthermore, the scope of the current study was restricted to retail investors, but there is potential to include institutional investors, banks, brokers, and financial advisors.

Based on the studies reviewed, a broad scope of research lies in the behavioral finance domain, as behavioral biases like home bias, recency bias, and negativity bias remain unexplored regarding some specific behavioral biases. Also, the overuse of non-probability sampling and the underrepresentation of female participants limit the generalizability of the findings, pointing towards a gap. Adopting longitudinal, experimental, or mixed-methods approaches to explore the less studied behavioral biases in the future could enhance the depth and practical importance of investor behavior research, especially in an increasingly digital and socially influenced financial environment.

Authors' Contribution

Dr. Saurabh Singh has carried out the ideation. Dr. Saurabh Singh and Ipsa Bharti developed the manuscript structure and framework. Preeti Maurya conducted the systematic literature review, which included extracting and filtering relevant research papers based on predefined keywords. Ipsa Bharti conducted the bibliometric analysis.

Conflict of Interest

The authors declare that there is no conflict of interest related to this study.

Funding Acknowledgement

The authors received no financial support for the research, authorship, and/or publication of this article.

References

Agarwal, S., & Singh, S. (2024). Biases in capital market instrument investing decisions: A study from India. *Australasian Accounting, Business and Finance Journal*, *18*(3), 307–330. https://doi.org/10.14453/aabfj.v18i3.16

Ahmad, M., & Shah, S. Z. (2022). Overconfidence heuristic-driven bias in investment decision-making and performance: Mediating effects of risk perception and moderating effects of financial literacy. *Journal of Economic and Administrative Sciences*, *38*(1), 60–90. https://doi.org/10.1108/JEAS-07-2020-0116

Ahmad, M. (2021). Does underconfidence matter in short-term and long-term investment decisions? Evidence from an emerging market. *Management Decision*, *59*(3), 692–709. https://doi.org/10.1108/MD-07-2019-0972

Ahmed, Z., Noreen, U., Ramakrishnan, S. A., & Abdullah, D. F. (2021). What explains the investment decision-making behaviour? The role of financial literacy and financial risk tolerance. *Afro-Asian Journal of Finance and Accounting*, *11*(1), 1–19. https://doi.org/10.1504/AAJFA.2021.10033830

Ahuja, S., & Kumar, B. (2025). An elicitation study to understand the equity investment motivation and decisions among Indian millennials. *Qualitative Research in Financial Markets, 17*(1), 66–86. https://doi.org/10.1108/qrfm-04-2023-0081

Almansour, B. Y., Almansour, A. Y., Elkrghli, S., & Shojaei, S. A. (2025). The investment puzzle: Unveiling behavioral finance, risk perception, and financial literacy. *Economics, 13*(1), 131–151. https://doi.org/10.2478/eoik-2025-0003

Annamalah, S., Raman, M., Marthandan, G., & Logeswaran, A. K. (2019). An empirical study on the determinants of an investor's decision in unit trust investment. *Economies*, *7*(3), 80. https://doi.org/10.3390/economies7030080

Annapurna, R., & Basri, S. (2024). Role of emotions in stock investment decisions : A critical review of the literature. *Indian Journal of Finance*, *18*(5), 50–65. https://doi.org/10.17010/ijf/2024/v18i5/173842

Areiqat, A. Y., Abu-Rumman, A., Al-Alani, Y. S., & Alhorani, A. (2019). Impact of behavioral finance on stock investment decisions applied study on a sample of investors at Amman Stock Exchange. *Academy of Accounting and Financial Studies Journal*, *23*(2), 1–16. https://www.abacademies.org/articles/Impact-of-Behavioral-Finance-On-Stock-Investment-Decisions-1528-2635-23-2-375.pdf

Badola, S., Sahu, A. K., & Adlakha, A. (2024). A systematic review on behavioral biases affecting individual investment decisions. *Qualitative Research in Financial Markets*, *16*(3), 448–476. https://doi.org/10.1108/qrfm-05-2022-0095

Banerji, J., Kundu, K., & Alam, P. A. (2022). The impact of behavioral biases on individuals' financial choices under uncertainty: An empirical approach. *Business Perspectives and Research*, *11*(3), 401–424. https://doi.org/10.1177/22785337221098287

Bihari, A., Dash, M., Muduli, K., Kumar, A., Mulat-Weldemeskel, E., & Luthra, S. (2025). Does cognitive biased knowledge influence investor decisions? An empirical investigation using machine learning and artificial neural network. *VINE Journal of Information and Knowledge Management Systems, 55*(2), 445–469. https://doi.org/10.1108/vjikms-08-2022-0253

Brenncke, M. (2018). The legal framework for financial advertising: Curbing behavioural exploitation. *European Business Organization Law Review*, *19*(4), 853–882. https://doi.org/10.1007/s40804-018-0111-9

Brière, M., & Thomadakis, A. (2024). *Digital-Savvy retail investors – How can the financial industry and regulation help them to prosper?* European Capital Markets Institute (ECMI). https://www.ecmi.eu/publications/research-reports/digital-savvy-retail-investors-%E2%80%93-how-can-financial-industry-and

Bushra, B., Srivastav, S., & Kapoor, S. (2024). Impact of gender, age, and education on investors' behavior: An empirical study of Delhi-NCR. *International Journal of Systems Assurance Engineering and Management*. https://doi.org/10.1007/s13198-024-02534-1

Chishti, M. F., Bashir, R., Mancinelli, T., & Hussain, R. T. (2023). Humanoid psychological sentiments and enigma of investment. *Journal of Economic and Administrative Sciences*, *39*(4), 1260–1276. https://doi.org/10.1108/jeas-05-2021-0100

Cosentino, N., Marenzi, G., & Chiesa, M. (2022). The impact of COVID-19 pandemic on scientific research: An upcoming new wave? *Journal of General Internal Medicine*, *37*(10), 2553–2555. https://doi.org/10.1007/s11606-022-07647-6

Dangi, M., & Kohli, B. (2018). Role of behavioral biases in investment decisions : A factor analysis. *Indian Journal of Finance*, *12*(3), 43–57. https://doi.org/10.17010/ijf/2018/v12i3/121997

Dar, B. I., & Kumar, J. (2023). The behavioural pattern of investment in the financial market: A study of the individual investors. *Global Business Review*. https://doi.org/10.1177/09721509231192229

Diacon, S., & Hasseldine, J. (2007). Framing effects and risk perception: The effect of prior performance presentation format on investment fund choice. *Journal of Economic Psychology*, *28*(1), 31–52. https://doi.org/10.1016/j.joep.2006.01.003

Dzung, P. T., Tung, N. X., Van, L. H., & Thanh, N. T. (2021). Experimental evidences for prospect theory in Vietnam. *Indian Journal of Finance*, *15*(5–7), 26–43. https://doi.org/10.17010/ijf/2021/v15i5-7/164491

Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*, *25*(2), 383–417. https://doi.org/10.2307/2325486

Gupta, N., Rana, R., & Tandon, D. (2025). Financial literacy as a moderator in behavioral biases and investor decisions. *Indian Journal of Finance*, *19*(5), 79–94. https://doi.org/10.17010/ijf/2025/v19i5/175045

Gupta, P., & Kohli, B. (2021). Herding behavior in the Indian stock market : An empirical study. *Indian Journal of Finance*, *15*(5–7), 86–99. https://doi.org/10.17010/ijf/2021/v15i5-7/164495

Hii, I. S., Li, X., & Zhu, H. (2023). Behavioural biases and investment decisions during COVID-19: An empirical study of Chinese investors. *Institutions and Economies, 15*(3), 81–103. https://doi.org/10.22452/ijie.vol15no3.4

Hossain, T., & Siddiqua, P. (2024). Exploring the influence of behavioral aspects on stock investment decision-making: A study on Bangladeshi individual investors. *PSU Research Review, 8*(2), 467–483. https://doi.org/10.1108/prr-10-2021-0054

Huang, J. Y., Shieh, J. C., & Kao, Y.-C. (2016). Starting points for a new researcher in behavioral finance. *International Journal of Managerial Finance*, *12*(1), 92–103. https://doi.org/10.1108/ijmf-05-2015-0111

Imthiyas, Y., Shyamasundar, K., & Ramar, S. S. (2015). A study on behavioral bias of individual investors. *International Journal of Economic Review, 12*(4), 885–899. https://www.researchgate.net/publication/298640904

Jan, N., Jain, V., Li, Z., Sattar, J., & Tongkachok, K. (2022). Post-COVID-19 investor psychology and individual investment decision: A moderating role of information availability. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.846088

Joshi, C. S., Badola, S., & Chopra, G. (2022). Behavioural bias: Does it affect an investor's rationality? *SCMS Journal of Indian Management, 19*(4), 128–142. https://www.proquest.com/docview/2788462373?sourcetype=Scholarly%20Journals

Kamath, A. N., Shenoy, S. S., Abhilash, A., & Kumar, S. N. (2023). Impact of personality traits on investment decision-making: Mediating role of investor sentiment in India. *Investment Management and Financial Innovations*, *20*(3), 200–211. https://doi.org/10.21511/imfi.20(3).2023.17

Kandpal, V., & Mehrotra, R. (2018). Role of behavioral finance in investment decision – A study of investment behavior in India. *International Journal of Management Studies*, *5*(4(6)), 39–49. https://doi.org/10.18843/ijms/v5i4(6)/06

Kartini, K., & Nahda, K. (2021). Behavioral biases on investment decision: A case study in Indonesia. *The Journal of Asian Finance, Economics and Business*, *8*(3), 1231–1240. https://doi.org/10.13106/jafeb.2021.vol8.no3.1231

Kawadkar, H. (2024). Navigating the irrational: A review of behavioural finance theory and practice. *International Journal of Commerce and Management Studies*, *9*(1), 29–34. https://www.researchgate.net/publication/379084402

Khilar, R. P., & Singh, S. (2019). Influence of behavioural biases on investment decision making in Bhubaneswar region. *International Journal of Recent Technology and Engineering*, *8*(3), 8297–8301. https://doi.org/10.35940/ijrte.c6592.098319

Kumar, J., Rani, M., Rani, G., & Rani, V. (2024). All are interesting to invest, I fear of missing out (FOMO): A comparative study among self-employed and salaried investors. *Journal of Financial Regulation and Compliance, 32*(5), 646–664. https://doi.org/10.1108/jfrc-01-2024-0010

Lakshmi, P., Visalakshmi, S., Natarajan, T., & Senthilarasu, B. (2013). Assessing the linkage of behavioural traits and investment decisions using SEM approach. *SSRN*. https://ssrn.com/abstract=2427998

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *PLoS Medicine*, *6*(7), Article ID e1000100. https://doi.org/10.1371/journal.pmed.1000100

Ludhani, K. K., & Kumar, S. (2023). A retrospective overview of *Indian Journal of Finance* between 2011 and 2022. *Indian Journal of Finance*, *17*(9), 8–24. https://doi.org/10.17010/ijf/2023/v17i9/173181

Mahmood, F., Arshad, R., Khan, S., Afzal, A., & Bashir, M. (2024). Impact of behavioral biases on investment decisions and the moderation effect of financial literacy; An evidence of Pakistan. *Acta Psychologica*, *247*, Article ID 104303. https://doi.org/10.1016/j.actpsy.2024.104303

Mandal, C., & Riyat, S. (2024). Role of cognitive biases in understanding financial investment Behavior. *Indian Journal of Research in Capital Markets*, *11*(1), 20–33. https://doi.org/10.17010/ijrcm/2024/v11i1/173824

Manzoor, A., Jan, A., & Shafi, M. (2023a). Do personality and demographic variances of individual investors challenge the assumption of rationality? A two-staged regression modeling-artificial neural network approach. *Indian Journal of Finance*, *17*(10), 64–78. https://doi.org/10.17010/ijf/2023/v17i10/168549

Manzoor, A., Jan, A., Shafi, M., Parry, M. A., & Mir, T. (2023b). Role of perceived COVID-19 disruption, personality traits and risk perception in determining the investment behavior of retail investors: A hybrid regression-neural network approach. *Journal of Economic and Administrative Sciences,* Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/jeas-01-2023-0026

Metawa, N., Hassan, M. K., Metawa, S., & Safa, M. F. (2019). Impact of behavioral factors on investors' financial decisions: Case of the Egyptian stock market. *International Journal of Islamic and Middle Eastern Finance and Management*, *12*(1), 30–55. https://doi.org/10.1108/imefm-12-2017-0333

Munir, S., Chishti, M. F., & Bashir, R. (2024). The aspects of behavioral finance with new insights: An analysis of individual investors at Pakistan Stock Exchange (PSX). *Journal of Economic and Administrative Sciences,* Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/jeas-11-2023-0306

Nair, P. S., & Shiva, A. (2023). Specifying and validating overconfidence bias among retail investors: A formative index. *Managerial Finance*, *50*(5), 1017–1036. https://doi.org/10.1108/mf-04-2023-0237

Nair, P. S., Shiva, A., Yadav, N., & Tandon, P. (2023). Determinants of mobile apps adoption by retail investors for online trading in emerging financial markets. *Benchmarking: An International Journal*, *30*(5), 1623–1648. https://doi.org/10.1108/bij-01-2022-0019

Öztürk, O., Kocaman, R., & Kanbach, D. K. (2024). How to design bibliometric research: An overview and a framework proposal. *Review of Managerial Science*, *18*(11), 3333–3361. https://doi.org/10.1007/s11846-024-00738-0

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A.,…Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *International Journal of Surgery*, *88*, Article ID 105906. https://doi.org/10.1016/j.ijsu.2021.105906

Paisarn, W., Chancharat, N., & Chancharat, S. (2021). Factors influencing retail investors' trading behaviour in the Thai stock market. *Australasian Accounting, Business and Finance Journal*, *15*(2), 26–37. https://doi.org/10.14453/aabfj.v15i2.3

Parveen, S., Satti, Z. W., Subhan, Q. A., & Jamil, S. (2020). Exploring market overreaction, investors' sentiments and investment decisions in an emerging stock market. *Borsa Istanbul Review*, *20*(3), 224–235. https://doi.org/10.1016/j.bir.2020.02.002

Pathak, D. D., & Thapa, B. S. (2024). Beyond market anomalies: How heuristics and perceived efficiency shape investor behavior in developing markets. *Investment Management and Financial Innovations*, *21*(3), 1–14. https://doi.org/10.21511/imfi.21(3).2024.01

Raj, G. (2025). Biases and investment decision: An analysis of demographics using PLS-MGA. *International Journal of Accounting & Information Management,* Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/ijaim-08-2024-0282

Raut, R. K., & Das, N. (2015). Behavioral prospects of individual investor decision making process: A review. *Indian Journal of Finance*, *9*(4), 44–55. https://doi.org/10.17010/ijf/2015/v9i4/71457

Raut, R. K., Das, N., & Mishra, R. (2018). Behaviour of individual investors in stock market trading: Evidence from India. *Global Business Review, 21*(3), 818–833. https://doi.org/10.1177/0972150918778915

Raynaud, M., Goutaudier, V., Louis, K., Al-Awadhi, S., Dubourg, Q., Truchot, A., Brousse, R., Saleh, N., Giarraputo, A., Debiais, C., Demir, Z., Certain, A., Tacafred, F., Cortes-Garcia, E., Yanes, S., Dagobert, J., Naser, S., Robin, B., Bailly, É.,…Loupy, A. (2021). Impact of the COVID-19 pandemic on publication dynamics and non-COVID-19 research production. *BMC Medical Research Methodology*, *21*(1), Article no. 255. https://doi.org/10.1186/s12874-021-01404-9

Sabir, S. A., Mohammad, H. B., & Shahar, H. B. (2019). The role of overconfidence and past investment experience in herding behaviour with a moderating effect of financial literacy: Evidence from Pakistan Stock Exchange. *Asian Economic and Financial Review*, *9*(4), 480–490. https://doi.org/10.18488/journal.aefr.2019.94.480.490

Sachdeva, M., & Lehal, R. (2023). The influence of personality traits on investment decision-making: A moderated mediation approach. *International Journal of Bank Marketing*, *41*(4), 810–834. https://doi.org/10.1108/ijbm-07-2022-0313

Sathya, N., & Prabhavathi, C. (2024). The influence of social media on investment decision-making: Examining behavioral biases, risk perception, and mediation effects. *International Journal of Systems Assurance Engineering and Management*, *15*(3), 957–963. https://doi.org/10.1007/s13198-023-02182-x

Schall, D. L. (2020). More than money? An empirical investigation of socio-psychological drivers of financial citizen participation in the German energy transition. *Cogent Economics & Finance*, *8*(1), Article ID 1777813. https://doi.org/10.1080/23322039.2020.1777813

Seth, H., Talwar, S., Bhatia, A., Saxena, A., & Dhir, A. (2020). Consumer resistance and inertia of retail investors: Development of the resistance adoption inertia continuance (RAIC) framework. *Journal of Retailing and Consumer Services*, *55*, Article ID 102071. https://doi.org/10.1016/j.jretconser.2020.102071

Sharma, P. C. (2025). Unveiling investment behavior: Through emotional intelligence, social stigma, financial literacy and risk tolerance. *International Journal of Social Economics, 52*(1), 16–32. https://doi.org/10.1108/ijse-08-2023-0626

Siddiqui, T. A., Ali, M. S., Sunayana, Alam, N., & Ranjan, P. (2025). Understanding financial inclusion through social and behavioural lenses. *Prabandhan Indian Journal of Management*, *18*(4), 52–71. https://doi.org/10.17010/pijom/2025/v18i4/174316

Singh, H. P., Goyal, N., & Kumar, S. (2016). Behavioural biases in investment decisions: An exploration of the role of gender. *Indian Journal of Finance*, *10*(6), 51–62. https://doi.org/10.17010/ijf/2016/v10i6/94879

Singh, S., & Chakraborty, A. (2025). The social ledger: Qualitatively decoding interaction-driven investment decisions among Indian investors and fund managers. *Qualitative Research in Financial Markets, 17*(4), 830–848. https://doi.org/10.1108/qrfm-08-2023-0190

Sood, K., Pathak, P., Jain, J., & Gupta, S. (2025). Gauging investors' investment decisions in the crypto market through the PRISM of behavioral biases: A fuzzy AHP approach. *International Journal of Emerging Markets, 20*(4), 1465–1486. https://doi.org/10.1108/ijoem-02-2022-0263

Stankovic, J. L., & Todorovic, N. (2014). Investors' behavior at capital markets. *Actual Problems of the Economics*, *154*, 409–418.

Sunil, N., & Kumar, S. (2025). Financial literacy and fintech : A double-edged sword for millennial investors' behavioral biases. *Indian Journal of Finance*, *19*(3), 44–63. https://doi.org/10.17010/ijf/2025/v19i3/174849

Suresh, G., & Loang, O. K. (2024). The rationality conundrum: Exploring herd mentality among individual investors in the Indian stock market. *Indian Journal of Finance*, *18*(6), 26–45. https://doi.org/10.17010/ijf/2024/v18i6/173967

Sutyanto, D. N., Achsani, N. A., Sembel, R., & Andati, T. (2022). Investment decisions in emerging market: Demographic analysis of individual investor in Indonesia Stock Exchange. *Asian Economic and Financial Review*, *12*(2), 99–120. https://doi.org/10.18488/5002.v12i2.4415

Talwar, S., Talwar, M., Tarjanne, V., & Dhir, A. (2021). Why retail investors traded equity during the pandemic? An application of artificial neural networks to examine behavioral biases. *Psychology & Marketing*, *38*(11), 2142–2163. https://doi.org/10.1002/mar.21550

Vu, M. H., Doan, A. N., Dinh, A. X., Trinh, H. M., & Tran, L. P. (2024). The relationship between electronic word-of-mouth information, information adoption, and investment decisions of Vietnamese stock investors. *Interdisciplinary Journal of Information Knowledge, and Management*, *19*, p. 20. https://doi.org/10.28945/5346

Wang, D., & Zou, T. (2024). Financial literacy, cognitive bias, and personal investment decisions: A new perspective in behavioral finance. *Environment and Social Psychology*, *9*(11). https://doi.org/10.59429/esp.v9i11.3050

Yasmin, F., & Ferdaous, J. (2023). Behavioral biases affecting investment decisions of capital market investors in Bangladesh: A behavioral finance approach. *Investment Management and Financial Innovations*, *20*(2), 149–159. https://doi.org/10.21511/imfi.20(2).2023.13

About the Authors

Dr. Saurabh Singh is currently working as an Assistant Professor at the Department of Finance and Business Economics, South Campus, University of Delhi. He holds a doctorate in financial services, analyzing the impact of electronic trends and innovations on the banking sector. Apart from academia, he has several years of functional and management experience in the banking sector and research experience in financial markets, including business/data analysis, risk assessment and management, fund management, and report preparation. He is a member of AIMA, DMA, and IIBF.

Ipsa Bharti is a Research Scholar at the Department of Management Studies, Jamia Millia Islamia, Delhi. She holds a double Master's degree—MBA from the Indian Institute of Management Udaipur (IIMU) and M.Com from Jamia Millia Islamia. She also has three-plus years of corporate experience. Her research interest is to study the transformative impact of technological advancements, such as Artificial Intelligence, on society.

Preeti Maurya is a Research Scholar at the Department of Finance and Business Economics, University of Delhi, South Campus. She is a postgraduate from the Department of Commerce, Delhi School of Economics, University of Delhi, and a graduate of Gargi College. She is interested in exploring the behavioral aspect of investors in the future and wants to deepen her knowledge in finance.