A Bibliometric Analysis of Financial Management Behavior Literature Using the Scopus Database

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Abstract

The financial management behavior research has garnered increasing attention, while a comprehensive understanding of its evolving trends and knowledge gaps remains elusive. The study addresses this gap by conducting a bibliometric analysis of 389 publications on the topic published in the Scopus database between 1969 and 2022. Data is analysed using the Biblioshiny R package through co-citation patterns, keyword co-occurrence, and publication trends. The findings reveal a significant surge in publications since 2007, with a slight dip in 2013. Additionally, the research identified three dominant research clusters: investor psychology and decision-making, financial literacy and education, and behavioral interventions for sustainable financial behavior. This study not only sheds light on the dynamic landscape of financial management behavior research but also highlights promising avenues for future investigation and potential applications in promoting sound financial decision-making.

Keywords: Financial literacy, Risk management, Trend analysis, Bibliometric Analysis, Economic behavior, Behavioral interventions

Introduction

Navigating financial complexity is frequently like piloting a ship through a storm in the dynamic and complicated world of modern finance, (Lusardi & Mitchell, 2014) where complex products and constantly shifting rules produce unpredictable waters. Financial management behaviour is the captain directing choices about earning, spending, and investing towards long-term financial well-being and is at the centre of this dangerous voyage. A comprehensive knowledge of the underlying mechanisms and influencing elements of this behaviour remains elusive (Firli & Dalilah, 2021, Dhingra et al., 2023, Hellstern, C. 2020) despite a plethora of studies examining different aspects of it. Using rigorous bibliometric analysis, this study explores a comprehensive 53-year research history to shed light on the complex behaviour of financial managers.

The study explore the environment in which wise financial choices are fostered by financial literacy (Goyal & Kumar, 2021), a powerful combination of confidence, competence, and knowledge. Well-researched studies highlight its indisputable influence on personal wealth and even the stability of the national economy. Through analysing the relationship between financial literacy and variables like personality traits, and demography, (Goyal et al., 2022, Hucul, D. T. 2015) and outside influences, the research hope to identify the keys to navigating money successfully.

This comprehensive bibliometric journey covers the most recent research frontiers to the conceptual origins (Costa et al., 2019) of financial management behaviour. The analysis aims to both synthesise current knowledge and identify important gaps that will inform future research directions. By revealing the techniques of wise money management, that enable people—individuals, families, and eventually society at large—to steer their way towards long-term prosperity and financial stability (Ahmed et al., 2021, Sevriana et al., 2022).

The complex network of financial management behaviour research is difficult to navigate due to its multidisciplinary structure and constantly changing body of knowledge. The study use a potent instrument, bibliometric analysis, (Paule-Vianez et al., 2020) to obtain a thorough grasp of this topic. It examine the statistical patterns, relationships, and trends in the published literature in great detail through this methodical methodology. Based on this rigorous framework (Paule et al. 2020, Singh et al. 2019), our technique employs citation mapping, network analysis, and keyword co-occurrence to shed light on the academic environment around financial management behaviour. The goal of the study is to produce a useful navigational map that will be useful to scholars, policymakers, and practitioners by visualising knowledge hierarchies and collaborative networks.

Citation maps are useful tools for scholars, policymakers, and practitioners by visualising knowledge hierarchies and collaborative networks (Mali et al., 2012). A careful review of the literature is required due to the interdisciplinary character of financial management behaviour, which encompasses disciplines such as psychology, economics, and finance. The researchers like Ingale et al. 2022, Glänzel et al., 2002, examining the scholarly outputs in this area for tracking the development of knowledge and locating important publications, significant writers, and critical works. But, to address four major research concerns, our thorough bibliometric analysis explores a huge corpus of literature, including publications:

- Who are the most significant contributors to financial management behavior literature in terms of journals and authors?
- What forms the conceptual and intellectual foundation of the research community in this field?
- What collaborative networks exist within the financial management behavior domain?
- How has financial management behavior evolved?

This article is structured as follows:

Begin with a comprehensive literature review, followed by a detailed discussion of research methodology and data analysis. Subsequently, presentation of the insightful research findings and conclude with a thoughtful discussion of their implications for future research and practice.

2. Methodology

This study employs both descriptive and network analyses to comprehensively analyze the bibliometric landscape of financial management behavior research. The descriptive analyses encompass the entire corpus of literature, including publication counts, publication years, document types, subject categories, and citation data. It is essential for a research to investigate the intellectual structure and evolution of the field through network analysis of co-occurrences and co-citations within keywords and author citations (Tahir et al., 2023). The analysis spans publications from 1969 to 2022, focusing on accessible scholarly articles, book chapters, conference papers, reviews, and books within the subject categories of Economics, Business Finance, Business & Management, and Social Psychology. Figure 1 illustrates the detailed document selection process used in this study.

Document Selection Framework
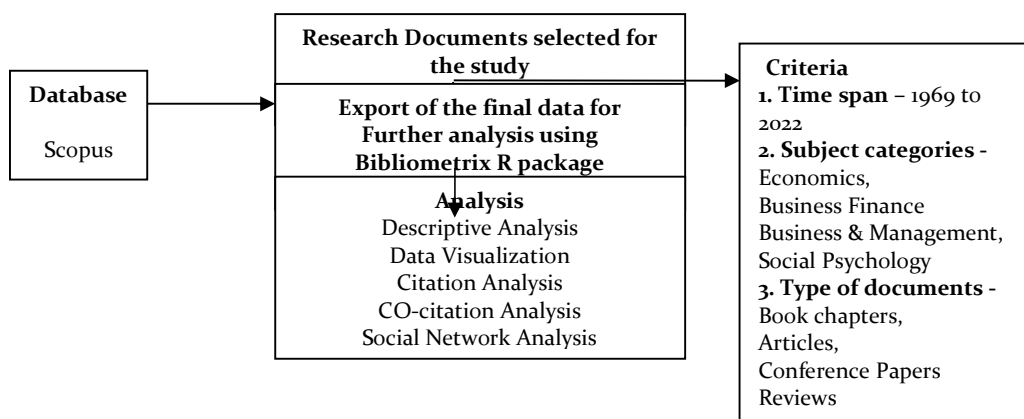
Figure 1. Flowchart depicting the document selection process for bibliometric analysis

2.1 Data Selection

The Scopus database was chosen as the primary data source due to its comprehensive coverage of scientific literature across various disciplines, including finance, economics, and social sciences. It provides detailed information on publications, including author affiliations, keywords, abstracts, and subject areas, facilitating targeted search and efficient retrieval of relevant studies.

2.2 Data Preparation

Documents meeting the search criteria were retrieved on July 28, 2022. The keyword search terms "Financial management behavior," "Personal financial management," and "Financial behavior" were used within titles, abstracts, and keywords. This yielded a total of 389 publications, including 322 articles, 27 book chapters, 27 conference papers, 11 reviews, one book, and one letter. The study excluded editorials, errata, retracted articles, short surveys, and data papers due to their limited analytical value.

2.3 Data Analysis

Biblioshiny, a user-friendly R package built on the functionalities of Bibliometrix, was utilized for data analysis. This tool allowed for efficient data processing, automated workflow, and comprehensive visualization of bibliometric networks and indicators. Within Biblioshiny, the research conducted descriptive analyses like publication trends, document type distribution, and subject category prevalence. Additionally, the study performed network analyses of keyword co-occurrence and co-citation among authors to reveal thematic clusters and intellectual relationships within the field.

3. Data analysis & findings

The main conclusions of the bibliometric study of financial management behavior research are given in this section. It investigates descriptive as well as network studies, providing information about the field's collaboration patterns, thematic trends, and intellectual structure. The findings for every analysis category are shown graphically in the following figures.
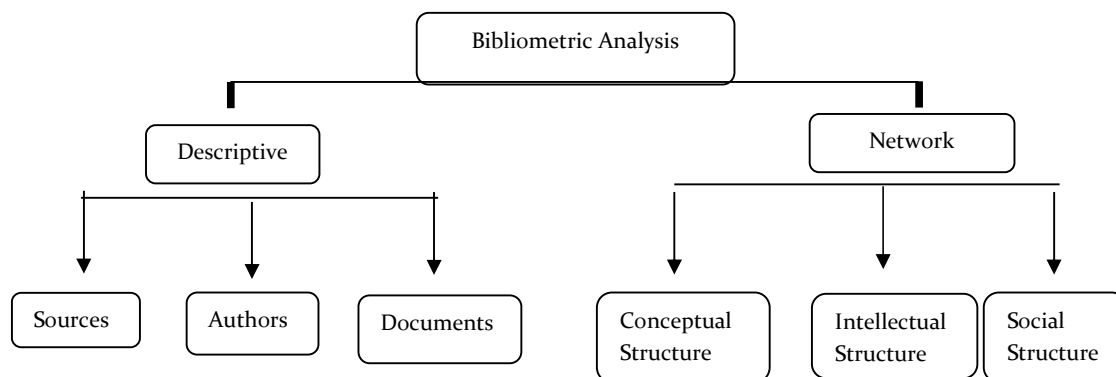
Figure 2. Levels of Bibliometric Analysis

An overview of the two primary bibliometric analysis components—descriptive analysis and network analysis—is shown in the above figure. The graphic depiction highlights the interdependence of several analytical techniques by illuminating the hierarchy of analysis stages.

3.1 Descriptive Analysis

3.1.1 Three-Field Plot

Figure 3's Sankey Plot is a visual aid that illustrates the connections between authors, keywords, and sources (Ratnawati et alo 2023, Sherwood, A. R. 2020). Sources are on the right, authors are on the left, and keywords are in the center. Key concepts including "financial behavior," "financial management," "financial education," and "financial socialization" are emphasized. Prolific writers and journals that contribute to important subtopics such as "financial knowledge," "financial attitude," "financial well-being," and "financial literacy" are also identified in the plot.
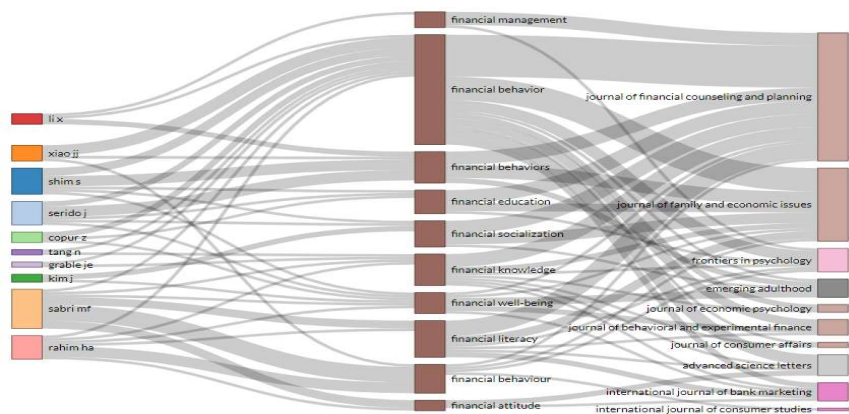
Figure 3. Three-field plot

3.1.2 Top 20 Impactful Sources

Figure 4 displays the top 20 academic journals in the field, ranked by their h-index. The h-index serves as a robust metric, evaluating the quality and influence of publications based on their citation impact.
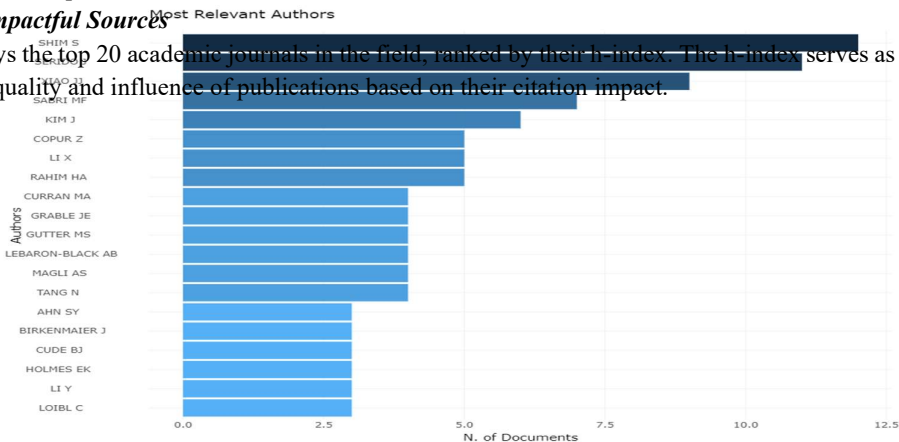
Figure 4: Top 20 impactful sources

3.1.3   ***Most Relevant Authors***

Authors SHIM S, SERIDO J, XIAO JJ, and SABRI MF are among those with the greatest number of publications on the topic, as shown in Figure 5. The writers with the greatest h-index, which indicates a strong impact, are highlighted in Figure 6. Contributors of note include SERIDO J, SHIM S, and XIAO JJ.
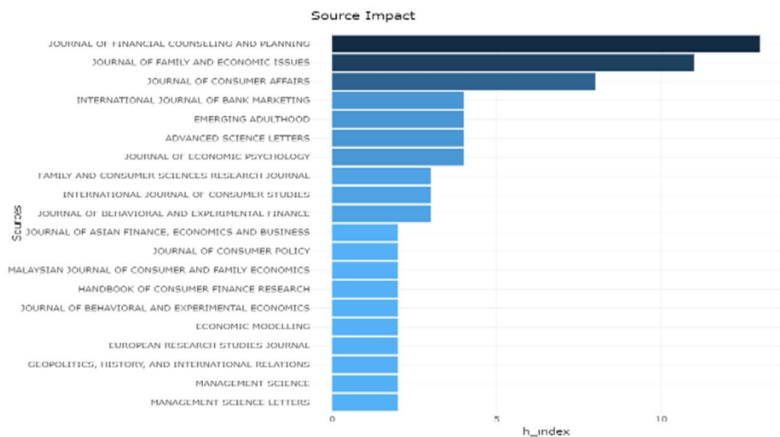
Figure 5: Most relevant authors
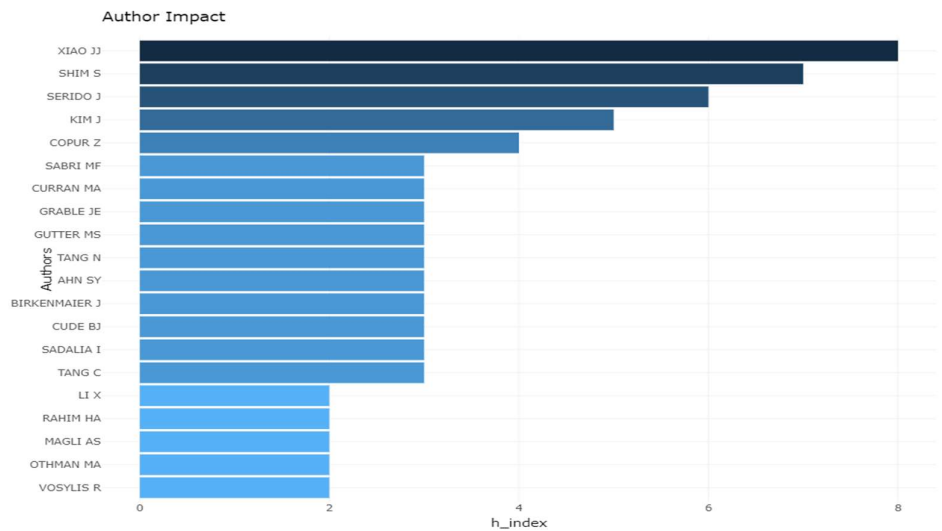
Figure 6 Author Impact

3.1.4 Country-Wise Contribution

The top 10 nations are ranked in Table 1 according to the number of publications and citations. In both categories, the USA is in the lead, followed by India. Nonetheless, notable disparities are observed in the relationship between citation volume and publication volume, indicating national differences in the effect of research.

Most Productive Countries		Most Cited Publications	
Country	Number of publications	Country	Number of Citations
USA	282	USA	3633
India	45	Netherlands	747
Indonesia	45	Germany	338
Malaysia	43	Sweden	163
UK	28	United Kingdom	133
China	25	Canada	100
Turkey	19	Malaysia	92
Netherlands	18	Australia	91
Spain	16	India	77
Germany	15	Indonesia	59

Table 1. Top 10 countries: Citations and Productivity

3.1.5   Most cited documents

The top 20 papers with more than 100 references are shown in Figure 7. As the most referenced paper, "Fernandes et al., 2014" highlights the role that financial education and literacy have in influencing an individual's financial behaviour.
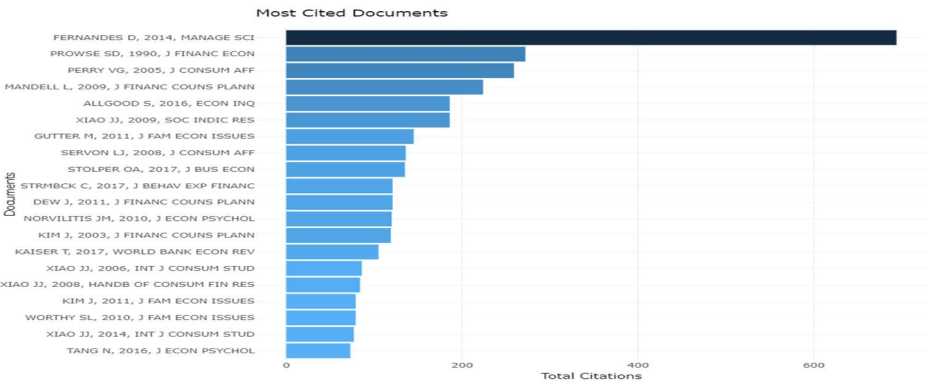
Figure 7: Most Cited documents

3.1.6 Keyword Analysis

A word cloud based on the terminology's frequency in publications is shown in Figure 8. With 104 occurrences, "financial behaviour" pops out, followed by "financial literacy," "financial knowledge," and "financial education." The word cloud graphically conveys the focus on attitude and education as antecedents of money management behaviour (Gatti, M. T. 2022, Lusardi et al., 2023).

Fig 8: Word **Dynamics**

3.1.7 Trend Topics

Figure 9 shows how popular subjects have changed throughout time. Logarithmic occurrence values are plotted on the Y-axis, while publication years are displayed on the X-axis. It is clear that the emphasis is now on economic and financial concerns like behavioural finance, household finance, and financial socialisation rather than personal finance and financial behaviour. Emerging themes like locus of control, self-control, financial inclusion, and the effects of COVID-19 are also depicted in the picture.
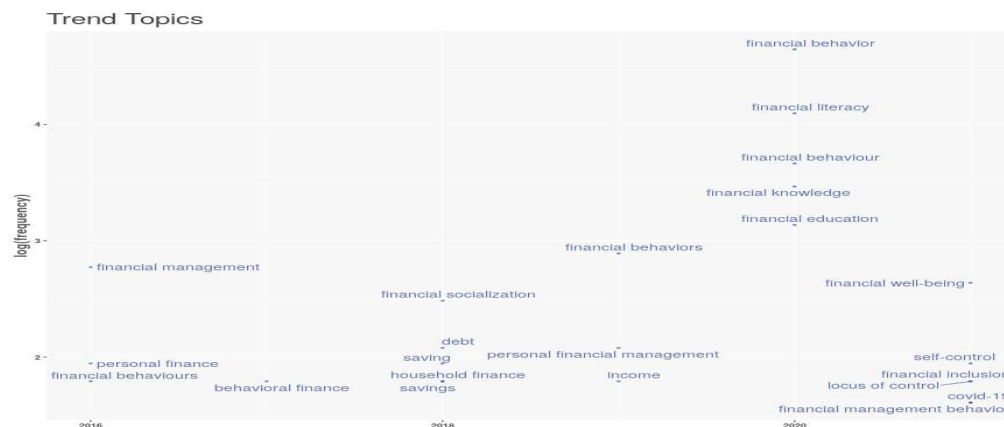
Figure 9: Trend topics

   3.2   Network Analysis

3.2.1 Conceptual structure

Co-occurrence analysis: Figure 10 shows the relationships between terms using a network map. Four separate clusters appear, each symbolised by a different colour. The red cluster is concentrated on motivation, impulsivity, and high-risk behaviour, while the blue cluster is concentrated on finance. The purple cluster is made up of adult, male, and female psychologists.

Figure 10. Co-occurrence analysis

Thematic map: Plotting these motifs on a two-dimensional graph according to centrality and density (Cobo et al., 2011) Figure 11 delves deeper into these themes. As "finance" and "financing" fill the lower right quadrant, "Female" stands out in the upper right quadrant. In the upper left, high-risk behaviour seems substantial, and in the lower left, "USA" shows, indicating its under developed research presence in this sector.

Figure 11 Thematic map

3.2.2 Intellectual Structure

Figure 12 uses citation and co-citation analysis to depict the intellectual structure. It examines the geographical distribution and collaboration of thirty countries. Academic research is dominated by the USA, which also cooperates with European countries, China, Malaysia, the UK, Hong Kong, Turkey, and Sweden.

Figure 12 Co-citation Analysis

3.2.3 Social Network Analysis

Social Network Analysis (SNA) is used in Figure 13 to find relationships within the research field. Participants are represented by nodes (such as authors or institutions), and interactions are shown by ties. The University of Minnesota and the University of Arizona stand out as top collaborators in the collaboration between institutes researching financial management behaviour.

Figure 13 Geographical Collaboration Network

4.   **Conclusion**

The development of the field's knowledge regarding financial management behaviour between 1997 and 2022 is clarified by this bibliometric analysis. Through the process of mapping this field's intellectual terrain, the research is able to pinpoint important patterns, significant researchers, and cooperative networks. The results provide insightful information that can guide the creation of focused financial education initiatives, successful legislative initiatives, and useful tactics for people looking to better their financial situation.

The first objective aimed to be acquainted with the journals and authors that play a crucial role in the financial management behaviour theme. Figure 6 depicts the most impactful sources. The figure uncovered that "Journal of Financial Counseling and Planning, Journal of Family and Economic Issues, and Journal of Consumer Affairs" top the list with the highest h-index. The "H-index" is the highest number up to "n," where "n" is the number of journals that have published at least "n" articles with at least "n" citations. Furthermore, Figure 7 shows that the writers have the most publications in the field. SHIMS S and SERIDO J have authored over ten articles in this field. The second objective intended to understand the foundation of conceptual and intellectual structure. The conceptual structure can be demonstrated using co-occurrence analysis. Figure 10 was created using the 50 nodes algorithm. Finance dominates the blue cluster, whereas high-risk behaviour, impulsivity, and motivation dominate the red cluster. Adult psychology, male psychology, and female psychology are all promoted by the purple cluster. It helps in understanding the association between the topic and the theme. It also reveals a major shift from economic factors like income, credit and insurance to behavioral and psychological factors like traits, thoughts, acquisitiveness and other analogous behavioral characteristics in financial management behavior. In addition to this, the study focuses on understanding intellectual structure. It shows how different nations and academics contribute to the technical community by discovering their associations. It discloses that the United States has close ties with China, Malaysia, the United Kingdom, Hong Kong, Turkey, and Sweden.

The third objective focuses on recognizing the collaboration networks in the field of financial management behaviour. To achieve this, the study conducted a Geographical collaboration network. This network shows the interconnections of

different universities within the research domain. The analysis revealed that the University of Minnesota and the University of Arizona dominate the list of collaborations with other institutes in researching financial management behaviour.

Lastly, the study focuses on the most recently addressed topics in the idea of financial management behavior. It can be displayed through trend topics (Figure 9). It shows that the topic has evolved from "personal finance, management behavior, financial management" in 2018, "household finance and financial socialization" in 2019 to "financial well-being, financial literacy topics, locus of control and financial inclusion" in 2020. This bibliometric analysis provides a valuable overview of the evolving trends in research on financial management behavior, offering insights that can benefit financial professionals and policymakers as they navigate the changing landscape of financial education and policy development.

Conflict of interest

The author declares that there is no conflict of interest.

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