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Global Research Frontiers and Thematic Evolution in Behavioural Finance: A Bibliometric Review

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ABSTRACT

Behavioural finance integrates psychological perspectives to explain financial decision-making and market anomalies. This study conducts a bibliometric analysis of 1,078 Scopus-indexed publications from 1996 to 2025 using PRISMA procedures and VOSviewer mapping. Results show a steady increase in global research, led by the United States, the United Kingdom, India, Germany, and China. The most influential themes include investor sentiment, financial literacy, overconfidence, herding behaviour, prospect theory, and behavioural biases. Collaboration networks reveal increasing international co-authorship and shifting research interests from traditional theories toward technology-integrated approaches. Emerging gaps include limited research on behavioural accounting, digital finance, and AI-driven decision-making. This study contributes to the literature by identifying thematic evolution, key authors, dominant institutions, and future research directions in behavioural finance. Moreover, the analysis identifies underexplored topics, including the interplay between technological advancements and psychological determinants in investment decisions, as well as behavioural accounting.

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1. INTRODUCTION

Over the past two decades, the field of behavioral finance has undergone remarkable growth, emerging as a vital topic not just within financial journals, but also across psychology, experimental economics, and a range of multidisciplinary sciences. Despite this expansion, there remains a notable shortage of comprehensive studies that rigorously examine the evolution of this field, identify its critical factors, and delve into its thematic advancements. Addressing this gap is essential for advancing our understanding of the dynamics that shape financial behavior and decision-making. Behavioural finance combines psychology and economics to understand how cognitive biases and emotions influence financial decision-making. As outlined in the research by Okur, M., Gurbuz, A.O. (2022), this theory challenges the assumption of rationality in modern financial theory, positing that investors often act irrationally. Practically, this field is used to understand investor behaviour and stock market dynamics, including models that capture the effects of both rational and irrational investor behaviour.

It is important for management and business in strategic decision-making and risk management. Additionally, as explained in the research by Gupta, S., & Shrivastava, M. (2023), behavioural finance helps explain market phenomena such as stock bubbles and market anomalies. According to Kumari, R. (2025), by understanding behavioural biases and their impacts, strategies can be developed to reduce these biases, thereby improving financial decision-making. Research in this field often highlights behavioural biases such as overconfidence, representativeness bias, and availability bias. Additionally, neurofinance studies the influence of neurological factors on financial decisions, while market sentiment studies examine their impact on other financial phenomena. Financial literacy is also a focus, examining its impact on investment decisions. Increased international collaboration, especially during crises like the COVID-19 pandemic, has further enriched global research in this field. According to Handriyani (2025), this study suggests that the Investors must join specific financial market trainings to help them practicing technical market analysis before making the investment decisions. As presented in the research by Dhillon & Singh (2017), recent research shows that although the global publication trend in behavioural finance is increasing, there is no comprehensive mapping of the integration of this field in the context of management and business. In addition, there is a lack of effort to consolidate and synthesize existing research, thereby hindering a comprehensive understanding of the knowledge structure and direction of development in this field.

The novelty of this study is that it presents an innovative approach in exploring the landscape of behavioral finance research through a comprehensive analysis that has never been done before, identifying significant research gaps where previous studies were limited to specific sub-themes or short time spans. By applying the PRISMA protocol and an advanced bibliometric analysis framework using VOSviewer, the study successfully siphoned 6,472 documents into 1,078 indexed quality publications, resulting in complex intellectual mapping that allowed for an in-depth exploration of the research structure. This innovative methodology enables thematic transformation mapping that demonstrates a significant shift from traditional theoretical approaches to multidisciplinary applications that integrate financial psychology, management, and

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technology. The research uncover complex global collaborative networks, identify key contributors to research (United States, UK, India) and explore critical research clusters such as investor sentiment, cognitive bias, and financial literacy. The uniqueness of the research lies in its ability not only to describe historical developments, but also to provide a comprehensive projection of the future of behavioral finance research in a dynamic global context, while providing fundamental insights into the evolution of research that have never been systematically revealed before, with a focus on the complex intersections between psychology, technology, and contemporary financial practice.

Thus, these results provide important guidance for new researchers to understand the structure of the field, identify key sources, and pinpoint areas requiring further development. The present study addresses this gap by performing a longitudinal bibliometric analysis of behavioural finance literature indexed in Scopus from 1996 to 2025. Using visualization tools such as VOSviewer and PRISMA based screening procedures, it aims to identify key contributors, influential publications, thematic clusters, and collaboration networks. Beyond descriptive mapping, this paper also explores how behavioural finance intersects with digital technologies, managerial decision making, and financial literacy domains that represent promising future directions. Specifically, the study addresses the following research questions:

1. What are the global publication trends in behavioural finance from 1996 to 2025?
2. Who are the most influential authors, institutions, and countries in this field?
3. What thematic clusters and intellectual structures characterize behavioural finance research?
4. How have research themes evolved over time, and what collaborative networks exist among scholars?
5. What research gaps and future directions emerge from the bibliometric evidence?

By addressing these questions, this study contributes a comprehensive synthesis that enhances theoretical understanding and guides the next phase of research in behavioural finance. The findings also provide a reference for scholars seeking to explore the psychological underpinnings of financial behaviour, the integration of technology and finance, and the design of interventions that improve investment decision-making and financial well being. Within behavioural finance, there is a newly emerging field that joins psychological concepts with established financial theories. This line of thinking rejects the assumption that investors are ever rational and markets always are efficient. The theory of behavioural finance suggests that thinking models and emotional bias (such as regret aversion and loss attribution) are likely to influence financial decisions so that irrational behaviour in the markets occurs. Major Themes in Behavioural Finance Research. Over the years, behavioural finance has diversified into several major themes:

1. Cognitive Biases and Heuristics: Studies emphasize biases such as overconfidence, representativeness, anchoring, and availability, which affect portfolio selection and asset pricing (Shah & Butt, 2024).
2. Investor Sentiment and Market Behaviour: Investor mood and sentiment, often measured through surveys or online data (e.g., Google Trends), correlate strongly with market dynamics (Preis et al., 2013).

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3. Financial Literacy and Decision-Making: Financial knowledge and awareness play a moderating role in mitigating biases (Ingale & Paluri, 2022; Hakim et al., 2025).
4. Herding Behaviour: Collective irrationality in markets, where investors mimic the actions of others, often leads to bubbles and crashes (Choijil et al., 2022).
5. Neurofinance and Emotional Drivers: Emerging research explores the neurological basis of decision-making, integrating neuroscience with behavioural theories.
6. Behavioural Accounting: This subfield examines how cognitive and emotional factors influence accounting judgements, reporting, and auditing behaviour.

Integration Challenges in this study, despite its robust theoretical development, behavioural finance faces several challenges:

1. Measurement Complexity: Quantifying psychological variables remains difficult, as emotional and cognitive processes are context dependent.
2. Empirical Validation: Many behavioural models lack large-scale empirical testing across cultures and markets.
3. Integration with Traditional Finance: Harmonizing behavioural and classical finance theories requires reconciling differing assumptions about rationality and market efficiency.
4. Technological Interactions: Limited research has addressed how digital platforms, AI tools, and algorithmic trading interact with human behavioural biases.

As presented in the research by Ricciardi (2010), behavioural finance is a field that stresses the significance of psychological factors in securities markets, with the ultimate goal of improving and increasing comprehension of how emotions and mental mistakes influence investors choice-making processes. Shafrin (2000) views the significance of investors being aware of investment mistakes and misestimation, both their own and others, and referring to the position of behavioural finance towards psychology. Through the acknowledgement of psychological biases and that investors are not necessarily rational, behavioural finance provides a more realistic theory of market behaviour and decision-making. By acknowledging that investors are not necessarily rational and that psychological biases play an important role, behavioural finance explains some phenomena in the markets which cannot be explained through traditional finance theory. Some core challenges confront behavioural finance, namely:

1. Arbitrage Limits: Although rational investors can arbitrage to rid the markets of unbalanced prices, in reality, arbitrage is restricted and not always effective because of cost and risk factors and other limitations.

2. Psychological Variables: It is difficult to quantify and understand the psychological variables in financial decision making owing to heterogeneity in cognitive as well as affective biases, and so it becomes difficult to develop accurate and reliable models.

3. Empirical Evidence: While a lot of empirical evidence exists for behavioural finance theory, more empirical work is necessary to verify and expand the results because most models and theories are in nascent stages of development.

4. Integration with Traditional Finance: The integration of behavioural finance with traditional finance theory is a huge challenge since the competing fundamental

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assumptions between the two theories make it impossible, hence a different way of interpreting financial markets is necessary.

Bibliometric research on behavioural finance. Bibliometric approaches provide valuable insights into the evolution of behavioural finance. Previous studies (Costa et al., 2019; Raj & Panja, 2023) have mapped its conceptual structure but often focused on specific subthemes or shorter timeframes. This study extends prior work by analysing nearly three decades of publications, offering a broader understanding of thematic evolution, collaboration patterns, and future research frontiers. A behaviour finance study using bibliometric analytical methods is to be done to establish global trends, as below:

1. Increase in Global Publications and Co-authorship (Raj, G., and S. Panja, 2023): There has been outstanding growth in publications on the topic of behavioural finance over the past decade, with India, the USA, and China being the prominent contributors.
2. The increase in mean and collaborative document creation worldwide indicates that this field is slowly gaining global recognition.
3. Research Themes and Trends Identification: Bibliometrics helps identify basic behavioural finance themes, such as psychology, financial knowledge, and herding (Chojiil, E., et all., 2022).
4. Supporting Theories: Several behavioural finance studies employ theories of behaviour such as prospect theory by Daniel Kahneman and Amos Tversky, which are used while explaining decision-making and cognitive biases (Costa, D.F., F.D.M. Carvalho, and B.C.D.M. Moreira, 2019). They typically focus on cognitive biases and heuristics such as overconfidence, representativeness, and anchoring that play a great role in investment decisions (Shah, B., and K.A. Butt, 2024).
5. Supporting Research Findings: Evidence has shown that behavioural finance shifted from its early focus on socio-economic and demographic determinants to more complex problems such as

psychological constructs and behaviour (Ingale, K.K., and R.A. Paluri, 2022).

2. METHODOLOGY

Research Design

This study adopts a quantitative bibliometric design to explore knowledge patterns, thematic structures, and collaboration networks within behavioural finance research. The methodology follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta Analyses) protocol (Page et al., 2021), ensuring transparency and replicability in literature selection. The study aims to utilize bibliometric methods to identify knowledge patterns, trends in publications, institutional and author collaboration, and central thematic diagrams in behavioural finance. The study employed data drawn from the Scopus database, which was the primary source of data. Using tools like VOS viewer and performance analysis, this research expanded on Kundy & Shah (2024) work, and identified the most significant journals/authors/institutions along with the most important areas of focus in the literature. Quantitative bibliometrics was employed in the study to obtain an overall overview of behaviour finance theory development and diffusion. By the identification

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of dominant trends, dominant actors, and current research topics, this method can help determine the evolution of the discipline and provide practical guidelines for future research. This technique includes the study of publication distribution and the application of statistical indices to comprehend the impact of articles on the progress of science in different areas (Van Eck & Waltman, 2010).

Data Source and Collection

Data were retrieved from the Scopus database, chosen for its extensive coverage of high quality international journals across multidisciplinary domains. The search query "behavioural finance" was applied to titles, abstracts, and keywords. The dataset, accessed on May 28, 2025, initially yielded 6,472 documents. Sequential filtering was applied as follows:

1. Limiting document types to articles and conference papers (6,184).
2. Restricting language to English (5,130).
3. Selecting only open access publications within relevant subject areas such as business, management, finance, and multidisciplinary studies.

After rigorous screening, 1,078 publications met the inclusion criteria. The area comprises various areas such as economics, econometrics and finance, business, management or science communication. The Scopus database also provides access to open access journals and is commonly utilized by researchers for bibliometric analysis. This database provides accessible information about authors' associations and principal terms and citations of each article and contributes considerably to this study.

Inclusion and Excusion Criteria

Several inclusion criteria were established by this study, which included publications on the topic of behavioural finance that were published from 1996 to 2025. Moreover, journals and papers must be entirely available and written in English. Conversely, exceptions encompass publications that are not relevant to the subject matter, are incomplete in their entirety, were published outside of the designated timeframe, could not be fully accessed, or are written in a language other than English.

Table 1.

Literature Criteria

Criteria	Inclusion	Exclusion
Subject	Research in behavioral finance	Beyond behavioral finance research
Source	Journals and research articles accessible from Scopus sources.	Research articles or journals that are not fully accessible or are fee based. Outside of Scopus sources.
Time period	Publication between 1996 and 2025	Published less than 1996
Journal content them	Articles or journals discussing behavioral finance	Articles or journals that, after analysis, are found to be inconsistent with the research problem
Area	Business, management, finance, accounting, science, and marketing, multidisciplinary	In addition to business, management, finance, accounting, science, and marketing, multidisciplinary
Language	English	Not in English

Source: processed by author (2025)

This study selected literature according to the PRISMA (Preferred Reporting Items

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for Systematic Reviews and Meta Analysis) approach. The abstracts and titles were first screened for their suitability for the research topic. In the second step, the books that passed the first round were then thoroughly read to verify the inclusion criteria. Subsequently, journals that were pertinent to the criteria were carefully examined to identify key findings that were crucial in this study. The secondary data used in this study was aimed at articles related to behavioural finance. There were 6,472 publications in the Scopus database on May 28, 2025, when the query = ("behavioural" AND "finance") was used. The number of publications was narrowed to 6,184 using document type filtering (article and conference paper). Filtering was done using 5,130 publications in English, and only English versions remained. The search identified 1,680 open access documents in their final publication. The number was then narrowed down to 1,078 publications that were filtered and classified under the Business, Management and Accounting, and Multidisciplinary fields for purposes of analysis. Categorization of publications has identified the three disciplines.

Analytical Tools

Data were exported to VOSviewer (version 1.6.20) for mapping co-authorship, keyword co-occurrence, and citation networks. Statistical analyses were performed using Microsoft Excel 2019. The study employs both performance analysis (to evaluate productivity) and science mapping (to visualize intellectual structures). The co-occurrence of keywords was normalized using the association strength method (Van Eck & Waltman, 2010). This process of selection was guided by the PRISMA guidelines (McKenzie et al, 2021). This structured approach ensures that the final dataset reflects only high quality, thematically relevant publications, forming the basis for subsequent network and thematic analyses. The overall research process follows the PRISMA flow shown below:

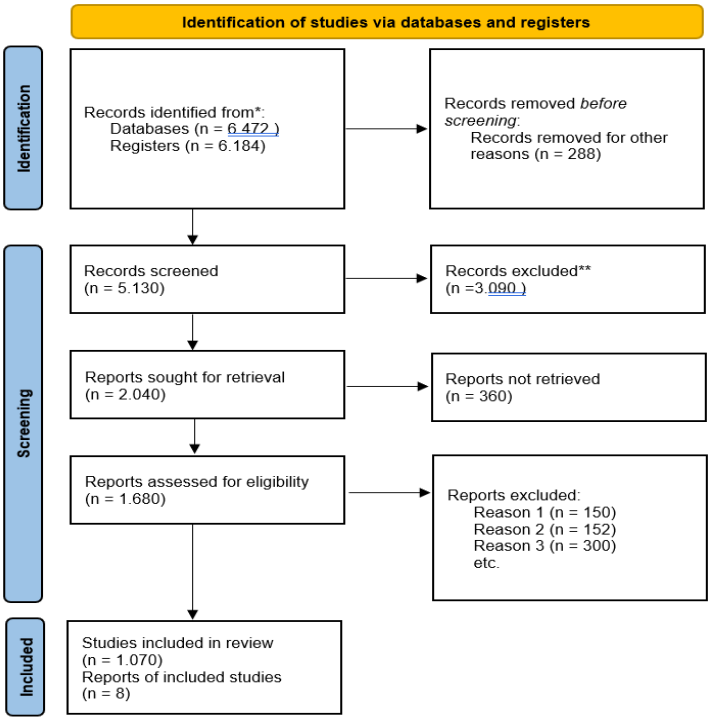

Figure 1.
Flow chart according to the PRISMA declaration

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3. RESULT AND DISCUSSION

The study reveals that the quantity of publications in this domain has significantly increased from 1996 to 2023, with the most recent peak being around 2022. the most common themes are investor sentiment, financial literacy, cognitive bias, overconfidence, herding, and prospect theory. The enrichment of this field has been facilitated by the close cooperation and collaboration between researchers from the united states, the uk, and developing nations. They were then exported as a csv file using Vos viewer (version 1.6.20) and then processed in microsoft excel 2019. by using Vos viewer, bibliometric data can be visually displayed and used to identify relationships between authors, journals or countries through citations (co-authorship), as well as other means. text mining features are available in this software, which can construct co-occurrence networks from important phrases extracted from scientific literature, enabling knowledge mapping and forecasting trends.

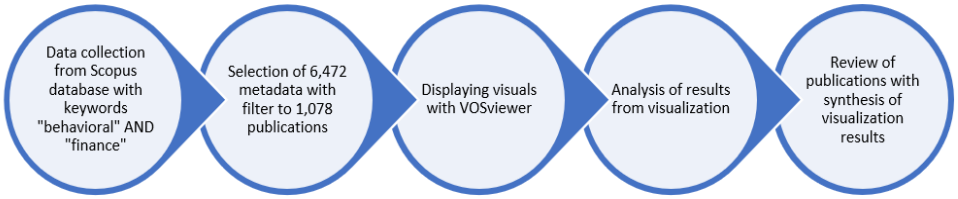

Figure 2.

Data collection methods

Overview of Publication Trends

The bibliometric analysis indicates a remarkable growth trajectory in behavioural finance publications between 1996 and 2025. The field has evolved from an emerging niche into a mature research domain. From 1996 to mid-2025, a total of 1,078 publications were published with the keyword behavioural finance. Of these, 1,065 journal publications and 13 conference publications were selected as primary publications. Most publications focused on the fields of economics, econometrics and finance, business, accounting and management, decision science, social sciences, and multidisciplinary studies.

As shown in Table 2, publication output accelerated after 2014, peaking in 2023 with 156 documents. This surge coincides with increased academic interest in investor psychology, the diffusion of behavioural insights into management and economics, and the rise of data-driven financial studies. The growth also reflects the broader recognition of behavioural finance as a legitimate complement to classical finance paradigms.

Table 2.

Annual publications on behavioral finance

Year	Documents
1996	1
1998	2
2000	1
2001	1

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2010	16
2011	18
2012	23
2013	21
2021	101
2022	97
2023	156
2024	151
2025	63

Source: processed by author (2025).

Highly Cited Publications and Influential Authors

Table 3 lists the ten most cited works, dominated by studies published in *The Journal of Finance* and *The Journal of Economic Literature*. Dellavigna (2009) and Asness et al. (2013) stand out as seminal contributions linking behavioural insights to empirical financial outcomes. The publication titled "Psychology and economics: Evidence from the field," published in the Journal of Economic Literature in 2009, is the most cited publication with 1,292 citations.

Table 3.
Publication with the 10 most citations on behavioral finance

No	Publication title	Author	Journal	Citation
1	Psychology and economics: Evidence from the field	Dellavigna S.	Journal of Economic Literature	1292
2	Value and Momentum Everywhere	Asness C.S.; Moskowitz T.J.; Pedersen L.H.	Journal of Finance	1270
3	A longitudinal investigation of personal computers in homes: Adoption determinants and emerging challenges	Venkatesh V.; Brown S.A.	MIS Quarterly: Management Information Systems	1010
4	Information uncertainty and stock returns	Zhang X.F.	Journal of Finance	957
5	Quantifying trading behaviour in financial markets using google trends	Preis T.; Moat H.S.; Eugene Stanley H.	Scientific Reports	675
6	How Blockchain can impact financial services – The overview, challenges and recommendations from expert interviewees	Chang V.; Baudier P.; Zhang H.; Xu Q.; Zhang J.; Arami M.	Technological Forecasting and Social Change	407
7	What Drives Business Model Adaptation? The Impact of Opportunities, Threats and Strategic Orientation	Saebi T.; Lien L.; Foss N.J.	Long Range Planning	364
8	Getting to the top of mind: How reminders increase saving	Karlan D.; McConnell M.; Mullainathan S.; Zinman J.	Management Science	316
9	Asset pricing at the millennium	Campbell J.Y.	Journal of Finance	315

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10	Cognitive abilities and behavioural biases	Oechssler J.; Roider A.; Schmitz P.W.	Journal of Economic Behaviour and Organization	314

Source: processed by author (2025).

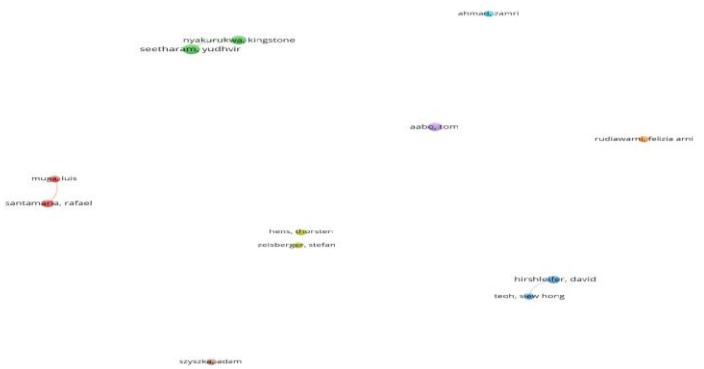
Citation concentration in these sources indicates that behavioural finance has gained legitimacy within mainstream economics journals. Furthermore, authors such as Seetharam Y., Nyayunkwa K., and Hirshleifer D. are among the most prolific contributors, forming intellectual hubs within global collaboration networks. Table 4 shows the authors with the highest number of publications. Seetharam, Y. is the author with the highest number, namely 12 publications, followed by Nyayunkwa, K. with 10 publications, Aabo, T. with 9 publications, and Hirshleifer, D. with 7 publications.

Table 4.
Top 10 authors on behavioural finance

Author	Documents
Seetharam, Y.	12
Nyayunkwa, K.	10
Aabo, T.	9
Hirshleifer, D.	7
Santamaria, R.	7
Hens, T.	6
Muga, L.	6
Ahmad, Z.	5
Rudiawani, F.A.	5
Szyska, A.	5

Source: processed by author (2025).

Distribution of authors in eight clusters with a minimum count of 5 publications, color coded differently, i.e., brown, green, light blue, yellow, pink, purple, red, and dark blue using VOSviewer visualization is presented in figure 3a. Figure 3b presents authors by year of publication, color-coded from purple to yellow to represent time scale from earlier to newer work: 2014–2022. Connection length indicates the degree of interconnection, with a minimum of 5 publications per author.



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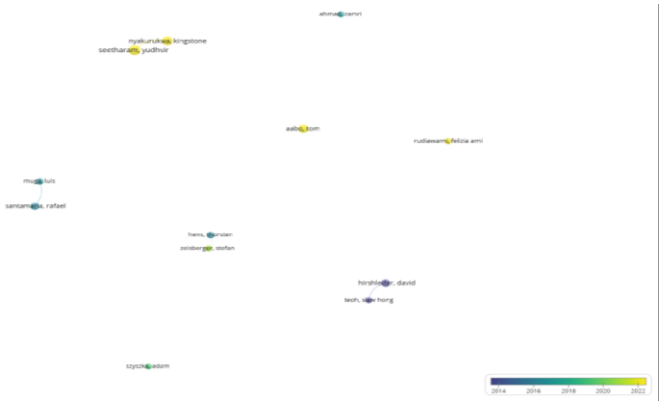

Figure 3.
Distribution and collaboration of authors in behavioral finance research. (a) network visualization; (b) overlay visualization.

These networks reveal strong intra-continental ties, particularly among institutions in Europe, North America, and Asia. Collaborative intensity increased significantly post-2015, consistent with the globalisation of academic research and the proliferation of open-access publishing.

Dominant Journals and Institutions

The top ten most recent publications on behavioral finance are presented in Table 5. *Cogent Economics and Finance* and *Journal of Risk and Financial Management* lead with 26 papers each.

Table 5.
Journal with the 7 most publications on behavioral finance

No.	Source of Journal	Documents
1	Cogent Economics and Finance	26
2	Journal of Risk and Financial Management	26
3	Investment Management and Financial Innovations	24
4	Journal of Economic Behavior and Organization	24
5	Journal of Behavioral and Experimental Finance	21
6	PLoS ONE	18
7	Cogent Business and Management	17

Source: processed by author (2025).

Table 6 presents institutional affiliations, where *University of Zurich* ranks highest (18 documents), followed by *National Bureau of Economic Research* (17). These findings suggest that research productivity is concentrated in advanced economies with established academic infrastructures in finance and behavioural sciences.

Table 6.
Institutions with the most publications affiliated with the top 7 rankings in BeFi

No.	Affiliation	Documents
1	Universitat Zurich	18
2	National Bureau of Economics Research	17
3	University of The Witwatersrand, Johannesburg	15

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4	The Hong Kong Polytechnic University	12
5	University College London	12
6	Radbound Universiteit	11
7	Erasmus Universiteit Rotterdam	10

Source: processed by author (2025).

Global Distribution by Country

Table 7 show that the United States remains the dominant contributor (181 publications), followed by the United Kingdom (165), India (71), Germany (64), and China (59).

Table 7.

Countries with the 10 highest rankings in terms of behavioral finance publications

No.	Country	Documents
1	United States	181
2	United Kingdom	165
3	India	71
4	Germany	64
5	China	59
6	Spain	54
7	Malaysia	51
8	France	50
9	Australia	49
10	Netherlands	49

Source: processed by author (2025).

VOSviewer visualization gives clusters of countries with a single citation count of at least 5 publications, which are represented using different colors such as dark blue, red yellow, green, orange and pink. Similarly, Figure 4 displays countries by year of publication, where there is a color transition from purple/purple to yellow/green for both the time period between older and newer publications such as 2006–628 and 2012–13 (between 2018 and 2022). Connection length indicates the level of interconnection, with a minimum of 5 publications per country

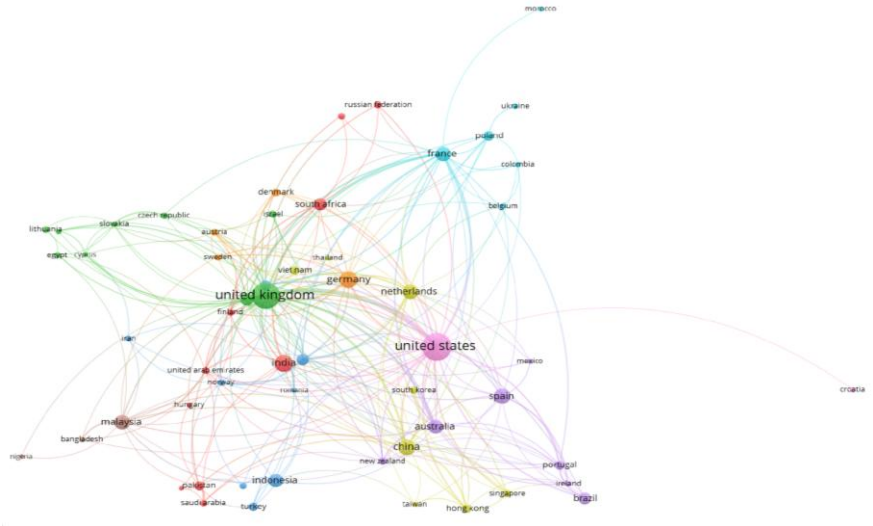

Figure 4a

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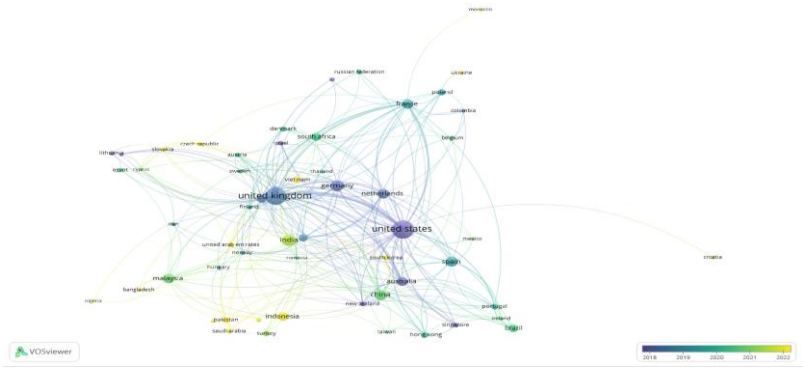

Figure 4b.

Mapping countries in behavioral finance research visualization. (a) network (b) overlay

This geographical clustering illustrates both concentration and diffusion patterns: Western countries dominate the intellectual base, while emerging economies particularly in Asia are increasingly active. Collaborative clusters between Europe and Asia suggest a growing exchange of perspectives that enriches the global research ecosystem.

Keyword and Thematic Analysis

Figure 5 shows a keyword map of behavioral finance research. Figure 5a shows five keyword clusters created through VOSviewer visualization with a minimum frequency of 100, shown by the colors red, green, blue, yellow, and purple. Figure 5b displays the publication dates of papers by topic and uses a purple-yellow color scheme that denotes the time frame from more recent to older publications from 2018 to 2022. The most recognized topics are Behavioral finance, Investor sentiment, Financial literacy, Overconfidence, Behavioral economics, Herding, and Prospect theory. Keyword co-occurrence mapping provides insights into the conceptual landscape of behavioural finance as illustrated in Figure 5a–5b and summarized in Table 8. The clusters represent:

1. Core Concepts: Behavioural finance, behavioural economics, cognitive bias.
2. Investor Psychology: Overconfidence, herding, prospect theory.
3. Financial Education: Financial literacy and its role in decision making.
4. Technological Interaction: Digital finance, algorithmic behaviour, fintech.
5. Cross-disciplinary Integration: Management, economics, and decision sciences.

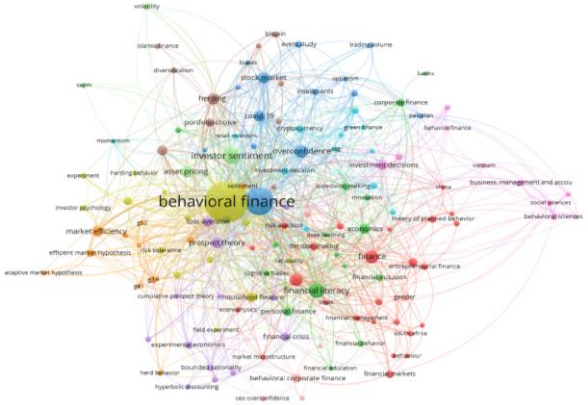

Figure 5a

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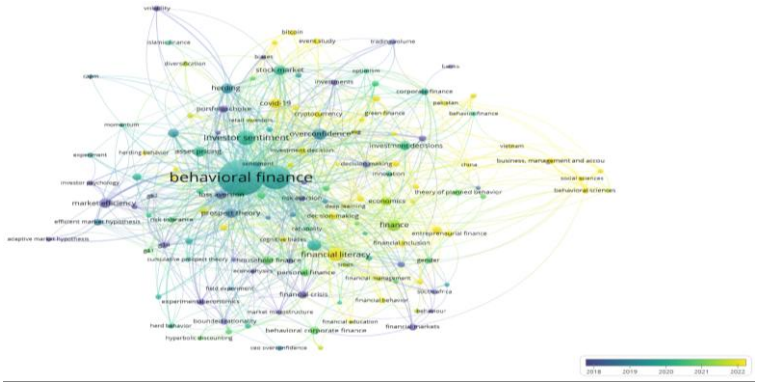

Figure 5b
Keyword mapping with VOSviewer in behavioral finance research

Table 8.
Top 10 keywords co-occurrences key words author

No.	Keyword	Occurrences	Total link strength
1	Behavioral finance	332	444
2	Behavioural finance	146	184
3	Investor sentiment	53	79
4	Finansial literacy	44	77
5	Finance	32	60
6	Overconfindence	32	55
7	Behavioral economics	31	53
8	Economics	20	53
9	Herding	26	53
10	Prospect theory	24	49

Source: processed by author (2025).

This thematic structure demonstrates the multidisciplinary character of behavioural finance, increasingly intersecting with technology and organizational behaviour.

Research Subject Areas

In terms of publication trends in behavioral finance, researchers focus on the most closely related research fields: economics, econometrica and finance (816 publications), business, management, and accounting (577 publications) and social science (152 publications); decision sciences (83 publications; 57 publications for psychology); and computer science with 55 publications.

Table 9.
Research subject areas with the 10 most co-occurrences

No.	Subject area	Documents
1	Economics, econometrics and finance	816
2	Business, management and accounting	577
3	Social sciences	152
4	Decision sciences	83

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5	Psychology	57
6	Computer science	55
7	Multidisciplinary	55
8	Mathematics	29
9	Art and humanities	26
10	Engineering	19

Source: processed by author (2025).

The growing inclusion of computational and psychological perspectives indicates a paradigm shift from descriptive behavioural models toward data intensive behavioural analytics. This aligns with global trends in financial technology and AI driven decision support systems.

Knowledge Structure and Future Orientation

The overall mapping reveals that behavioural finance has matured into a multidisciplinary research frontier. Early studies (1996–2010) focused on foundational theories prospect theory, heuristics, and cognitive bias while recent research integrates behavioural insights into emerging fields such as digital finance, sustainability, and behavioural governance. Key observations include:

1. Shift from theory to application: The focus is moving from conceptual exploration to applied behavioural models for investment, policy design, and fintech innovation.
2. Expansion of collaboration networks: Cross-institutional and cross-country co-authorships have doubled since 2015.
3. Emerging research gaps: Limited exploration exists at the intersection of behavioural finance, artificial intelligence, and digital transformation.

These patterns indicate that behavioural finance is transitioning from a reactive theory explaining anomalies to a proactive framework guiding decision making and innovation. Nevertheless, several research gaps remain particularly concerning the convergence of behavioural finance with AI-driven analytics, digital transformation, and sustainability finance. Addressing these areas can propel the field toward greater practical relevance and interdisciplinary integration.

Table 10.

Thematic Evolution and Research Gaps in Behavioural Finance (1996–2025)

Period	Dominant Themes	Methodological Focus	Emerging Issues / Gaps
1996–2005	Prospect theory, cognitive bias, market anomalies	Conceptual and theoretical development	Limited empirical validation; small sample studies
2006–2015	Investor sentiment, herding, financial literacy	Quantitative empirical studies; regression and survey-based	Lack of integration between finance and psychology disciplines
2016–2020	Behavioural bias, overconfidence, digital behaviour	Bibliometric and cross-country analysis	Limited exploration of behavioural accounting and fintech
2021–2025	AI, digital finance, neurofinance, sustainability	Network analysis, big data analytics	Underexplored linkages between behavioural finance,

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	AI, and digital ecosystems

Source: Synthesized by the authors (2025).

Table 11.

Future Research Directions and Practical Implications

Research Focus	Future Directions	Practical Implications
Technology Integration	Examine behavioural responses to algorithmic trading, robo-advisory, and AI-based decision support.	Enhance investor protection through ethical fintech design and digital literacy programs.
Behavioural Accounting	Explore how cognitive biases affect accounting judgements and audit decision-making.	Improve financial reporting quality and transparency in organizations.
Financial Education	Investigate how behavioural interventions can improve saving and investment behaviour.	Design policy frameworks for financial literacy and inclusion.
Cross-Cultural Behavioural Studies	Compare behavioural biases across developed and emerging markets.	Inform culturally adaptive financial management strategies.
Neurofinance and Emotions	Integrate neuroimaging and physiological data to explain emotional triggers in financial behaviour.	Develop emotion-aware investment models and decision tools.

Source: Authors' elaboration based on bibliometric findings (2025).

The main novelty lies in a comprehensive and multidisciplinary approach in mapping the global evolution of behavioral finance research, with a focus on methodological and thematic transformations over nearly three decades. This research contributes to the existing literature in behavioral finance by presenting a literature review paper that creates a theoretical framework to integrate the scattered findings within this field. A more systematic understanding of behavioral finance establishes a solid foundation for further advancements in economics, management, business, and finance research. Additionally, this study demonstrates that bibliometric analysis is an effective tool for analyzing publication statistics from traditional behavioral finance literature. It also highlights opportunities and challenges for future research within the realm of behavioral finance. Notably, this research identifies areas that remain largely unexplored, such as the interaction between technology and cognitive biases in investment decisions, as well as behavioral accounting, which is a newer and less established discipline compared to behavioral finance. The field of behavioral finance is expanding rapidly, offering significant opportunities for a deeper understanding of key themes and fostering interdisciplinary collaboration. Bibliometric techniques, such as those used for visual analysis with VOSviewer, have proven effective in identifying important trends and notable contributors within this area, while also paving the way for innovative research that integrates management and technology

4. CONCLUSSION

The findings indicate that behavioral finance has transitioned from a psychology focused subfield of economics to a multidisciplinary and data driven discipline. Core topics such as investor sentiment, overconfidence, herding, and prospect theory remain

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central, while new areas such as digital finance, financial literacy, and behavioral accounting are becoming increasingly significant. The United States, the United Kingdom, and India stand out as global leaders in this domain, showcasing both established and developing academic ecosystems. From a theoretical perspective, behavioural finance extends classical economic assumptions by integrating bounded rationality and emotional intelligence into models of financial behaviour. From a managerial standpoint, the findings inform strategies for improving investment decision making, enhancing financial education, and designing technology based interventions that mitigate bias. Developed countries specifically, the United States, the United Kingdom, Germany, and China are currently leading in the production of scholarly papers in this field. This trend may be attributed to enhanced political and economic collaboration within these regions. Generally, researchers from developed nations are more actively involved in generating scientific literature. Analysis of knowledge structures reveals a trend toward multidisciplinary integration, with prevalent themes including investor sentiment, financial literacy, overconfidence, herding behavior, prospect theory, loss aversion, and investment decision making. Other regions that need to be investigated are a lack of extensive studies and broadly inclusive trends in this area, as well as opportunities for incorporating management and technology aspects more intensively in the development of behavioral finance.

This study has several limitations. It focuses exclusively on scientific papers and conference proceedings, excluding other relevant literature. Additionally, the sample is restricted to publications written in English. Given the importance of research published in German, Spanish, Portuguese, and other languages within the field of behavioral finance, it is possible that significant studies were published in languages other than English. Furthermore, while the research extensively searched for relevant literature on behavioral finance using the Scopus database, it is important to note that other databases may contain significant studies on this topic as well.

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