

FINANCIAL ANXIETY: A BIBLIOMETRIC ANALYSIS

Sasifa Sabiya K. A

*Research Scholar, Department of Business Administration,
Kalasalingam Academy of Research and Education, Krishnankoil-626126,
Tamil Nadu, India.*

Dr. Jafersadhiq. A

*Assistant Professor, Department of Business Administration,
Kalasalingam Academy of Research and Education, Krishnankoil-626126, Tamil Nadu, India*

Abstract

This study presents a bibliometric analysis of financial anxiety research and systematically maps its academic landscape through an evaluation of 139 relevant articles obtained from the Scopus database. Utilizing bibliometric techniques such as co-occurrence analysis, bibliographic coupling, and citation network mapping via VOSviewer, the study identifies key trends, influential authors, leading journals, and seminal works that have shaped the discourse around financial anxiety. The findings reveal dominant themes, including the role of financial literacy in alleviating anxiety, the psychological impact of economic downturns, and gender disparities in financial stress. The analysis underscores the need for interdisciplinary research that bridges finance, psychology, and behavioral economics, aiming to develop effective interventions tailored to reduce financial anxiety. Additionally, the study outlines future research directions, emphasizing the exploration of financial anxiety in emerging economies and assessing the long-term effects of financial education. By synthesizing existing literature and providing empirical insights, this bibliometric analysis serves as a valuable resource for academics, policymakers, and financial professionals dedicated to enhancing financial well-being in today's complex economic environment. The study contributes to the theoretical understanding of financial anxiety while supplying practical recommendations for mitigating its effects.

Keywords: Financial Anxiety, Bibliometric Analysis, Financial Literacy, Economic Psychology, Behavioral Finance, Interdisciplinary Research, Psychological Well-being.

Introduction

Financial anxiety has emerged as a significant concern in the fields of behavioral finance and economic psychology, significantly influencing individual financial behaviors, decision-making processes, and overall mental well-being Archuleta et al., (2013). This particular phenomenon refers to the emotional discomfort, stress, and fear that individuals experience in managing personal finances, particularly under conditions of economic uncertainty. Growing evidence indicates that financial anxiety is not merely a symptom of financial distress but can be viewed as a complex emotional response shaped by various cognitive, emotional, and social factors Lusardi & Tufano., (2015). The increasing prevalence of financial anxiety in today's volatile economic climate, characterized by rising living costs, fluctuating job markets, and growing economic inequalities, highlights the urgent need for a deeper understanding of its drivers and its multifaceted implications Talwar et al., (2021).

One critical aspect of financial anxiety is its relationship with financial literacy. Research has consistently demonstrated that individuals with low levels of financial literacy are more likely to experience heightened anxiety when faced with financial decisions Fernandes et al., (2014).

The ability to comprehend financial concepts is vital for effective money management and can serve as a protective factor against financial stress. Several studies emphasize the importance of financial literacy programs in equipping individuals with the necessary skills to navigate their financial landscapes Kim et al., (2022). Moreover, the psychological impact of economic downturns—such as those caused by the COVID-19 pandemic—has seen an increase in financial anxiety, particularly among vulnerable populations Shapiro et al., (2012). This phenomenon highlights the significance of understanding how market fluctuations and crises can affect emotional well-being and financial behaviors.

Further compounding the issue, empirical studies have revealed that financial anxiety is not uniformly distributed across different demographic groups. For instance, women often report higher levels of financial stress compared to men, driven by factors such as unequal access to financial resources and societal expectations regarding financial behaviors Lind et al., (2020). The intersection between gender, financial anxiety, and financial literacy adds a crucial layer to our understanding of this emotional experience. Additionally, disparities related to socio-economic status, educational attainment, and cultural backgrounds play essential roles in moderating individuals' experiences of financial stress Klapper et al., (2020).

The intersection of technology with financial behavior is another emerging area of concern. The rapid growth of digital finance and fintech solutions presents both opportunities and challenges. While digital platforms can enhance access to financial services and information, they may also contribute to increased anxiety due to information overload and the complexities of navigating new financial tools Ahamed et al., (2024). Understanding the implications of digital finance behaviors on financial anxiety is critical, as more individuals turn to online resources for financial management amidst growing economic uncertainties.

This study aims to contribute to the existing body of literature through a bibliometric analysis of financial anxiety research, drawing insights from 139 relevant articles sourced from the Scopus database. The goal is not only to outline the intellectual landscape of this field but also to provide a systematic evaluation of key trends, influential authors, and leading journals that have shaped the discourse surrounding financial anxiety Van Eck & Waltman, (2010). Employing bibliometric techniques such as co-occurrence analysis and citation network mapping via VOS Viewer, this study seeks to identify dominant themes and gaps in the current research, thereby offering valuable insights for researchers and practitioners alike. Key contributors to this discourse, such as Archuleta et al. (2013), have explored essential relationships between financial distress and anxiety among specific populations, such as college students. Additionally, recent studies have examined the psychological implications of financial attitudes and behavior during crises, indicating how these factors may vary across different groups Talwar et al., (2021). This research not only bolsters the theoretical understanding of financial anxiety but also advocates for interdisciplinary approaches that incorporate insights from psychology, behavioral economics, and finance.

In conclusion, financial anxiety represents a critical area of study with far-reaching implications for both individual welfare and broader societal outcomes. As the economic landscape grows more complex, understanding the dynamics of financial anxiety becomes increasingly vital. This bibliometric analysis serves as a foundational resource for identifying significant trends, influential works, and emerging themes, ultimately contributing to the development of targeted interventions aimed at reducing financial anxiety and enhancing

financial well-being among individuals. By synthesizing existing literature and identifying future research directions, this study aims to inform policymakers, financial educators, and mental health professionals in their efforts to mitigate financial anxiety within an increasingly intricate economic context.

Methodology

This study adopts a bibliometric analysis to systematically explore the development, major themes, and research trends within the financial anxiety literature. As a recognized quantitative method, bibliometric analysis uses techniques such as citation analysis, co-occurrence analysis, and keyword mapping to identify influential works, prominent authors, and thematic patterns in a given research field. The data were collected from the Web of Science (WoS) and Scopus databases, both widely acknowledged for their extensive and high-quality academic literature coverage (Zupic & Cater, 2015).

Bibliometric analysis is an objective, quantitative method used to uncover the intellectual structure and development of a scientific discipline. In recent years, its combination with other methodologies—such as citation network analysis, cluster analysis, and content analysis—has gained significant attention in the management research domain. These techniques are employed either to map the conceptual evolution and scholarly communication within a research area or to assess the key elements influencing the quality and reputation of specific journals. By examining citation patterns, bibliometric analysis reveals interconnections among research articles and identifies influential contributors, emerging themes, and research gaps.

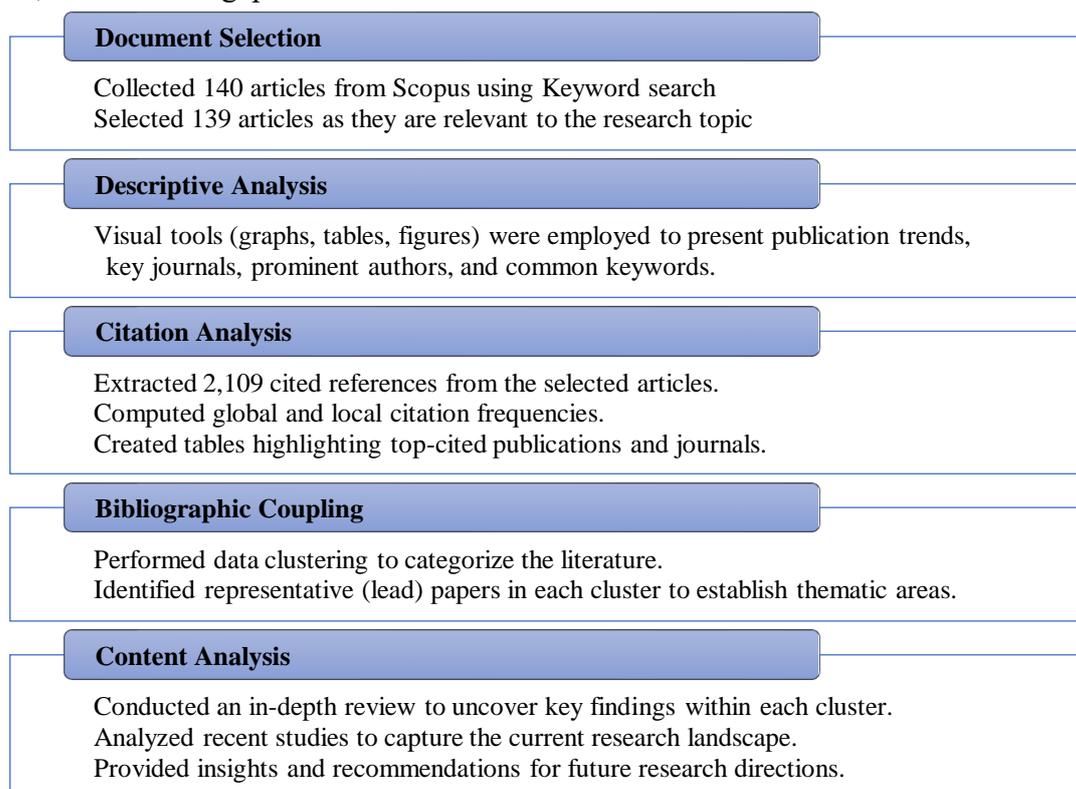


Figure 1: Research Methodology

The present study applies a combination of citation analysis, bibliographic coupling, and content analysis to explore the literature on financial anxiety. To conduct this analysis, we used **VOSviewer**, a widely adopted bibliometric tool in management research (Phulwani et al., 2020). For data collection, we searched the term “**Financial Behaviour**” across titles, abstracts, and keywords, ensuring a comprehensive retrieval process. As noted by Archambault et al. (2009), both Web of Science (WoS) and Scopus provide reliable and comparable bibliometric data at the country level, though Scopus offers broader journal coverage for citation analysis (Falagas et al., 2008). Google Scholar, while freely accessible, was excluded due to concerns over data consistency and quality.

Following this, an initial keyword search for “financial anxiety” in Scopus yielded 146 records. After applying filters related to language, subject area, and document type, 139 relevant articles remained. Then the 139 articles related to financial stress and anxiety were identified and compiled into the **Financial Anxiety (FA) database** for in-depth analysis. To ensure data integrity, one non-English article with limited relevance was excluded. The search covered publications from 1961 to 2025 and focused on journal articles only.

Metadata such as titles, authors, publication years, journals, citation counts, and keywords were extracted for analysis. Descriptive statistics were used to conduct a performance analysis, revealing publication trends, prolific authors, leading institutions, and citation impact (Van Eck & Waltman, 2010). Using **VOSviewer**, co-occurrence analysis was performed to generate keyword maps and identify dominant themes. Thematic clustering and network analysis further uncovered core research areas and document interlinkages. Microsoft Excel supported data cleaning and statistical organization.

Although bibliometric analysis offers rich insights into the structure and trends of scholarly research, it has limitations. These include reliance on database coverage, the exclusion of non-indexed gray literature (e.g., books and reports), and potential citation bias, which may overlook newer or niche contributions. Despite these challenges, this study provides a structured, data-driven overview of the financial anxiety research landscape, highlighting key developments, influential scholars, and thematic directions, and thereby serving as a robust foundation for future research in this growing field.

Descriptive Analysis

Yearly Publication Trends

Figure 2 illustrates how research on financial anxiety has evolved between 1990 and 2023, showing a clear upward trend in scholarly interest—especially after 2010. Remarkably, over 70% of all publications in this area emerged in the past decade, signaling growing recognition of financial anxiety as a key factor influencing both financial behavior and mental well-being. The years 2020 and 2021 saw a noticeable spike in publications, likely driven by the financial stress and uncertainty brought on by the COVID-19 pandemic. This surge in interest reflects broader societal concerns around financial literacy, income instability, and economic inequality (Fernandes et al., 2014). Moreover, global shifts in the economy, the rise of digital finance, and evolving job markets have added urgency to understanding financial anxiety and its wider impact (Lusardi & Tufano, 2015). These patterns suggest that research in this area is likely to keep growing, especially as it becomes increasingly important for developing effective mental health support, financial education, and policy measures that build financial resilience.

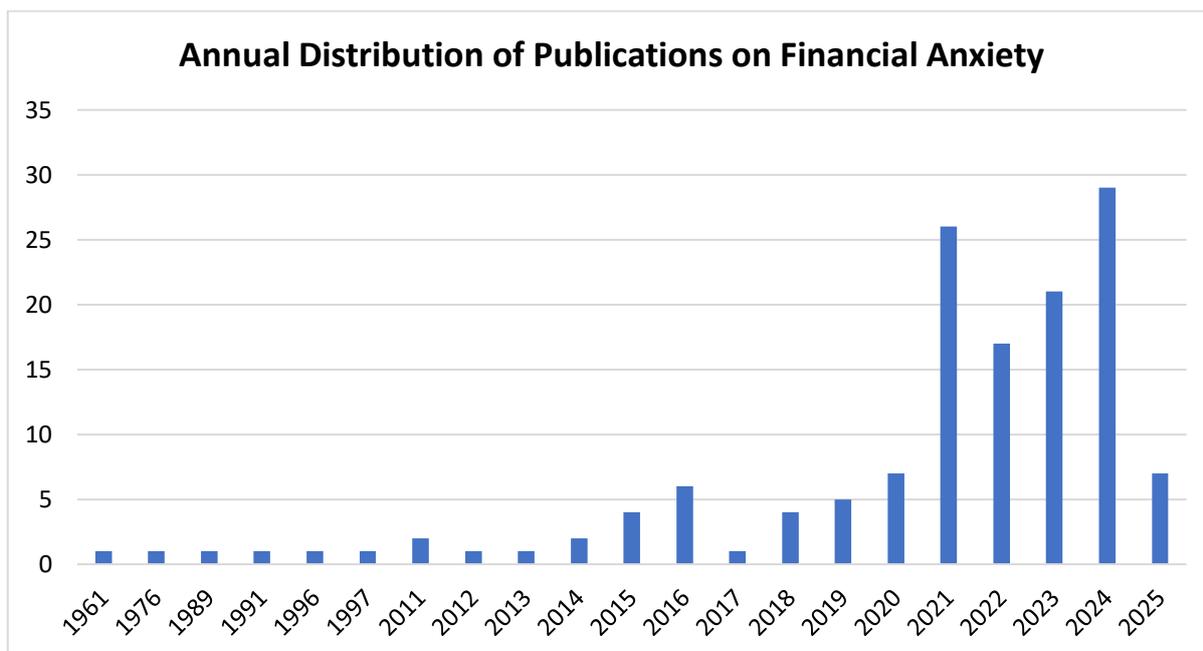


Figure 2: Annual Distribution of Publications on Financial Anxiety

Journal-Wise Publishing Activity

A total of 139 articles on financial anxiety have been published across 105 academic journals, underscoring the topic's interdisciplinary reach. Table 1 highlights the top 10 journals that have made the most significant contributions, collectively accounting for 32% of all publications in this area. This distribution reflects the wide range of academic lenses—spanning behavioral economics, psychology, financial planning, and mental health—through which financial anxiety is studied. Leading the list is the International Journal of Bank Marketing, which alone accounts for 7% of the total output. Close behind are the Journal of Financial Counseling and Planning and the Journal of Family and Economic Issues, both of which have been instrumental in exploring the psychological and behavioral dimensions of financial anxiety.

Table 1 Top 10 Journals by Publication Volume

S.No	Name of the Journal	Number of the Articles
1	International Journal of Bank Marketing	10
2	Journal of Financial Counseling and Planning	8
3	Journal of Family and Economic Issues	7
4	Journal of Financial Therapy	5
5	Frontiers in Psychology	3
6	Journal of Behavioral and Experimental Finance	3
7	Behavioral Sciences	2
8	Investment Management and Financial Innovations	2
9	Journal of Neuroscience Psychology and Economics	2
10	Orphanet Journal of Rare Diseases	2

Other notable contributors include the Financial Planning Review and the Journal of Behavioral Finance, emphasizing the importance of financial decision-making and risk perception. This broad scholarly engagement highlights the growing relevance of financial anxiety research and reinforces the need for cross-disciplinary collaboration in developing strategies to alleviate financial distress and enhance overall financial well-being.

Author Contribution Analysis

Author publishing activity is evaluated using the concept of "recurrence," which refers to how frequently an author's name appears across various analytical fields. In this study, the author field from the dataset was analyzed using VOSviewer to calculate the frequency of contributions. A total of 160 unique authors have published research on financial anxiety. Table 2 highlights the top 10 most active contributors in this area. Leading the list is **Jones, Salene M.W.** from the United States, who stands out as the most prolific author in the dataset with six publications focused on financial anxiety.

Table 2 Top 10 Most Influential Authors

S.No	Author's Name	Number of Articles
1	Jones, Salene M.W.	6
2	Archuleta, Kristy L.	3
3	Xiao, Jing Jian	3
4	Ado, Muhammad Bilyaminu	2
5	Ahmed, Ali	2
6	Aoki, Masashi	2
7	Britt, Sonya L.	2
8	Brooks, Cecilia	2
9	El Keshky, Mogeda El Sayed	2
10	Ghafoori, Eraj	2

Keyword Analysis

VOSviewer was used to analyze and visualize the occurring keywords within the dataset. Across the 139 articles reviewed, a total of 806 unique keywords were identified. Figure 2 presents a network visualization of 36 keywords that appeared more than five times, highlighting the most common themes in financial anxiety research. Central to the network are terms such as "Anxiety," "Human," and "Environmental being," reflecting their significance in this field. Additionally, keywords like "Psychology" and "Financial well-being" emerge as prominent subtopics, indicating key areas of focus within the literature. The visualization offers insights into the thematic structure of the research and the interconnectedness of core concepts.

Table 3 Top ten most cited papers

Authors	Title	Total Global Citations	Total Local Citations
Archuleta K.L.; Dale A.; Spann S.M.	College students and financial distress: Exploring debt, financial satisfaction, and financial anxiety	253	0
Talwar M.; Talwar S.; Kaur P.; Tripathy N.; Dhir A.	Has financial attitude impacted the trading activity of retail investors during the COVID-19 pandemic?	176	0
Lim, Vivien K.G.; Teo, Thompson S.H.	Sex, money and financial hardship: An empirical study of attitudes towards money among undergraduates in Singapore	130	0
Lind T.; Ahmed A.; Skagerlund K.; Strömbäck C.; Västfjäll D.; Tinghög G.	Competence, Confidence, and Gender: The Role of Objective and Subjective Financial Knowledge in Household Finance	112	6
Shapiro G.K.; Burchell B.J.	Measuring financial anxiety	109	0
Kim J.; LaTaillade J.; Kim H.	Family Processes and Adolescents' Financial Behaviors	97	1
Bareket-Bojmel L.; Shahar G.; Margalit M.	COVID-19-Related Economic Anxiety Is As High as Health Anxiety: Findings from the USA, the UK, and Israel	92	5
Maaravi Y.; Heller B.	Not all worries were created equal: the case of COVID-19 anxiety	53	1
Basyouni S.S.; El Keshky M.E.S.	Job Insecurity, Work-Related Flow, and Financial Anxiety in the Midst of COVID-19 Pandemic and Economic Downturn	41	0
She L.; Rasiah R.; Waheed H.; Pahlevan Sharif S.	Excessive use of social networking sites and financial well-being among young adults: the mediating role of online compulsive buying	33	0

Journal Citation Impact Analysis

Beyond the number of articles published, a journal's influence within a specific research field can also be gauged by the average number of citations its articles receive. This measure provides a more nuanced view of a journal's impact, reflecting not only the quality but also the visibility and scholarly recognition of its published work. A higher average citation count indicates that the journal's content resonates strongly within the academic community. Table 4 presents the top journals ranked by average citations per article, offering insights into which

outlets are contributing most significantly to the advancement of financial anxiety research. This method complements publication volume by highlighting influence and depth over quantity. Based on the current analysis, the Journal of Financial Counseling and Planning ranks highest in terms of average citations per article, signifying its central role in shaping this research area.

Table 4 Top journals by average citations

S.No	Name of the journal	Number of Articles	Total Citations
1	BMJ Open	1	2
2	Journal of Banking and Finance	1	11
3	Journal of Financial Counselling and Planning	8	253
4	Journal of Financial Services Marketing	1	14
5	Journal of Behavioural and Experimental Finance	1	0
6	Journal of Economic Behavior and Organization	1	50
7	Journal of Financial Therapy	5	2
8	Journal of Risk and Financial Management	1	3
9	Journal of Wealth Management	1	7
10	Journal of Business Theory and Practice	1	2

Bibliographic Coupling Analysis

Bibliographic coupling is a valuable technique in bibliometric analysis used to identify relationships between research papers based on shared references. When two documents cite the same third source, they are considered bibliographically coupled. This concept, originally introduced by Kessler (1963), is based on the idea that scientific works carry an internal logic and thematic flow that can reveal meaningful connections through their citation patterns. As Weinberg (1974) later explained in the Encyclopedia of Linguistics, Information, and Control, bibliographic coupling occurs when two works share a significant number of keywords, descriptors, or references—indicating they are likely addressing similar topics.

Unlike co-citation analysis, which depends on how often two works are cited together by other sources, bibliographic coupling relies on the references within the documents themselves. This makes it especially useful for analyzing newer research, where citation counts are still low, and for mapping emerging areas where citation links may not yet be well-established (Zupic, 2015). Because of its forward-looking nature, bibliographic coupling is considered more effective for uncovering current research frontiers and thematic clusters.

In this study, bibliographic coupling analysis was performed using **VOSviewer**, a widely used software for visualizing bibliometric networks. A clustering resolution of 1.00 was applied, with a minimum cluster size of one document. To ensure the quality of connections, a threshold was set so that only articles with at least five citations were included. Out of the 139 articles in the dataset, 113 met this criterion and were grouped into **11 distinct clusters** based on shared references.

These clusters represent groups of studies that are closely related in terms of subject matter, as indicated by their citation patterns. Articles within the same cluster are more likely to explore similar themes or research questions. Each article in the clustered network is visually represented, helping to map the intellectual structure of financial anxiety research. Abstracts and additional metadata from these articles were also reviewed to better understand the core topics and emerging interests driving the field.

Literature Classification

Table 5 provides a breakdown of the number of articles and their thematic focus across each identified cluster. For a more in-depth understanding of these clusters, 83 articles with a **Total Link Strength (TLS) greater than 20** were selected for content analysis. This threshold helped ensure the inclusion of highly interconnected and influential works. To pinpoint the core focus of each cluster, the most impactful articles within each group were identified based on their TLS values, as shown in Tables 6 through 16.

Understanding the sources that contribute significantly to each cluster allows for clearer insight into the key journals shaping research within those thematic areas. Notably, themes surrounding financial stress, anxiety, and well-being consistently emerged as common threads among the top-performing clusters. Certain journals appeared more prominently in specific clusters. For example, the Journal of Financial Therapy featured prominently in **Cluster 1**, aligning with its emphasis on emotional and behavioral aspects of financial health. **Cluster 3** saw greater contributions from the Journal of Financial Counseling and Planning, which often explores the intersection of financial literacy and anxiety. Meanwhile, the Journal of Family and Economic Issues stood out in **Cluster 4**, reflecting its focus on the economic and psychological dynamics within households.

This classification of literature not only helps map the intellectual structure of financial anxiety research but also highlights the journals and themes that have played central roles in shaping scholarly discourse across different subtopics.

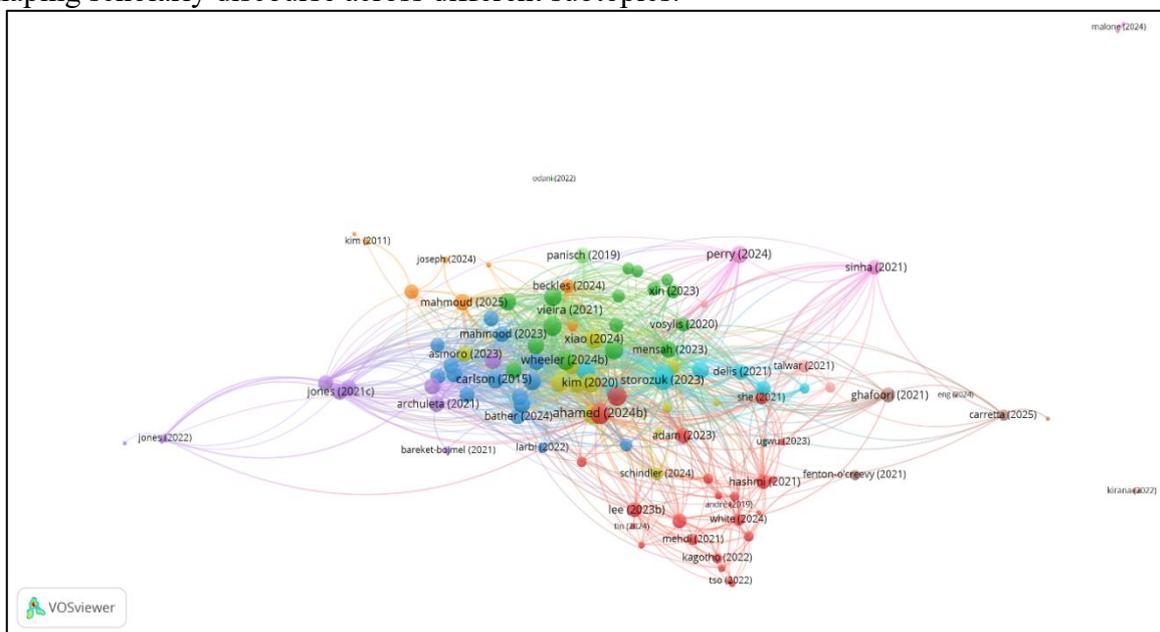


Table 5 Literature Classification : The eleven research clusters

Cluster Number	Total Articles	Content Analysis	Theme of the Clusters
Cluster 1	24	14	Financial Well-being and Therapy
Cluster 2	16	16	Enhancing Human Well-being
Cluster 3	15	15	Advancing Social Justice and Community Well-being
Cluster 4	12	10	Strengthening Intergenerational Solidarity for Enduring Wellbeing
Cluster 5	10	7	Financial Anxiety on Health, Behavior, and Access to Care in Medically and Economically Vulnerable Populations
Cluster 6	9	8	Psychological and Cognitive Determinants of Financial Behavior, Literacy, and Well-being
Cluster 7	8	4	Financial Anxiety and Socioeconomic Resilience During the COVID-19 Pandemic: The Roles of Gender, Governance, Family Dynamics, and Financial Access
Cluster 8	8	3	Cognitive and Attitudinal Influences on Financial Confidence, Behavior, and Technology Expectations
Cluster 9	5	2	Psychological and Attitudinal Determinants of Financial Well-Being and Anxiety
Cluster 10	3	2	The Influence of Financial Attitudes on Retail Investor Behavior During the COVID-19 Pandemic
Cluster 11	3	2	The Relationship Between Financial Well-being and Health Outcomes in Times of Crisis
Total	113	83	

*Only those articles which had TLS > 20 are included for content analysis.

Cluster 1: Financial Well-being and Therapy

These studies collectively shed light on the complex and multidimensional nature of financial well-being. Sinstance, Adam et al. (2023) examine how financial anxiety brought on by crises affects tourism sector employees, revealing that strong social support and socio-psychological well-being can help buffer stress and enhance workplace commitment. Thanki et al. (2020) explore the psychological roots of financial risk tolerance, showing how traits like personality and emotional regulation influence financial decision-making. Peltier et al. (2016) focus on student credit card debt, linking poor self-control and psychological stress to financial hardship, while Hashmi et al. (2021) identify self-esteem, optimism, and thoughtful decision-making as key traits that support responsible financial behavior among young adults.

Table 6 Top 5 Articles in Cluster 7 by Total Link Strength (TLS)

Label	Title	TLS	Year
lee (2023a)	Untying Financial Stress and Financial Anxiety: Implications for Research and Financial Practitioners	63	2023
lee (2023b)	Examining Financial Anxiety Focusing on Interactions between Financial Knowledge and Financial Self-efficacy	66	2023
hashmi (2021)	The role of self-esteem, optimism, deliberative thinking and self-control in shaping the financial behavior and financial well-being of young adults	76	2021
peltier (2016)	Sequential loss of self-control: Exploring the antecedents and consequences of student credit card debt	130	2016
ahamed (2024)	Financial anxiety: a systematic review	175	2024

On the therapeutic side, Archuleta et al. (2020) demonstrate how Solution-Focused Financial Therapy (SFFT) can reduce financial anxiety and improve goal-setting, reinforcing the value of targeted counseling interventions. She et al. (2021) bring attention to the role of digital behavior, finding that excessive use of social networking platforms can lead to financial stress through impulsive online spending. Meanwhile, Shapiro et al. (2012) contribute to the field by introducing a standardized tool for measuring financial anxiety, providing a foundation for future research and practical interventions.

Together, these studies paint a rich picture of how financial well-being is not just about income or savings, but also about mental resilience, behavioral habits, and social support systems. They highlight both the risk factors that contribute to financial distress—like poor self-regulation or digital overuse—and the tools or supports, such as therapy and goal-setting, that can help individuals regain control. This cluster of research promotes an integrative view, combining insights from psychology, behavioral finance, and social science to guide more effective strategies for enhancing financial health and resilience.

Cluster 2: Enhancing Human Well-being

Together, these studies highlight the widespread and deeply personal impact of financial anxiety across different populations and life circumstances, showing how it intersects with psychological, social, and occupational well-being. For example, Begun et al. (2017) and Doehring et al. (2018) delve into how student debt affects doctoral students, influencing not just their financial stress but also their career decisions. Mulligan et al. (2024) extends this focus to physical therapy students, showing how socioeconomic background shapes financial literacy, stress levels, and anxiety.

Table 7 Top 5 Articles in Cluster 7 by Total Link Strength (TLS)

Label	Title	TLS	Year
hamididin (2023)	Does the dark triad predict intention to commit corrupt acts? The mediating role of financial anxiety among Saudi students	81	2023
karatepe (2024)	Do financial anxiety and generalized anxiety mediate the effect of perceived organizational support on service employees' career commitment?	98	2024
rabelo dutra (2023)	Government emergency aid and perceived financial security in COVID-19: evidence from a sample of vulnerable women in Brazil	101	2023
wheeler (2024)	Financial Safety Nets or Rescue Fantasies? A Moderating View of the Relationship between Usage of Alternative Financial Services and Financial Anxiety among College Students	110	2024
akhtar (2023)	Linking Financial Capability, Advice, Anxiety, Social Security, and Residential Status with Outward Remittances: Evidence from the UAE	115	2023

Outside academic settings, Bhowmik et al. (2022) and Basyouni et al. (2021) examine how financial anxiety, driven by job insecurity during COVID-19, is influenced by gender, job tenure, and income. Xin et al. (2023) finds that financial and math anxiety are linked to poor financial management, while Vosylis et al. (2020) emphasizes the long-term effects of early family financial education on young adults' financial behaviors and identity.

In caregiving contexts, Tambling et al. (2021) reveal the emotional and financial toll on parents caring for children with substance use disorders, highlighting how financial anxiety can strain family life. Kaittila et al. (2024) presents an intervention designed to support social work clients in Finland facing complex financial issues, stressing the importance of proactive, community-based solutions.

Other studies explore unique angles: Hamididin et al. (2023) link financial anxiety with unethical behavior, such as corruption, among individuals with dark triad personality traits. Karatepe et al. (2024) shows how strong organizational support can reduce both financial and general anxiety, boosting employee commitment. Mensah et al. (2023) investigates the psychological well-being of hotel workers during the pandemic, while Rabelo Dutra et al. (2023) highlights how emergency financial aid improved feelings of security among vulnerable Brazilian women. Wheeler et al. (2024) questions whether alternative financial services actually alleviate or worsen financial anxiety in college students.

Altogether, these studies demonstrate that financial anxiety is not just a personal issue—it's a broad societal challenge that touches people at different life stages and in various roles. Addressing it is essential to improving both individual and collective well-being.

Cluster 3: Advancing Social Justice and Community Well-being

Table 8 Top 5 Articles in Cluster 7 by Total Link Strength (TLS)

Label	Title	TLS	Year
wheeler (2024)	Financial Socialization, Financial Identity, and Financial Well-Being Among University Students Taking a Consumer Economics Course	79	2024
stephens (2023)	Money Worries: Examining Demographic Difference in Financial Anxiety	80	2023
kim (2023)	Is Ignorance Bliss? Use of Alternative Financial Services, Financial Knowledge, and Financial Anxiety	87	2023
carlson (2015)	Factors associated with a composite measure of financial behavior among soldiers	96	2015
britt (2015)	Financial stress and financial counseling: Helping college students	111	2015

This cluster of research focuses on the broader societal impacts of financial anxiety and stress, especially among marginalized or vulnerable groups such as students, soldiers, and individuals facing systemic disadvantages. Kim et al. (2023) highlight how reliance on alternative financial services—often used by those with limited access to traditional banking—combined with low financial literacy, contributes to heightened financial anxiety. Their findings frame financial education as not just a tool for empowerment, but a matter of social justice. Similarly, Carlson et al. (2015) examine the financial behaviors of soldiers, showing how institutional constraints and environmental pressures shape economic decision-making in military contexts.

Gresham et al. (2021) shed light on the intersection of financial strain and personal safety, linking economic stressors during the pandemic to increased rates of intimate partner violence and poor health outcomes. Britt et al. (2015) advocate for financial counseling tailored to the needs of college students under financial pressure, while Archuleta et al. (2013) identify student debt and financial anxiety as key barriers to student well-being and academic satisfaction.

Collectively, these studies emphasize that financial anxiety is not only a personal or economic issue—it's a deeply social one that reflects larger issues of inequality, access, and support. They call for systemic solutions like inclusive financial education, accessible counseling services, and institution-level interventions to foster financial stability, mental well-being, and greater equity across communities.

Cluster 4: Strengthening Intergenerational Solidarity for Enduring Wellbeing
Table 9 Top 5 Articles in Cluster 7 by Total Link Strength (TLS)

Label	Title	TLS	Year
gignac (2023)	Financial literacy mediates the effect between verbal intelligence and financial anxiety	98	2023
kim (2025)	Financial well-being, anxiety and payment delinquency among student loan holders in the United States: insights from the COVID-19 pandemic	101	2025
dogra (2022)	Predictors of Financial Anxiety among Indian Population due to COVID-19: A Hierarchical Regression Analysis ¹	103	2022
kim (2020)	Financial Stress and Depression Among African Refugees in the Southern United States: A Serial Multiple Mediation Analysis of Financial Self-Efficacy and Financial Anxiety	118	2020
xiao (2024)	Financial capability and financial anxiety: comparison before and during the COVID-19 pandemic	172	2024

This group of studies highlights the deep and complex connections between financial anxiety and broader socio-economic, familial, and cognitive factors, viewed through both intergenerational and cross-cultural perspectives. Asmoro et al. (2023) examine working women in Indonesia during the COVID-19 pandemic, revealing how perceptions of income adequacy and the presence of family support significantly influence both financial anxiety and tax non-compliance. Their work underscores the powerful role of family networks in shaping financial behavior. Gignac et al. (2023) add a cognitive dimension, showing that financial literacy acts as a bridge between verbal intelligence and financial anxiety—suggesting that boosting financial education could help reduce anxiety and promote financial well-being across generations.

Dogra et al. (2022) focus on the Indian context during the pandemic, identifying major predictors of financial anxiety and highlighting how crises intensify financial stress, especially when psychological coping mechanisms are lacking. Kim et al. (2020) explore the financial experiences of African refugees in the United States, revealing that financial stress and depression are closely linked to self-efficacy and financial anxiety. Their findings emphasize the heightened vulnerability of displaced populations and the lasting impact of intergenerational trauma.

Xiao et al. (2024) compare financial capability and anxiety levels before and during the pandemic, illustrating how economic disruptions leave a lasting mark on people’s financial behaviors and stress responses. Together, these studies show that financial anxiety is shaped by more than just numbers on a bank statement—it is deeply rooted in family dynamics, cognitive skills, cultural backgrounds, and generational experiences. They advocate for financial literacy programs, supportive family and community structures, and culturally

tailored interventions that not only help individuals cope with financial anxiety but also strengthen long-term financial resilience across generations.

Cluster 5: Financial Anxiety on Health, Behavior, and Access to Care in Medically and Economically Vulnerable Populations

Table 10 Top 5 Articles in Cluster 7 by Total Link Strength (TLS)

Label	Title	TLS	Year
jones (2021c)	Cross-sectional association of financial anxiety, medical conditions and preferences for financial interventions	60	2021
jones (2021a)	Association of healthcare utilization with financial worry and anxiety in a general population sample	61	2021
jones (2019)	Assessing Worry About Affording Healthcare in a General Population Sample	62	2019
archuleta (2021)	I Know I Should, But Do I Do It? Connecting Covert and Overt Financial Behaviors	79	2021
mahmoud (2023)	Relative financial deprivation, financial anxiety and financial satisfaction: the role of access to Islamic financing among MSME owners amidst COVID-19	92	2023

This group of studies highlights the deep and often overlooked connection between financial anxiety and health-related outcomes, particularly for individuals facing economic hardship or medical vulnerability. Archuleta et al. (2021) explore the gap between people’s financial intentions and their actual behaviors, uncovering the inner psychological tension that can prevent individuals from taking action, even when they know what needs to be done. A series of studies by Jones et al. (2019, 2021a, 2021c, 2022) further examine the strong link between financial anxiety and physical health. Their research shows that financial stress is closely tied to how often people seek medical care, the presence of chronic health conditions, and the emotional experiences of patients dealing with illnesses like cancer.

These findings underscore that financial anxiety isn’t just an emotional or economic issue—it has real, measurable consequences on health and well-being. It can deter people from seeking necessary care, exacerbate health problems, and even influence how they respond to different types of financial support or interventions. Adding a cultural lens, Mahmoud et al. (2023) study MSME owners during the COVID-19 pandemic and find that financial stress and anxiety were eased when individuals had access to Islamic financing options. This highlights the importance of inclusive and culturally sensitive financial tools in reducing distress.

Collectively, these studies emphasize that financial anxiety serves as a significant barrier to both healthcare access and healthy behaviors, especially for those already navigating economic or medical challenges. They make a strong case for the development of integrated support systems that combine financial education, accessible financial services, and health-focused interventions to better serve vulnerable populations and improve their overall well-being.

Cluster 6: Psychological and Cognitive Determinants of Financial Behavior, Literacy, and Well-being

Table 11 Top 5 Articles in Cluster 7 by Total Link Strength (TLS)

Label	Title	TLS	Year
lind (2020)	Competence, Confidence, and Gender: The Role of Objective and Subjective Financial Knowledge in Household Finance	102	2020
van dijk (2022)	The Psychological Inventory of Financial Scarcity (PIFS): A psychometric evaluation	108	2022
moss (2018)	How to prevent unhelpful personality traits from evolving into unhelpful financial behaviors: The benefits of future clarity	108	2018
ianole-calin (2021)	Understanding sources of financial well-being in Romania: a prerequisite for transformative financial services	166	2021
storozuk (2023)	What's Math Got to Do with It?: Establishing Nuanced Relations between Math Anxiety, Financial Anxiety, and Financial Literacy	180	2023

This cluster of research explores how our internal thoughts, emotions, and perceptions shape the way we manage money, make financial decisions, and experience financial well-being. Storozuk et al. (2023) investigate the links between math anxiety, financial anxiety, and financial literacy, revealing how emotional and cognitive barriers can limit people's financial confidence and capability. Moss et al. (2018) introduce the concept of "future clarity"—the ability to envision and plan for the future—as a psychological tool that helps counteract poor financial habits tied to certain personality traits, ultimately improving decision-making.

Delis et al. (2021) bring a broader perspective, examining how shifts in the economic environment can shape individual financial thinking, showing that financial reasoning is not only personal but also context-sensitive. Ianole-Calin et al. (2021) focus on financial well-being in Romania, identifying the psychological factors that influence it and calling for financial services that are more aligned with people's emotional and cognitive needs. In a step toward measuring these internal experiences, Van Dijk et al. (2022) introduce the Psychological Inventory of Financial Scarcity (PIFS), a tool designed to capture how people psychologically perceive financial scarcity and how that perception affects their well-being. Gender differences also emerge as a key theme. Tinghog et al. (2021) examine how stereotype threats can negatively impact women's financial literacy, while Lind et al. (2020) explore how both actual financial knowledge and self-perceived competence affect individuals' confidence in managing household finances.

Together, these studies make it clear that financial literacy and behavior are about more than just knowing facts or crunching numbers—they are deeply tied to mindset, identity, emotional regulation, and social influences. Improving financial well-being, therefore, requires more

holistic interventions that address these psychological and cognitive dimensions alongside traditional financial education.

Cluster 7: Financial Anxiety and Socioeconomic Resilience During the COVID-19 Pandemic: The Roles of Gender, Governance, Family Dynamics, and Financial Access

Table 12 Top Articles in Cluster 7 by Total Link Strength (TLS)

Label	Title	TLS	Year
kadzima (2025)	Is financial anxiety gendered? A cross-sectional analysis during the COVID-19 pandemic	23	2025
beckles (2024)	Financial worry and government responses to the COVID-19 pandemic in 88 Countries: Did public confidence in National Governments matter?	40	2024
partington (2022)	Family Thriving During COVID-19 and the Benefits for Children’s Well-Being	48	2022
mahmoud (2025)	An analysis of Islamic financing access in Nigeria: perspectives of MSME owners	78	2025

This group of studies explores how social systems, personal values, and institutional frameworks collectively shape financial anxiety and the capacity to build resilience, especially during times of crisis. Kadzima et al. (2025) examine financial anxiety through a gendered lens during the COVID-19 pandemic, uncovering notable differences in how men and women experience economic stress. Beckles et al. (2024) broaden this perspective globally, analyzing data from 88 countries and finding that public trust in government significantly influences how people perceive financial risk and manage anxiety during uncertain times—highlighting the powerful role of governance in shaping emotional and financial resilience.

Adding a cultural and financial inclusion angle, Mahmoud et al. (2025) explore how access to Islamic financing for MSMEs in Nigeria supports resilience, particularly in communities underserved by conventional financial systems. Carretta et al. (2025) shift the focus to the digital landscape, showing how individuals’ mental frameworks—or cognitive schemas—affect their expectations and adaptability in the face of increasing bank automation, which in turn influences financial behavior and stress levels.

Looking toward long-term security, Ghafoori et al. (2021) develop a Retirement Confidence Index to better understand and address the anxiety many feel about their financial futures. From a family systems perspective, Partington et al. (2022) show that when families are thriving—particularly during crises like the pandemic—children’s well-being improves, highlighting the intergenerational benefits of financial and emotional stability. Finally, Fenton-O’Creevy et al. (2021) explore the psychological roots of financial distress, emphasizing how individuals’ attitudes toward money shape their ability to cope with financial hardship.

Together, these studies reveal that financial anxiety is not simply a personal or psychological issue—it is deeply intertwined with gender dynamics, institutional trust, access to financial resources, cultural values, and family support. Building resilience, therefore, requires a

systemic approach that addresses both individual and societal dimensions of financial well-being.

Cluster 8: Cognitive and Attitudinal Influences on Financial Confidence, Behavior, and Technology Expectations

Table 13 Top Articles in Cluster 7 by Total Link Strength (TLS)

Label	Title	TLS	Year
fenton-o'creevy (2021)	Financial Distress and Money Attitudes	25	2021
carretta (2025)	Expectations of bank automation: the influence of consumer cognitive schema	36	2025
ghafoori (2021)	Retirement Confidence: Development of an Index	59	2021

Cluster 8 examines how cognitive and attitudinal factors shape financial behavior, confidence, and adaptability in the context of evolving financial systems. Fenton-O’Creedy et al. (2021) and Ghafoori et al. (2021) highlight the psychological and perceptual dimensions of financial vulnerability and planning, while Carretta et al. (2025) emphasize the influence of mental models on receptiveness to bank automation. Additional studies in this cluster focus on broader social and institutional influences. Kadzima et al. (2025) reveal gendered patterns in financial anxiety during the COVID-19 pandemic, and Beckles et al. (2024) demonstrate the moderating effect of public trust in government on financial stress. Mahmoud et al. (2025) underscore the importance of culturally relevant financial systems, while Partington et al. (2022) show how supportive family environments enhance resilience. Collectively, this research underscores the interplay between individual cognition, social norms, and institutional trust in shaping financial well-being and behavior.

Cluster 9: Psychological and Attitudinal Determinants of Financial Well-Being and Anxiety

Table 14 Top Articles in Cluster 7 by Total Link Strength (TLS)

Label	Title	TLS	Year
sinha (2021)	Relating mindfulness to financial well-being through materialism: evidence from India	79	2021
perry (2024)	Determinants of UK students' financial anxiety amidst COVID-19: Financial literacy and attitudes towards debt	81	2024

Psychological and Attitudinal Determinants of Financial Well-Being and Anxiety examine how internal traits and personal attitudes influence financial outcomes, particularly under socio-economic stress. Sinha et al. (2021) show that in India, mindfulness is linked to improved financial well-being through reduced materialism. Perry et al. (2024) find that among UK students during the COVID-19 pandemic, financial literacy and attitudes toward debt significantly predict financial anxiety. These studies highlight that psychological traits, such as mindfulness and positive financial attitudes, can buffer against financial stress across cultural and economic contexts.

Cluster 10: The Influence of Financial Attitudes on Retail Investor Behavior During the COVID-19 Pandemic

Table 15 Top Articles in Cluster 7 by Total Link Strength (TLS)

Label	Title	TLS	Year
bushra (2022)	Evaluation of Investor’s Financial Attitude towards Trading Activity during Pandemic	37	2022
talwar (2021)	Has financial attitude impacted the trading activity of retail investors during the COVID-19 pandemic?	71	2021

It explore how investors’ psychological orientations and financial attitudes shaped their trading behaviors amid a period of heightened market volatility and uncertainty. Bushra et al. (2022) evaluate retail investors’ financial attitudes during the pandemic, finding that these attitudes significantly influenced trading activity, particularly in how individuals responded to perceived risk and opportunity. Similarly, Talwar et al. (2021) investigate the same theme, revealing that financial attitude—such as confidence, risk tolerance, and decision-making style—directly affected retail investors’ market engagement during COVID-19. Together, these studies emphasize that investor behavior in crisis contexts is not solely driven by external economic signals, but is deeply rooted in internal attitudes, suggesting that behavioral finance interventions and education could play a vital role in guiding more rational and stable investment decisions during times of uncertainty.

Cluster 11: The Relationship Between Financial Well-being and Health Outcomes in Times of Crisis

Table 16 Top Articles in Cluster 7 by Total Link Strength (TLS)

Label	Title	TLS	Year
panisch (2019)	Financial well-being and physical health related quality of life among persons incarcerated in jail	67	2019
vieira (2021)	Loss of financial well-being in the COVID-19 pandemic: Does job stability make a difference?	120	2021

The studies in Cluster 11 highlight the profound connection between financial stability and physical health, particularly among vulnerable populations and during periods of widespread disruption. Panisch et al. (2019) examine individuals incarcerated in jail, finding that lower financial well-being is closely linked to poorer physical health-related quality of life, underscoring how financial distress exacerbates existing health vulnerabilities in marginalized groups. Vieira et al. (2021) investigate the impact of financial loss during the COVID-19 pandemic, showing that job stability plays a crucial protective role in maintaining financial well-being and mitigating negative health outcomes. Together, these studies reveal that financial security is a critical determinant of physical health, particularly during crises, and emphasize the need for integrated social and economic support systems to protect the well-being of at-risk populations.

Articles published within the last five years

As illustrated in Figure 3, there has been a noticeable increase in publications related to financial anxiety, with 100 articles published over the past five years. This upward trend

indicates growing scholarly interest in the field. The following section provides key insights and emerging patterns drawn from a review of the studies published between 2021 and 2025.

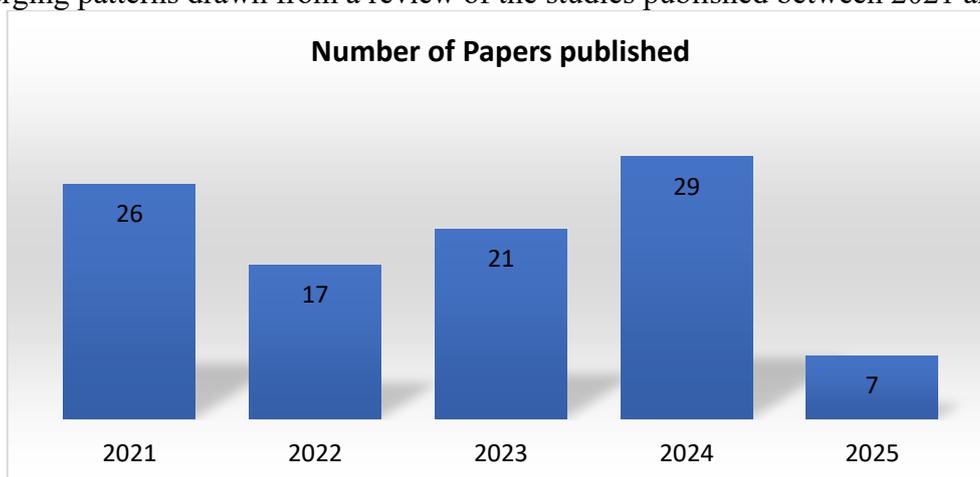


Figure 3 Number of Papers published in the past 5 years
Table 17 Recent 5 Studies on the Financial Anxiety Research

Authors	Title	Source title
An T.; Xiao J.J.; Porto N.; Cruz L.	Mobile payment, financial behavior and financial anxiety: a multi-group structural equation modeling study	International Journal of Bank Marketing
Kim K.T.; Lee J.	Financial well-being, anxiety and payment delinquency among student loan holders in the United States: insights from the COVID-19 pandemic	International Journal of Bank Marketing
Sargent C.S.; Balasubramnian B.; Bowler B.D.; Lambert C.A.	Examining retirement savings building and depleting behavior	Managerial Finance
Teo T.-A.	Affect, agency and im/mobilities: skills and secrets at the shelter	Mobilities
Mahmoud M.A.; Umar U.H.; Danlami M.R.; Ado M.B.	An analysis of Islamic financing access in Nigeria: perspectives of MSME owners	International Journal of Islamic and Middle Eastern Finance and Management

Table 17 presents the five most recent publications on financial anxiety, highlighting its multifaceted relationship with financial behavior, service accessibility, and socio-economic challenges. An et al. (International Journal of Bank Marketing) investigate the impact of mobile payment usage on financial behavior and anxiety. Kim and Lee (International Journal of Bank Marketing) examine how financial anxiety and overall well-being influence payment delinquency among U.S. student loan borrowers during the COVID-19 crisis. Sargent et al. (Managerial Finance) explore the link between retirement savings habits and financial stress, emphasizing long-term financial behavior. Teo (Mobilities) provides a broader sociocultural lens, discussing how emotional and structural factors contribute to financial immobility among vulnerable groups. Mahmoud et al. (International Journal of Islamic and Middle Eastern Finance and Management) study MSME owners in Nigeria, highlighting how limited access to Islamic financing exacerbates financial anxiety. Collectively, these studies underscore that financial anxiety is closely tied to evolving financial technologies, indebtedness, savings practices, mobility constraints, and financial inclusion.

Future Research Directions

The bibliometric study titled “Financial Anxiety: A Bibliometric Analysis” identifies several key avenues for future research, emphasizing the need to deepen and broaden our understanding of financial anxiety as a complex, multifaceted phenomenon. Drawing from the analysis of 139 scholarly articles, the following directions are proposed:

- 1. Global and Cultural Perspectives:** Future research should focus on examining financial anxiety in emerging economies, where financial systems, literacy levels, and cultural attitudes toward money may differ significantly from those in developed nations. Investigating these diverse contexts can provide a more globally inclusive understanding of financial anxiety and reveal localized socio-economic drivers of financial stress.
- 2. Longitudinal Impact of Financial Education:** While financial literacy is widely acknowledged as a buffer against financial anxiety, more longitudinal studies are needed to assess the sustained effectiveness of financial education programs. As noted by Kim et al. (2021), future research should explore how various financial interventions influence long-term financial well-being and anxiety reduction over time.
- 3. Technology and Digital Finance:** With the rise of digital finance and fintech platforms, there is a pressing need to explore how technology shapes financial behaviors and psychological responses. Ahamed et al. (2024) highlight that while digital tools increase access to financial information, they may also contribute to information overload and increased anxiety. Research should examine both the positive and negative psychological impacts of digital finance adoption.
- 4. Demographic Disparities and Intersectionality:** Financial anxiety is not experienced uniformly across populations. As shown by Lind et al. (2022), women and individuals from lower socio-economic backgrounds often report higher levels of financial stress. Future studies should investigate how intersecting demographic factors—such as gender, income, education, and age—contribute to financial anxiety and how tailored interventions can support these groups.
- 5. Interdisciplinary Approaches:** There is a growing call for research that bridges finance, psychology, behavioral economics, and social sciences. Interdisciplinary studies can offer richer insights into the cognitive, emotional, and behavioral dimensions of financial anxiety and support the design of more holistic interventions and policy frameworks.
- 6. Psychological Mechanisms and Constructs:** Further investigation into psychological variables such as stress resilience, coping strategies, and emotional regulation is essential. Understanding how these factors interact with financial behaviors and literacy can provide deeper insight into the root causes of financial anxiety and inform therapeutic and educational strategies.

The study highlights the importance of financial anxiety as a significant factor influencing both individual well-being and broader societal outcomes. As economic conditions continue to shift, addressing financial anxiety through focused research and cross-disciplinary collaboration will be crucial. Future research should not only focus on the quantitative dimensions of financial literacy and education but also explore the personal experiences of individuals facing financial stress.

This bibliometric analysis provides a foundational resource for guiding policymakers, financial educators, and mental health professionals. It supports initiatives aimed at alleviating financial anxiety and improving overall financial well-being (Archuleta et al., 2013; Kim et al., 2021; Ahamed et al., 2022; Lind et al., 2022). Understanding and addressing financial anxiety is essential for fostering resilience and promoting psychological well-being in today’s increasingly complex economic environment.

Conclusion

This bibliometric analysis of research on financial anxiety underscores the complexity of this issue, highlighting that effective understanding and intervention must move beyond merely assessing financial literacy through quantitative measures to also consider the qualitative, lived experiences of those affected. The findings emphasize the significant interplay between financial literacy, economic conditions, demographic variables, and psychological factors such as stress resilience and emotional regulation in shaping financial anxiety. The analysis reveals that women and other vulnerable groups are particularly affected by financial stress, driven by systemic inequalities and societal expectations, thus indicating the need for intersectional approaches in future research and policy development.

Moreover, the rapid growth of digital finance adds a layer of complexity, where increased access to financial information could inadvertently exacerbate anxiety through information overload. This calls for a careful examination of the role of technology in influencing financial well-being. Longitudinal studies on the long-term effects of financial education are crucial for identifying sustainable strategies for reducing anxiety. The study also advocates for interdisciplinary collaboration between behavioral economics, psychology, and finance to develop comprehensive interventions, given that financial anxiety is shaped by cognitive-emotional factors beyond financial knowledge alone.

By synthesizing existing literature and pinpointing research gaps, this analysis provides an important resource for guiding policymakers, educators, and mental health professionals in crafting targeted, comprehensive initiatives. Ultimately, addressing financial anxiety is vital for fostering resilience and psychological well-being in the increasingly complex global economic environment.

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