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Mapping the Landscape of Financial Mindfulness Research: A Bibliometric Study

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Abstract

Financial mindfulness is an emerging concept in personal finance that promotes a transformative mindset to encourage rational decision-making and mitigate emotional biases. This study explores the evolution of research on financial mindfulness through a systematic literature review and bibliometric analysis of 58 relevant articles. The bibliometric analysis reveals the developmental trajectory of this literature, identifying notable authors, journals, countries involved, and international collaborations. Financial mindfulness originated from integrating finance with mindfulness principles, building on earlier concepts like money attitudes and behavioural finance. The study highlights the interdisciplinary nature of financial mindfulness, with significant contributions from finance, economics, and psychology. This research is novel in that it is the first attempt to systematically analyse the literature on financial mindfulness in this comprehensive manner. It establishes a foundational understanding for future researchers in the field, mapping out the existing landscape and highlighting the interdisciplinary collaboration that characterizes this area of study. By charting the developmental path and identifying key contributors and trends, this research sets the stage for continued exploration and a deeper understanding of financial mindfulness. Ultimately, it encourages further interdisciplinary research and practical applications in personal finance management, ensuring that future studies build on a robust framework of existing knowledge. This research not only explores past developments but also provides a clear direction for future inquiries and innovations in the field.

Keywords: Bibliometric Analysis, Financial Mindfulness, Mindful Finance, Personal Finance, Systematic Literature Review.

Introduction

A person's life crucially involves finance and financial management. Given the significance of financial choices in life and the dynamic shifts in the economy, it is imperative for every individual to be capable of making enhanced financial decisions (1, 2). Studies have revealed that individuals encounter difficulty when making financial decisions (2). The primary reasons preventing individuals from actively participating in financial decision-making include financial illiteracy, intricate and sophisticated financial products, and personal traits, habits, and circumstances (3). Numerous studies have sought to discover methods to alleviate the psychological biases present in the financial decision-making process (4–9). Somatic experience therapy, Nudging, and financial literacy programs are some of these interventions (5-7, 9, 10). It should be noted that interventions identified thus far have certain drawbacks (6, 10). Hence, it is imperative to recognize a robust solution to psychological challenges in financial decision-making. Financial Mindfulness has the potential to solve psychological issues in individuals in relation to financial decision-making. A developing concept in the field of personal financial management is financial mindfulness. Financial mindfulness has gained industrial popularity and is currently capturing the interest of researchers (11). Financial mindfulness integrates many sub-concepts in finance with an added layer of mindfulness. Financial mindfulness is defined per existing literature "as openness and attention to, and awareness of, present economic events and experiences (12, 13). Financial mindfulness involves effective management of one financial matter (14). Financial mindfulness's importance lies in the fact that it helps reduce financial discrepancies (15). Nowadays, financial mindfulness is crucial, especially because fintech

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has created several options that, when used wisely, can lead to economic well-being or, contrary, financial despair (12, 16, 17).

Dr Dan Stone introduced the term financial mindfulness in his book" Cultivating Financial Mindfulness: A Dual-Process Theory" in 2011. In this book chapter, he defined financial mindfulness as a balance between impulsivity and over-analysis (18). Regarding financial matters, mindfulness gives people more awareness regarding their spending and financial matters. Financial mindfulness makes individuals prioritise the use of money by paying attention to the budget (16). Also, financial mindfulness promotes financial planning (12). Financial mindfulness brings a more harmonious relationship with financial matters that can help align individuals' needs and wants (19). Financial mindfulness can regulate the relationship between financial literacy and investment behaviour (20). However, the research on financial mindfulness is in its initial stage, which leads to less conceptual clarity.

Numerous recent literature reviews and bibliometric analyses have been conducted on financial behaviour and financial management domains. It is interesting to note that several authors have linked financial literacy and financial behaviour in their review articles (21–23). One of the prominent papers in this regard is Goyal and Kumar's bibliometric analysis of financial literacy, where the authors establish a strong relationship between financial literacy and financial behaviour (22). This study reviewed 501 articles that were published in a time span of 2000 to 2019, and based on the analysis, a conceptual model of financial literacy was developed. While they sound similar, financial literacy and financial mindfulness are distinct concepts. Financial literacy is having financial knowledge and the ability to apply financial knowledge in daily life (24). In contrast, financial mindfulness is the trait that helps individuals in the effective management of financial affairs (19) by regulating their emotions and thoughts concerning money and finance management (18). Further, it was proven in a study that financial mindfulness is essential to enhance the financial literacy of an individual (19, 25).

A very recent literature review on financial planning behaviour establishes a theory called the theory of economic planning behaviour, which is developed after analysing factors such as financial satisfaction, financial socialisation, financial literacy, mental accounting, and financial cognition (26). This literature review has mentioned the importance of financial planning and the problems identified in financial planning behaviour. Financial planning behaviour focuses on long-term projections of one's financial state (26, 27), whereas financial mindfulness quality focuses more on a conscious, emotionally balanced approach to one's current financial choices and attitudes (2), which in turn can boost financial planning behaviour. Readers may often conflate financial mindfulness with financial planning; however, these are fundamentally distinct concepts.

Several other scholars conducted literature reviews on behavioural bias affecting financial behaviour. One such review is Upashi *et al*.'s paper on behavioural bias affecting investment decisions, including overconfidence, anchoring, loss aversion, and availability biases (28). Another literature review conducted on behavioural bias concluded that investment advisers also suffer from behavioural bias along with investors (29). While these reviews provide valuable insights into cognitive biases affecting investment decisions, they do not address the emerging concept of financial mindfulness, which has the potential to mitigate behavioural bias, as proven by studies (14, 19).

A literature review analyzing the implications of mindfulness in the workplace suggested that employees with financial mindfulness can easily cope with their financial pain (12). This paper also provides a definition of financial mindfulness. However, this review lacked an in-depth examination of financial mindfulness. Also, this review paper focused more on the various implications of mindfulness in the workplace rather than on the concept of financial mindfulness.

Contrary to existing reviews, this paper focused on the conceptual analysis of financial mindfulness. These related studies were reviewed to clarify and differentiate the concept of financial mindfulness from other overlapping concepts in finance. While previous studies have explored the related concepts of financial literacy, financial planning behaviour, and behavioural bias, this study focused on tracing the genealogy and evolution of financial mindfulness as a distinct concept. The current study aims to provide a foundational mapping of this emerging field by identifying key authors, journals, and international collaborations. To the best of the authors' knowledge, no detailed academic literature review is available on this topic. The current study has the following objectives: to trace the genealogy of literature in financial mindfulness, to determine the most impactful journals and authors in the field, and to assess the production of articles on a country-specific basis while exploring collaborations among different nations.

This paper is organized as follows: the next section explains the materials and methods, followed by a section highlighting the results. The final section provides the discussion and then the conclusion

Methodology

The authors have adopted a combination of systematic literature review and bibliometric analysis to achieve the current research objectives. The systematic literature review approach guaranteed the reliability and relevance of the literature examined for the current study. This study adhered to methodologies prescribed by Jain *et al*. (29) and Block *et al.* (30) to retrieve the literature using the systematic literature review method. Implementing a Systematic Literature Review (SLR) entails using specific protocols and a set search strategy across different databases, thus improving the quality of research with respect to transparency, scientific detail and scope (30–34). Figure 1 illustrates the step-by-step process used in the systematic literature search.

The systematic literature review was initiated by establishing the choice of databases and outlining the search criteria. Scopus stands as Elsevier's largest database, encompassing over 82 million documents, 17 billion cited references, over 17 million author profiles, over 234 thousand publications, 7,000 publishers, and over 80,000 institution profiles (35). Significant bibliometric studies (36–39) have used the Scopus database for data retrieval. Hence, the Scopus database was used for this study.

In selecting pertinent keywords, this study adhered to the suggestions provided by Bartolini *et al.* (40) and Jain *et al.* (29). Starting with the initial keyword "Financial Mindfulness," the authors uncovered numerous articles. Additional relevant terms were identified by scrutinizing commonly used keywords in peer-reviewed literature. Kumar *et al*. recommended incorporating keywords that are related and associated with the main keyword in the search string (41). The final search string is as follows, "Financial Mindfulness" OR "Money Consciousness" OR "Money Attitude" OR "Mindful Investment" OR "Mindful Finance"; "Mindfulness" AND "Finance".

Aligned with the objectives of the present study, specific inclusion and exclusion criteria were established. Given that financial mindfulness is a relatively new topic, no restrictions were imposed on the document type. Additionally, no specific year criteria were applied, as the aim of the paper is to trace the origins of this concept. This approach allows for the inclusion of both foundational studies and the most recent developments in the field, providing a holistic view of the evolution of financial mindfulness. The sole exclusion criterion was documents in languages other than English. Considering the multidisciplinary nature of financial mindfulness, all relevant documents pertaining to Business, Management and Accounting, Finance, and Economics were compiled. The identification of pertinent articles involved matching provided keywords with the abstract, title, and author-supplied keywords, resulting in the download of 560 articles.

Subsequently, papers lacking titles, authors, or abstracts were excluded from the sample. In the following stage, articles with incomplete abstracts or abstracts not available in English were also removed. This curation process resulted in a total of 530 retained articles. An initial screening based on the title and abstract further filtered out articles that did not align with the paper's objective, eliminating approximately 420 documents and leaving 110 papers. A final comprehensive reading of these papers narrowed down the selection to 58, discarding the rest due to a lack of alignment with the article's scope.

Bibliometric analysis plays a vital role in the evaluation of search. In the bibliometric study, advanced statistical methodologies provided a deeper understanding of large data sets' performance measures and productivity indicators (42). Bibliometric analysis involves using numbers from large sets of information and applying methods related to big data and machine learning (43). The study uses bibliometric analysis for performance analysis, aiming to track the evolution of literature and identify key sources of knowledge, particularly emphasizing impactful journals, authors, and nations. This study follows the patterns of bibliometric analysis done by the previous studies (39, 44). This study used the software Bibliometrix to conduct the bibliometric analysis. The bibliometric R-package, utilizing the R Language, presents diverse tools for conducting bibliometric studies within an open-source environment (45). Much existing literature has made use of this software for conducting bibliometric studies (29, 46–48).

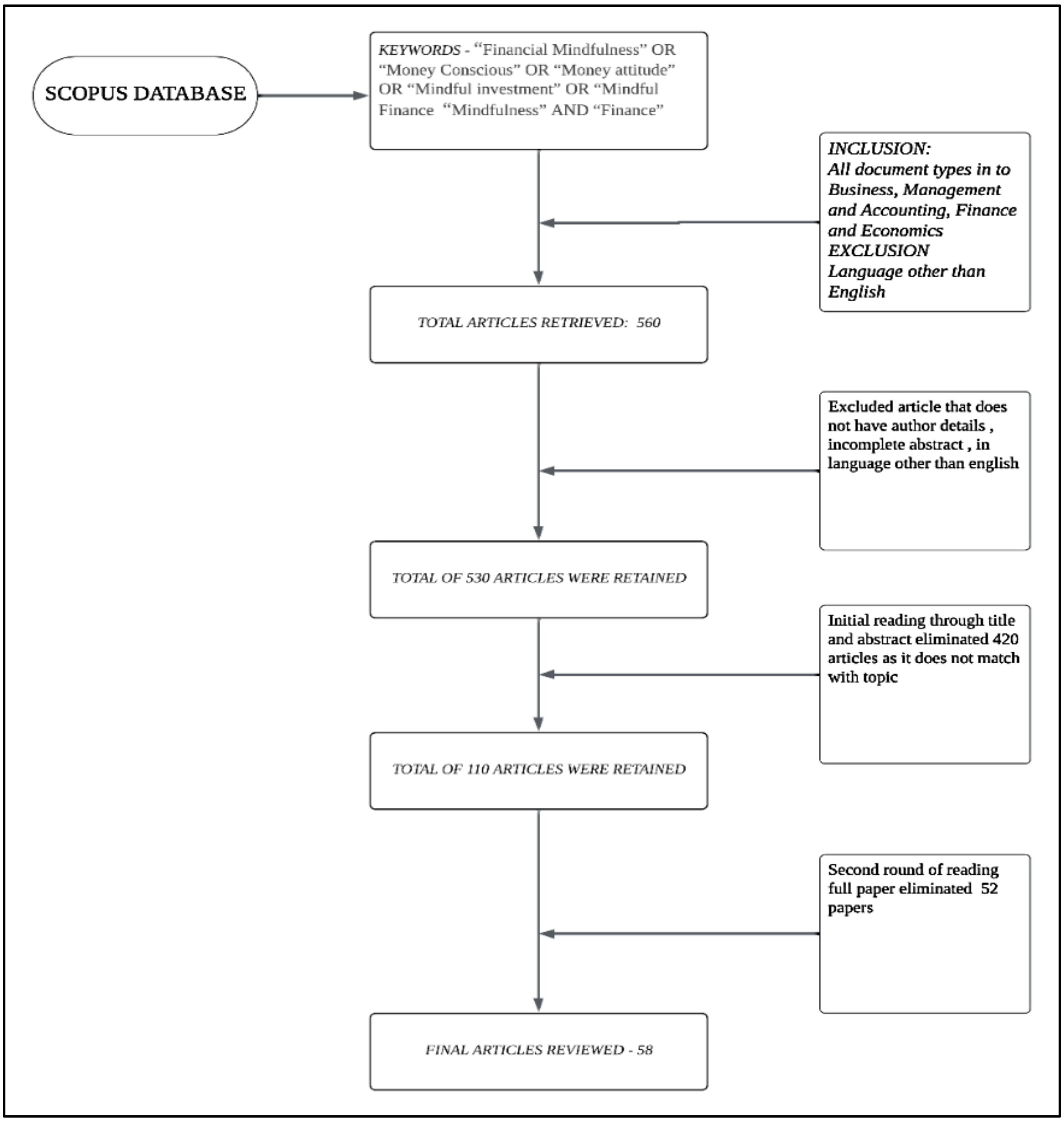

Figure 1: Procedure for Selecting Literature

Results

Evolution of Literature

Figure 2 illustrates the historical expansion of publications in the field of financial mindfulness. Figure 2 shows the number of papers that have been published in this field, along with the citation trend from 1993 to 2023. A significant growth in the number of articles published can only be seen after the year 2020. The first publication of an article related to this concept happened in the year 1993. Wilhelm *et al.* adopt a distinctive approach by considering the role of behavioural aspects in financial well-being, moving away from traditional objective indicators such as income and returns (49). This study has introduced the influence of money attitude in determining financial well-being.

During the time frame from 1994 – 2006, there was no significant production of articles in this field. During this time, research on financial behaviour focused more on economic factors than psychological factors (50–52). These researchers often used expected returns, the dividend policy of the firm, and market conditions to predict financial behaviour. In 2007, there was a resurgence in the publication trend, marked by a study validating the association between money consciousness and unethical behaviour (53). This marked a notable shift in researchers' focus towards money attitude and related investigations. In 2009, another publication emerged in this domain. The commencement of the 2008 recession and the formulation of the Money Anxiety Theory by Dr Dan Geller potentially acted as catalysts (18), motivating scholars to delve into the psychological dimensions of financial decision-making. However, in the following years, 2010 and 2011, a noticeable lack of relevant articles in this field became apparent. In 2011, Dr. Dan Stone published his book chapter titled "Cultivating Financial Mindfulness: A Dual-Process Theory" (18). This motivated many researchers to take up the topic of money attitude and to link finance and mindfulness. A consistent production of articles can be seen after 2011. Topics such as monetary intelligence, money perceptions, mindfulness in financial literacy, mindfulness and heuristics, and materialism were researched during this period. Definitions for financial mindfulness emerged during this period. A noticeable surge in article production is evident in the years 2021 and 2022, attributable to the post-COVID era. The COVID-19 pandemic and the associated lockdowns resulted in heightened financial anxiety and vulnerability among individuals, presenting researchers with an opportunity to identify potential solutions to help people overcome these challenges (54–58). During this time, firms started giving importance to corporate wellness initiatives since employees are returning to office space after a long time (59). During this period, the connection between mindfulness and finance gained significant importance, and the concept of financial mindfulness became a popular subject for research (60, 61). It was suggested by researchers to provide money management training infused with financial mindfulness to help employee overcome their financial trauma (12). Thus, the financial mindfulness concept gained popularity. It was identified by research that financial mindfulness is a widely used tool by financial practitioners to sell their financial products and services (11).

Upon closer analysis of citation trends, it is evident that the paper published in 2009, titled "What One Has is enough: mindfulness, Financial Desire Discrepancy, and Subjective Well-being", authored by Brown *et al.*, has garnered the highest number of citations, totalling 121 (15). This article stands out as one of the pioneering works linking mindfulness and financial behaviour. It explores how mindfulness can serve as a potential solution for discrepancies in financial desires and how cultivating mindfulness may contribute to subjective well-being. Given its foundational nature, any future research centring on the theme of financial mindfulness or mindfulness in financial matters is likely to reference this paper as a fundamental source, providing a basis for further exploration. In 2018, numerous papers were published introducing innovative concepts such as monetary intelligence, money wisdom, connections with Buddhist economics, and the intersection of behavioural economics in financial behaviour (62–65). Additionally, there were discussions on mindfulness-based interventions for gambling, presenting unique ideas for consideration (66). These papers stood out for their originality and relevance at that time, leading to significant citation rates. Researchers focusing on these areas found valuable references in the papers from 2018, contributing to the notable number of citations these publications received. A decline in citations becomes evident post-2018, attributed to a decrease in the introduction of novel concepts. Researchers, rather than introducing new ideas, focused on building upon the research conducted in 2018, seeking to uncover new dimensions and perspectives related to the concepts introduced during that period. Again, there was an increase in citations in 2021. During this period, there was a heightened interest among researchers in establishing connections between mindfulness and money attitudes, as well as exploring their relevance to financial matters. This conceptual linkage generated significant interest in the research community, leading to an increase in citations. In 2023, there is a decline in citations, possibly due to the novelty of the papers, requiring time to capture researchers' attention. It is expected that an upward trend may surface in the upcoming years, given that the papers published in 2023, numbering only a few, focused on measuring and analysing financial mindfulness as a concept. This establishes an optimistic outlook for future publications on this subject.

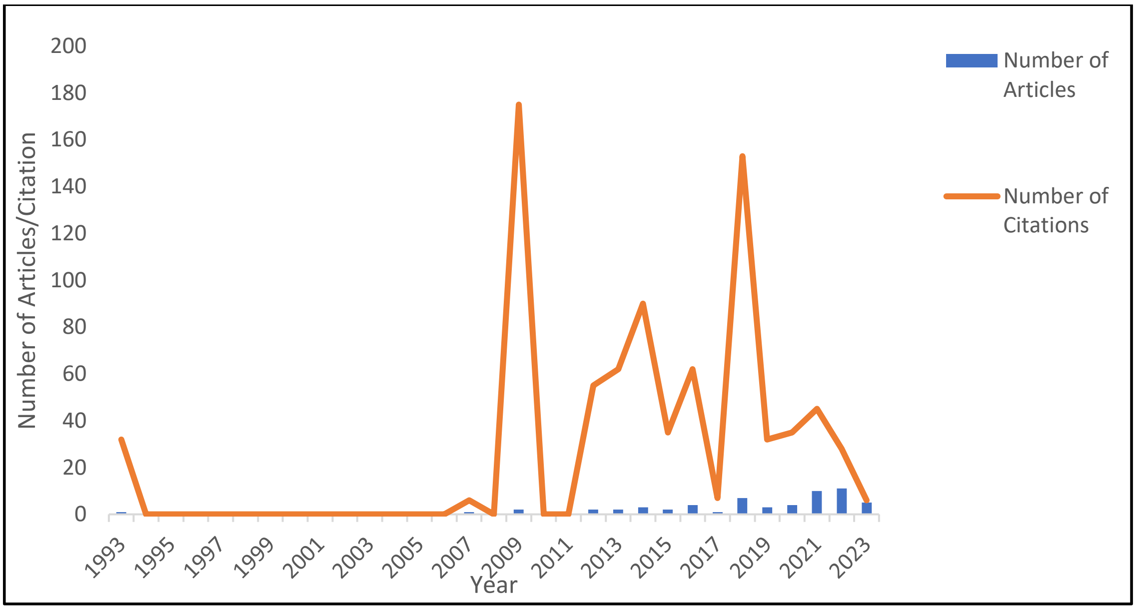

Figure 2: Publication and Citation Trend

Impactful Authors

Based on the analysis of the bibliometric data, ten impactful authors were identified. Table 1 shows the top 10 impactful authors in the field of financial mindfulness, along with details of the h index, g index, total citations, and number of publications. Tang TL-P is a prominent author with 11 publications and 330 citations. His major works are on Monetary Intelligence and Money attitude. The next prominent author is Chen J, with five papers and 154 citations. Following him there is Tang N, with five articles and 154 citations. Both authors focused on money attitude and its impact on financial decision-making.

Table 1: Impactful Authors

Authors	h_index	g_index	m_index	TC	NP
Tang Tl-P	9	11	0.818	330	11
Chen J	4	5	0.4	154	5
Tang N	4	5	0.4	154	5
Luna-Arocas R	3	3	0.3	109	3
Sardžoska Eg	3	3	0.333	102	3
Sutarso T	3	3	0.273	133	3
Tang Tl-N	3	3	0.3	109	3
Akande A	2	2	0.333	77	2
Al-Zubaidi As	2	2	0.333	77	2
Allen Mw	2	2	0.333	77	2

The h-index is a productivity metric indicating that a journal has published at least h papers, each of which has been cited at least h times. The g-index is the maximum value the h-index can reach if a fixed number of citations are distributed freely over a fixed number of papers. The m-index is a variant of the h-index that shows the h-index per year since the first publication. TC - Total Citations. NP -No of publications.

Impactful Journals

Table 2 shows the top 10 journals in terms of impact. A scientist's or a group of scientists' productivity and influence are measured using the H index. On the other hand, the G index denotes a modified version of the h index that gives highly cited articles more weight. Another variation of the h index is the M index, which displays the h-index for each year since the first publication. The ten journals on financial mindfulness that had the most influence have been identified based on these parameters, together with the total citation and publication. Journal of Business Ethics comes at the top of the list with 272 citations. Springer Nature B.V. is the publisher of The Journal of Business Ethics. It was started in the year 1982. All other prolific sources have been mentioned in Table 2, with the next most popular source in this area being the Journal of Financial Counselling and Planning, which has 117 citations, followed by Applied Psychology, which has 43 citations.

Table 2: Impactful Journals

Journals	h_index	g_index	m_index	TC	NP	PY_start
Journal of Business Ethics	7	7	0.636	272	7	2013
Journal of financial counselling and planning	3	4	0.097	117	4	1993
Applied psychology	2	2	0.2	43	2	2014
Family and consumer sciences research journal	2	2	0.167	36	2	2012
Frontiers in psychology	2	3	0.5	25	3	2020
American journal of psychiatric rehabilitation	1	1	0.091	6	1	2013
Asian journal of business ethics	1	1	0.5	2	1	2022
Business perspectives and research	1	1	0.5	1	1	2022
Corvinus journal of sociology and social policy	1	1	0.25	2	1	2020
Critical studies on corporate responsibility, governance and sustainability	1	1	0.125	2	1	2016

The h-index is a productivity metric indicating that a journal has published at least h papers, each of which has been cited at least h times. The g-index is the maximum value the h-index can reach if a fixed number of citations are distributed freely over a fixed number of papers. The m-index is a variant of the h-index that shows the h-index per year since the first publication. TC - Total Citations. NP -No of publications. PY_ start- Year in which the journal started publishing.

Country-Wise Production and Collaboration

Figure 3 shows the country's scientific production. Shades of blue can help us understand the contributions of various nations. Darker blue hues represent significant contributors, whereas lighter tones denote those that contribute less. Countries with grey backgrounds are ones where the study has not yet begun. The dark blue colour present in the USA highlights it as the leading contributor to research in this field. Further light blue shades on countries like India, China, Pakistan, Australia and several other countries, indicating their moderate contribution to research in this field. Most of Central Asia, the Middle East, South America (with the exception of Brazil), and Africa (excluding a few countries in the North and South) are shaded in grey, indicating their limited contribution to research in this field. The top 10 countries that are significant contributors are shown in Table 3. The United States is the country that contributes the most, with 77 articles, followed by China with 25 and Malaysia with 21. The top 10 impactful countries are listed in Table 3. The United States has the most citations, followed by Australia and India. Despite not being among the top 10 most productive nations, Canada is one of the top 10 most impactful nations. The same is the case with Thailand and Hong Kong.

The USA has an individualistic society (67, 68), which means that people act more individually rather than as members of a group (69). Investors hailing from individualistic nations have been demonstrated to exhibit traits such as self-confidence, being decision-oriented, and risk taker (70). It was proven that people from such countries would be more interested in using different financial services (68). The impulsive buying phenomenon is widely recognized in the USA (71, 72). Additionally, the United States has recently witnessed the first decline in median household income in almost a decade, coupled with rising inflation; however, Americans' expenditures have notably increased, rendering them more financially vulnerable (73). Financial mindfulness represents a behaviour-oriented approach aimed at fostering greater rationality in financial decision-making. Therefore, in the United States, a country where individuals tend to lean towards individualism, embrace risk-taking, and engage in impulsive buying behaviour, researchers may find it intriguing to investigate the concept of financial mindfulness. The next highest number of research studies was carried out in Pakistan, whose economic situation is entirely different from that of the USA. Interestingly, most of the research carried out in Pakistan focused on women and finance (14, 19, 74). The attraction of researchers to Pakistan's growing economy is evident, and their identification of numerous factors influencing women's reasoning and investment decision-making, such as work-family balance, demanding work settings, cultural norms, and fear, makes it an excellent subject for research (14, 19). India, being a home to people with varying income levels, diverse consumption habits, and distinct savings and investment behaviours compared to developed economies, possesses a diverse understanding of and practices for achieving financial well-being (75). Research thus conducted in this context has the potential to contribute to the growth of financial mindfulness literature. The expansion of research focus to encompass developing nations such as Pakistan, India, and South Africa, along with developed countries like the United States, Britain, and China, is noteworthy in the progression of the concept of financial mindfulness. However, Figure 3 indicates that research into financial mindfulness is still in its early stages. Still, there are a lot of other nations where financial mindfulness needs to be investigated.

The collaboration between nations in the area of financial mindfulness is depicted in Figure 4. The red lines connecting various countries represent international collaborations. Notably, strong research partnerships are evident between North American countries, such as the USA and Canada, and South Asian nations, including India and China. There is still a lot of room for progress when considering collaboration in a larger context, which is visible in Figure 4. International collaboration helps researchers understand the impact of research in different cultures and facilitates the sharing of ideas and information (76). Research suggested that more studies on financial behaviour have to be conducted in countries with versatile cultures so that the findings of the study could be generalized. Also, investor's mindsets are usually influenced by their culture (75). The financial mindfulness concept is an add-on to financial behaviour literature. Therefore, it is necessary that financial mindfulness has to be tested in different cultural contexts to boost its use by financial practitioners.

Table 3: Productive and Impactful Countries

Productive countries		**Impactful countries**	
Country	**Total publications**	**Country**	**Total citations**
USA	77	USA	566
China	25	Australia	56
Malaysia	21	India	30
Pakistan	17	Pakistan	21
India	11	United Kingdom	19
Portugal	10	France	16
UK	10	Thailand	8
Nigeria	8	Hong Kong	7
France	6	Portugal	7
Australia	5	Canada	5

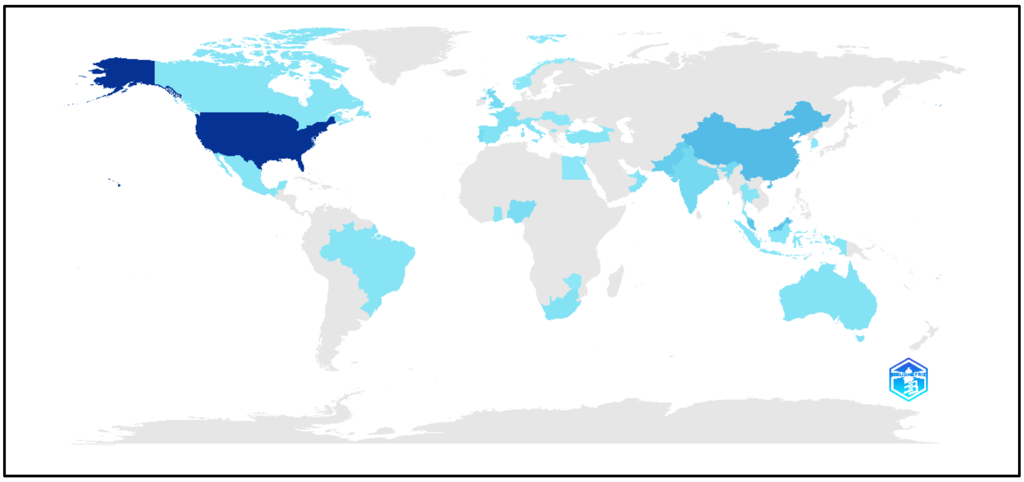

Figure 3: Country's Scientific Production. This world map illustrates the global distribution of financial mindfulness article production. The visualization uses varying shades of blue to represent production intensity - darker blue regions indicate higher levels of content production, while lighter blue areas represent lower production levels. Grey areas on the map indicate regions with no documented production of financial mindfulness articles.

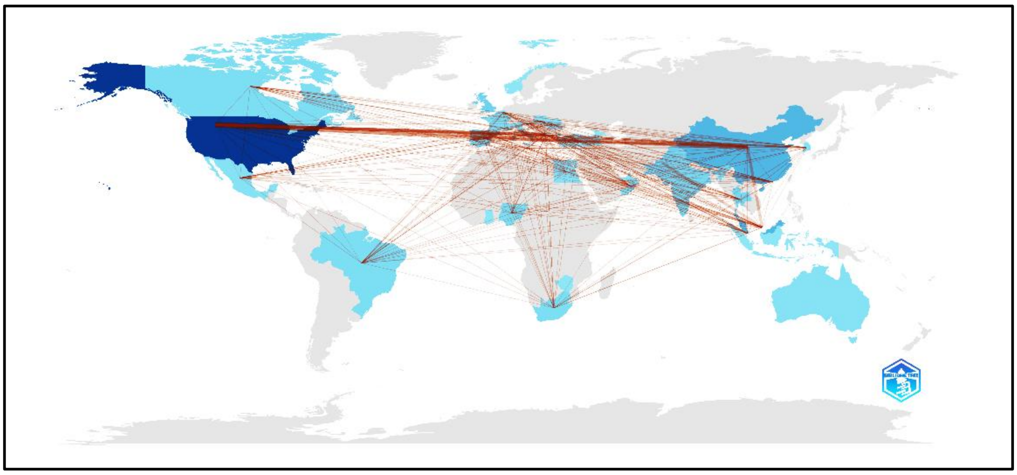

Figure 4: Country Collaboration. This world map visualization depicts international research collaborations in the field of financial mindfulness. The map uses a network of red connecting lines to illustrate collaborative relationships between different countries, where each line represents a research partnership. The underlying map maintains the same colour scheme as before in Fig 3, with varying shades of blue indicating the intensity of production levels in each country, while grey areas represent regions with no documented research production. The interconnecting red lines showcase the global nature of research partnerships, with particularly dense networking visible between North America and Asia, highlighting the international collaborative nature of research in this field.

Discussion

Financial mindfulness is a transformative approach to managing personal finance. As Stone (18) aptly described, it represents the balance point between impulsivity (making quick, often hasty financial decisions without considering the long-term consequences) and overthinking (spending excessive time and energy analysing every financial decision).

Examining the genealogy of financial mindfulness literature reveals a gradual evolution over time and ongoing development in the present. Notably, finance researchers and experts have transitioned their focus from solely economic factors impacting financial decision-making to a greater emphasis on the psychological aspects influencing such decisions. The recognition that psychological factors, as opposed to economic variables, can be controlled and enhanced for more effective financial decision-making has been a key pivot in this evolution. During this transitional period, various psychological interventions, including somatic therapy and nudging, were initially explored; however, these approaches proved ineffective due to certain limitations. This period coincided with the rising popularity of mindfulness in various domains, prompting researchers to consider its potential application in the financial decision-making process. Consequently, the concept of financial mindfulness emerged, highlighting the significance of being fully present and engaged in financial decision-making. It is worth noting that earlier concepts such as money wisdom, perceptions, and attitudes shaped and influenced the development of financial mindfulness as a concept. Hence, even though the term suggests that financial mindfulness is a sub-concept of mindfulness, it has borrowed concepts and ideas from other constructs. As Stone rightly indicated, financial mindfulness goes beyond the mere application of mindfulness to financial affairs (18).

On the critical examination of the literature, it has been revealed that financial mindfulness significantly impacts three major aspects: money attitude (the individual's beliefs and feelings about money), financial management behaviour, and unethical intentions. By cultivating financial mindfulness, individuals can potentially reduce their obsession with money, manage financial stress when there is insufficient money, and boost monetary intelligence (the ability to process, regulate, and prioritize money-related thoughts and behaviours) (66, 77–80). In the end, it results in a more positive and meaningful connection with money since it leads to a deeper understanding of one's financial behaviours, attitudes, and beliefs (20). Further, financial mindfulness can be understood as the conscious approach towards financial management (81). When it comes to finance and financial decision-making processes, one has to be analytical and prudent at the same time (18). Too much fear in financial decisions is also not a good indicator. By fostering financial mindfulness, people acquire the capacity to clearly evaluate their financial status, make wise decisions, and coordinate their activities with their long-term financial objectives. Further, the integration of mindfulness and finance has been proven effective in regulating behavioural biases that are perceived as hindrances to making rational decisions (14). Adopting a mindful attitude in personal finance assists individuals in coping with financial vulnerability (73). This can prevent consumers from falling into a debt trap (82). Further, to ensure efficient personal finance management, it is necessary to control the unethical intentions of individuals concerning money and wealth. Unethical behaviour generally includes theft, corruption, and deception (83). The current generation, exposed to various gambling platforms, often views gambling as a way to achieve wealth, influence, and prestige, as portrayed in the media. This can lead to distorted thinking, where individuals gamble, believing it will improve their financial security (84).In this scenario, financial mindfulness has proven effective, with Maynard *et al*. indicating that mindfulness-based interventions can also regulate gambling intentions (66). Furthermore, individuals with financial mindfulness are less likely to engage in embezzlement, fraud, and theft (18). Moreover, Brown *et al.* suggested that mindfulness in financial matters helps regulate money-related thoughts by promoting intrinsic stimulus over external ones, thereby reducing financial desire discrepancies (15). Similarly, Sinha *et al*. suggested that mindful finance helps individuals reduce materialistic thoughts relating to wealth, which is often a primary reason for unethical behaviour (2). Finally, individuals with high levels of financial mindfulness often avoid unethical means of generating wealth as they are well aware of the later consequences. Financial mindfulness, therefore, emerges as a behavioural trait that can build healthier relationships with money, efficiently manage finances, and promote ethical financial behaviour, ultimately enhancing financial well-being.

Conclusion

Current bibliometric analysis was able to bring out prominent authors and journals in this field. Based on the area of expertise of the authors and journals publishing these articles, it can be concluded that financial mindfulness is an interdisciplinary concept. Various fields, including finance, economics, and psychology, influence this concept.

Research predominantly occurs in the USA, largely attributed to its heightened consumer culture. However, developing nations such as Pakistan have also embarked on studies in financial mindfulness. Yet, it's clear that many other countries, particularly across the African continent with its mix of underdeveloped and developing nations, have yet to engage in this field of research. Exploring financial mindfulness within these contexts could yield diverse and valuable perspectives.

Bibliometric analysis indicates that research connecting finance and mindfulness first appeared in 2003, but it wasn't until Dr Dan Stone released a book chapter on financial mindfulness that the concept started to gain widespread attention. Despite this increased interest, with specific papers on financial mindfulness emerging towards the end of 2021 and throughout 2022 and 2023, the foundational theoretical underpinnings of financial mindfulness remain underdeveloped. Further investigation is necessary to fully understand and explore the possibilities of financial mindfulness.

The limitation of the current study is that only 58 relevant articles related to financial mindfulness are available at this time. In future, when research on financial mindfulness expands, a similar study could be conducted to gain further insights.

Abbreviation

Nil.

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Nil.

Author Contributions

Manjusha J and Lakshmi Bhooshetty conceptualized the idea of the article and contributed significantly to its development. Manjusha J was responsible for drafting the article, while Lakshmi Bhooshetty took care of the methodology part. Both authors collaboratively reviewed and corrected the article before submission.

Conflict of Interest

There is no conflict of interest between authors.

Ethics Approval

Not applicable.

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References

1. Frydman C, Camerer CF. The psychology and neuroscience of financial decision making. Trends in cognitive sciences. 2016;20(9):661–75.
2. Sinha NK, Kumar P, Priyadarshi P. Relating mindfulness to financial well-being through materialism: evidence from India. International Journal of Bank Marketing. 2021;39(5):834–55.
3. Park JJ, Sela A. Not my type: Why affective decision makers are reluctant to make financial decisions. Journal of Consumer Research. 2018;45(2):298–319.
4. Jain R, Jain P, Jain C. Behavioral Biases in the Decision Making of Individual Investors. IUP Journal of Knowledge Management. 2015;13(3):7-27.
5. Sabir SA, Mohammad HB, Shahar HBK. The role of overconfidence and past investment experience in herding behaviour with a moderating effect of financial literacy: evidence from Pakistan stock exchange. Asian Economic and Financial Review. 2019;9(4):480.
6. García JM, Vila J. Financial literacy is not enough: The role of nudging toward adequate long-term saving behavior. Journal of Business Research. 2020;112:472–7.
7. Suresh G. Impact of financial literacy and behavioural biases on investment decision-making. FIIB Business Review. 2024;13(1):72-86.
8. Bhatia A, Chandani A, Divekar R, Mehta M, Vijay N. Digital innovation in wealth management landscape: the moderating role of robo advisors in behavioural biases and investment decision-making. International Journal of Innovation Science. 2022;14(3/4):693–712.
9. VanderPal G, Brazie R. Influence of basic human behaviors (influenced by brain architecture and function), and past traumatic events on investor behavior and financial bias. Journal of Accounting and Finance. 2022;22(2):33-53.
10. Koskelainen T, Kalmi P, Scornavacca E, Vartiainen T. Financial literacy in the digital age—A research agenda. Journal of Consumer Affairs. 2023;57(1):507–28.
11. Garbinsky EN, Blanchard SJ, Kim L. Financial Mindfulness: A Scale. Personality and Social. Psychology Bulletin. 2024 Jul 30;50(11). https://doi.org/10.2139/ssrn.4564115
12. Panditharathne PNKW, Chen Z. An integrative review on the research progress of mindfulness and its implications at the workplace. Sustainability. 2021;13(24):13852.
13. Stone D. What is a Functional Relationship to Money and Possessions? The Oxford Handbook of Work Engagement, Motivation, and Self-Determination Theory. 2014:374.
14. Iram T, Bilal AR, Ahmad Z, Latif S. Building a conscientious personality is not sufficient to manage behavioral biases: an effective intervention for financial literacy in women entrepreneurs. Business Perspectives and Research. 2022;12(4). DOI:22785337221114675.
15. Brown KW, Kasser T, Ryan RM, Alex Linley P, Orzech K. When what one has is enough: Mindfulness, financial desire discrepancy, and subjective well-

being. Journal of Research in Personality. 2009;43(5):727–36.
16. Serowik KL, Bellamy CD, Rowe M, Rosen MI. Subjective experiences of clients in a voluntary money management program. American Journal of Psychiatric Rehabilitation. 2013;16(2):136–53.
17. Varga D. Fintech, the new era of financial services. Vezetéstudomány-Budapest Management Review. 2017;48(11):22-32.
18. Stone D. Cultivating financial mindfulness: A dual-process theory. In Consumer knowledge and financial decisions: Lifespan perspectives 2011 Sep 28; p. 15-27.
19. Iram T, Bilal AR, Ahmad Z, Latif S. Does financial mindfulness make a difference? A nexus of financial literacy and behavioural biases in women entrepreneurs. IIM Kozhikode Society and Management Review. 2023;12(1):7-21.
20. Riaz S, Khan HH, Sarwar B, Ahmed W, Muhammad N, Reza S, UlHaq SM. Influence of financial social agents and attitude toward money on financial literacy: the mediating role of financial self-efficacy and moderating role of mindfulness. Sage Open. 2022;12(3):21582440221117140.
21. Bedi HS, Karn AK, Kaur GP, Duggal R. Financial literacy–A Bibliometric analysis. Our Heritage. 2019;67(10):1042-54.
22. Goyal K, Kumar S. Financial literacy: A systematic review and bibliometric analysis. International Journal of Consumer Studies. 2021;45(1):80–105.
23. Ingale KK, Paluri RA. Financial literacy and financial behaviour: A bibliometric analysis. Review of Behavioral Finance. 2022;14(1):130–54.
24. Huston SJ. Measuring financial literacy. Journal of consumer affairs. 2010;44(2):296–316.
25. Smith TE, V. Richards K, M. Shelton V. Mindfulness in financial literacy. Journal of Human Behavior in the Social Environment. 2016;26(2):154–61.
26. Yeo KHK, Lim WM, Yii KJ. Financial planning behaviour: a systematic literature review and new theory development. Journal of Financial Services Marketing. 2023;29(3):979-1001.
27. Brahmana RK, Memarista G. Financial planning behaviour among the young: evidence from Malaysian university students. Global and Local Economic Review. 2018;21(21):29-54.
28. Upashi R, Kadakol AM. Impact of Behavioral Biases on Investment Decision Making: Evidence from the Review of Literature. Abhigyan. 2023;41(1):35-49.
29. Jain J, Walia N, Singh S, Jain E. Mapping the field of behavioural biases: A literature review using bibliometric analysis. Management Review Quarterly. 2021;72(11):1-33.
30. Block J, Fisch C, Rehan F. Religion and entrepreneurship: a map of the field and a bibliometric analysis. Management Review Quarterly. 2020;70:591–627.
31. Tranfield D, Denyer D, Smart P. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. British journal of management. 2003;14(3):207–22.
32. Fisch C, Block J. Six tips for your (systematic) literature review in business and management research. Management Review Quarterly. 2018;68:103–6.
33. Jalonen H. Ignorance in organisations–a systematic literature review. Management Review Quarterly. 2024;74(2):909-50.
34. Thai QH, Mai KN. Entrepreneurial traits: a systematic literature review. Management Review Quarterly. 2023:1-69.
35. Ghaffar AR, Melethil A, Adhami AY. A bibliometric analysis of inverse optimization. Journal of King Saud University-Science. 2023;35(7):102825.
36. Salleh NZ, Abdullah M, Ali A, Faisal F, Nor RM. Research trends, developments, and future perspectives in brand attitude: A bibliometric analysis utilizing the Scopus database (1944–2021). Heliyon. 2023;9(1):e12765.
37. Hussain SM, Ahmad N, Ahmed S. Applications of high-frequency data in finance: a bibliometric literature review. International Review of Financial Analysis. 2023;89(1):102790.
38. Nti IK, Adekoya AF, Weyori BA, Keyeremeh F. A bibliometric analysis of technology in sustainable healthcare: Emerging trends and future directions. Decision Analytics Journal. 2023;8(2):100292.
39. Uttam K, Rahul T. Consumer behavior from the lens of Bottom of the Pyramid: literature review and future agenda. Management Review Quarterly. 2023:1–31.
40. Bartolini M, Bottani E, Grosse EH. Green warehousing: Systematic literature review and bibliometric analysis. Journal of Cleaner Production. 2019;226:242–58.
41. Kumar S, Sureka R, Colombage S. Capital structure of SMEs: a systematic literature review and bibliometric analysis. Management Review Quarterly. 2020;70:535–65.
42. Ellegaard O. The application of bibliometric analysis: disciplinary and user aspects. Scientometrics. 2018;116(1):181–202.
43. Hernández-Hernández JA, Londoño-Pineda A, Cano JA, Gómez-Montoya R. Stakeholder governance and sustainability in football: A bibliometric analysis. Heliyon. 2023;9(8):1–18.
44. Boubaker S, Goodell JW, Kumar S, Sureka R. COVID-19 and finance scholarship: A systematic and bibliometric analysis. International Review of Financial Analysis. 2023;85:102458.
45. Aria M, Cuccurullo C. bibliometrix: An R-tool for comprehensive science mapping analysis. Journal of Informetrics. 2017;11(4):959–75.
46. Kaushal N, Kaurav RPS, Sivathanu B, Kaushik N. Artificial intelligence and HRM: identifying future research Agenda using systematic literature review and bibliometric analysis. Management Review Quarterly. 2023;73(2):455–93.
47. Kaiser M, Kuckertz A. Bibliometrically mapping the research field of entrepreneurial communication: where we stand and where we need to go. Management Review Quarterly. 2023:1-34.
48. Zhou L, Dong H, Tao Y, Ding Y, Lin H, Xie R. Global bibliometric and visual analysis of Chiari malformation. Journal of Neurorestoratology. 2023;11(4):100079.
49. Wilhelm MS, Varcoe K, Fridrich AH. Financial satisfaction and assessment of financial progress: Importance of money attitudes. Financial Counseling and Planning. 1993;4(1):181–98.

50. Wedig GJ. Risk, leverage, donations and dividends-in-kind: A theory of nonprofit financial behavior. International Review of Economics and Finance. 1994;3(3):257–78.
51. Shapira Z, Venezia I. Patterns of behavior of professionally managed and independent investors. Journal of Banking and Finance. 2001;25(8):1573–87.
52. Kothari S, Lewellen J, Warner JB. Stock returns, aggregate earnings surprises, and behavioral finance. Journal of Financial Economics. 2006;79(3):537–68.
53. Ariyabuddhiphongs V. Money consciousness and the tendency to violate the Five Precepts among Thai Buddhists. The International Journal for the Psychology of Religion. 2007;17(1):37-45.
54. Mann FD, Krueger RF, Vohs KD. Personal economic anxiety in response to COVID-19. Personality and Individual Differences. 2020;167:110233.
55. Mogaji E. Financial vulnerability during a pandemic: insights for coronavirus disease (COVID-19). Mogaji, E. 2020;2020(5):57–63.
56. Midões C, Seré M. Living with reduced income: an analysis of household financial vulnerability under COVID-19. Social Indicators Research. 2022;161(1):125-49.
57. Mensah C, Azila-Gbettor EM, Amissah EF, Addison E. Covid-19, financial anxiety and the psychological well-being of hotel workers. International Journal of Hospitality and Tourism Administration. 2023;24(1):142–65.
58. Xiao JJ, Meng K. Financial capability and financial anxiety: comparison before and during the COVID-19 pandemic. International Journal of Bank Marketing. 2024;42(6):1348-69.
59. Radzi NA, Hasbollah HR, Normaizatul Akma S, Hashim H, Ali AF. Wellness, Work and Employee Assistance Programs as Part of CSR Initiatives Among the Corporate Companies. Palarch's Journal of Archaeology Of Egypt/Egyptology. 2020;17(4).
60. Aumeboonsuke V, Caplanova A. An analysis of impact of personality traits and mindfulness on risk aversion of individual investors. Current Psychology. 2021;42(1):1-8.
61. Bazley W, Cuculiza C, Pisciotta K. Being Present: The Influence of Mindfulness on Financial Decisions. SSRN Electronic Journal. 2020 Dec.
62. Ng EC. Mindfulness and Buddhist economics in the financial market–generating Delta or Alpha? Society and Economy. 2018;40(4):515–29.
63. Tang N, Chen J, Zhang K, Tang TLP. Monetary wisdom: How do investors use love of money to frame stock volatility and enhance stock happiness? Journal of Happiness Studies. 2018;19:1831–62.
64. Tang TLP, Sutarso T, Ansari MA, Lim VKG, Teo TSH, Arias-Galicia F, *et al.* Monetary intelligence and behavioral economics across 32 cultures: Good apples enjoy good quality of life in good barrels. Journal of Business Ethics. 2018;148:893–917.
65. Tang TLP, Sutarso T, Ansari MA, Lim VK, Teo TS, Arias-Galicia F, *et al*. Monetary Intelligence and Behavioral Economics: The Enron Effect—Love of money, corporate ethical values, Corruption Perceptions Index (CPI), and dishonesty across 31 geopolitical entities. Journal of Business Ethics. 2018;148:919–37.
66. Maynard BR, Wilson AN, Labuzienski E, Whiting SW. Mindfulness-based approaches in the treatment of disordered gambling: A systematic review and meta-analysis. Research on Social Work Practice. 2018;28(3):348–62.
67. Shoham A, Gavish Y, Segev S. A Cross-Cultural Analysis of Impulsive and Compulsive Buying Behaviors among Israeli and U.S. Consumers: The Influence of Personal Traits and Cultural Values. Journal of International Consumer Marketing. 2015;27(3):187–206.
68. Lu W, Niu G, Zhou Y. Individualism and financial inclusion. Journal of Economic Behavior and Organization. 2021;183:268–88.
69. Lykes VA, Kemmelmeier M. What predicts loneliness? Cultural difference between individualistic and collectivistic societies in Europe. Journal of Cross-Cultural Psychology. 2014;45(3):468–90.
70. Dutta N, Mukherjee D. Cultural traits and stock market development: an empirical analysis. Journal of Entrepreneurship and Public Policy. 2015;4(1):33–49.
71. Kacen JJ, Lee JA. The Influence of Culture on Consumer Impulsive Buying Behavior. Journal of Consumer Psychology. 2002;12(2):163–76.
72. Ahmed RR, Streimikiene D, Rolle JA, Duc PA. The COVID-19 pandemic and the antecedants for the impulse buying behavior of US Citizens. Journal of competitiveness. 2020;12(3):5-27.
73. Bayuk J, Lee HC, Park J, Saka S, Talukdar D, Sinha J. Mindfully aware and open: Mitigating subjective and objective financial vulnerability via mindfulness practices. Journal of Consumer Affairs. 2022;56(3):1284–311.
74. Nadeem MA, Qamar MAJ, Nazir MS, Ahmad I, Timoshin A, Shehzad K. How investors attitudes shape stock market participation in the presence of financial self-efficacy. Frontiers in Psychology. 2020;11:553351.
75. Mahendru M, Sharma GD, Hawkins M. Toward a new conceptualization of financial well-being. Journal of Public Affairs. 2022;22(2):e2505.
76. Freshwater D, Sherwood G, Drury V. International research collaboration: Issues, benefits and challenges of the global network. Journal of Research in Nursing. 2006;11(4):295–303.
77. Gentina E, Daniel C, Tang TLP. Mindfulness reduces avaricious monetary attitudes and enhances ethical consumer beliefs: Mindfulness training, timing, and practicing matter. Journal of Business Ethics. 2021;173:301–23.
78. Langabeer JR. The Quest for Wealth: 6 Steps for Making Mindful Money Choices. CRC Press. 2022.
79. Pereira MC, Coelho F. Mindfulness, Money Attitudes, and Credit. Journal of Consumer Affairs. 2019;53(2):424–54.
80. Sun Y, Lam CB, Chan KKS, Li JB, Chung KKH. Trait mindfulness moderates the longitudinal association of family financial strain with perceived cognitive difficulties. Mindfulness. 2020;11:1267–74.
81. Faugère C. Applying mindfulness and compassion in finance. In: Finance reconsidered: New perspectives for a responsible and sustainable finance. 2016 Sep 2. p. 299-319.

82. Schomburgk L, Hoffmann A. How mindfulness reduces BNPL usage and how that relates to overall well-being. European Journal of Marketing. 2023;57(2):325–59.
83. Tang TLP, Sutarso T. Falling or Not Falling into Temptation? Multiple Faces of Temptation, Monetary Intelligence, and Unethical Intentions Across Gender. Journal of Business Ethics. 2013;116(3):529–52.
84. Lostutter TW, Enkema M, Schwebel F, Cronce JM, Garberson LA, Ou B, *et al.* Doing it for the money: The relationship between gambling and money attitudes among college students. Journal of Gambling Studies. 2019;35:143–53.