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Financial Inclusion and Financial Literacy among the Millennial Generation: A Bibliometric Study

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ABSTRACT

Financial literacy and financial inclusion are critical components of economic empowerment, particularly among the millennial generation, who are actively engaged with digital financial services. This study employs a **bibliometric analysis** using data exclusively from **Scopus** and analyzed with **VOSviewer** to map the intellectual structure, trends, and key research themes in financial literacy and inclusion. The findings reveal that **financial literacy is a dominant theme**, with strong interconnections to **financial behavior, financial knowledge, investment decision-making, and digital finance**. The **role of social media and fintech innovations** is increasingly shaping millennials' financial engagement, highlighting the need for **digital financial literacy**. Co-authorship analysis identifies **three primary research clusters**: (1) financial literacy and personal finance, (2) behavioral and methodological frameworks, and (3) technology acceptance in financial behavior. The study underscores **the interdisciplinary nature of financial literacy research**, incorporating insights from **economics, behavioral psychology, and technology adoption models**. Implications suggest the need for **updated financial education programs integrating investment literacy and digital finance competencies**. Future research should explore **regional financial inclusion disparities, the role of digital platforms in financial education, and emerging fintech trends influencing millennials' financial behavior**.

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1. INTRODUCTION

Financial inclusion is a pivotal element in fostering sustainable economic growth by ensuring that individuals and businesses have access to a full spectrum of affordable and timely financial services. According to [1] , financial inclusion not only involves access to bank accounts, credit, and insurance but also empowers consumers to participate fully in the financial system. Over recent decades, policy-makers and financial institutions have increasingly recognized that expanding access to financial services can reduce poverty, enhance economic stability, and stimulate entrepreneurship [2]. In today's rapidly evolving economic environment, technological innovations such as mobile banking and digital payment platforms have accelerated this drive toward inclusion, particularly in previously underserved communities. Nevertheless, despite these advancements, significant challenges remain in ensuring that all segments of society are adequately integrated into the financial ecosystem [3].

Closely intertwined with the concept of financial inclusion is financial literacy—the ability to understand, interpret, and effectively utilize financial information for sound decision-making. Financial literacy equips individuals with the skills needed to manage personal finances responsibly, plan for future needs, and avoid potentially harmful financial pitfalls [4]. Empirical evidence suggests that individuals with higher financial literacy are more likely to engage in behaviors that foster long-term financial stability, such as saving regularly, investing prudently, and avoiding high-cost debt [5]. In an era characterized by increasingly complex financial products and rapidly evolving digital platforms, possessing robust financial literacy has become essential. As financial markets grow more intricate, enhancing financial literacy emerges as a critical pathway to maximizing the benefits of financial inclusion initiatives and empowering consumers to navigate their financial lives confidently [6], [7].

The millennial generation, typically defined as individuals born between 1981 and 1996, represents a unique demographic that is reshaping the landscape of financial behavior. As digital natives, millennials have grown up with technology, which has fundamentally altered their approach to banking, investing, and personal finance management. Their comfort with digital tools has spurred the widespread adoption of online financial services, mobile banking, and fintech innovations [8]. Yet, despite their technological proficiency, many millennials contend with challenges such as substantial student debt, volatile job markets, and economic uncertainty, which can impede their full participation in traditional financial systems [9]. These challenges underscore the necessity for tailored financial literacy programs and innovative inclusion strategies that address the specific needs and behaviors of millennials, ensuring they are not left behind in the rapidly evolving financial landscape.

The interplay between financial inclusion and financial literacy is both complex and mutually reinforcing. While financial inclusion lays the groundwork by providing the necessary infrastructure for accessing diverse financial services, financial literacy empowers individuals to make informed choices regarding these services [10]. An informed consumer is better positioned to make decisions that lead to improved outcomes, such as responsible borrowing, effective saving, and prudent investing. Conversely, inadequate financial literacy can diminish the positive impacts of inclusion initiatives, leading to misinformed decisions and exposing individuals to financial vulnerabilities [11]. Recognizing this symbiotic relationship is crucial for the development of comprehensive policies that not only expand access to financial services but also enhance individuals' capacity to manage their financial affairs effectively, thereby contributing to overall economic resilience.

In recent years, bibliometric analysis has emerged as a powerful tool for mapping the evolution and structure of scholarly research. This methodological approach involves the systematic examination of publication trends, citation patterns, and collaborative networks, offering insights into the intellectual landscape of a given field. In the context of financial inclusion and financial literacy, bibliometric studies can reveal how these interrelated concepts have been developed, identify influential publications and authors, and uncover emerging research themes [12]. Such an approach is particularly valuable as the academic interest in financial topics continues to grow, especially with regard to the unique financial behaviors of the millennial generation. By synthesizing a vast and diverse body of literature across multiple disciplines, bibliometric analysis provides a comprehensive overview of past and current trends, setting the stage for informed discussions about future research directions.

Despite the growing interest in financial inclusion and financial literacy, especially as they relate to the millennial generation, the current body of literature exhibits several notable limitations. The rapid pace of technological innovation and the distinctive financial challenges faced by millennials have contributed to a fragmented research landscape. Many studies tend to focus on isolated aspects of financial behavior—either financial inclusion or financial literacy—without adequately exploring their interdependent nature. Moreover, while numerous empirical investigations have examined the impacts of digital financial services, there remains a dearth of comprehensive bibliometric analyses that consolidate findings from diverse regions and academic disciplines [13]. This fragmentation hampers our ability to fully understand how these critical themes interrelate and evolve over time, thereby limiting the formulation of holistic policies and educational strategies. Addressing these gaps is essential for advancing both academic inquiry and practical interventions aimed at enhancing the financial well-being of millennials.

The objective of this bibliometric study is to systematically map and analyze the scholarly literature on financial inclusion and financial literacy among the millennial generation. This study seeks to identify key trends, influential publications, and collaborative networks that have shaped the research landscape over time. By integrating insights from a wide array of academic sources, the study aims to highlight significant research gaps and emerging themes that warrant further investigation. Ultimately, the findings are intended to provide a comprehensive understanding of how financial inclusion and financial literacy have been conceptualized and operationalized in relation to millennial financial behavior. These insights are expected to inform future research endeavors, policy development, and educational initiatives designed to enhance the financial well-being and resilience of the millennial cohort.

2. LITERATURE REVIEW

Over the past few decades, extensive research has focused on the intertwined concepts of financial inclusion and financial literacy as critical components for enhancing individual and national economic well-being. Financial inclusion refers to the accessibility and usage of affordable financial products and services, while financial literacy involves the capacity to understand and effectively use financial information for decision-making [4]. Early studies laid the groundwork by exploring how increased access to formal financial services could alleviate poverty and drive economic growth [14]. For instance, policies promoting bank account ownership and microfinance have been linked with reduced income inequality and increased entrepreneurial activity in emerging economies [15]. These foundational works provided empirical evidence supporting the notion that expanding financial access is crucial for fostering inclusive economic development.

Parallel to the evolution of financial inclusion is the growing recognition of financial literacy as a necessary skill in today's complex financial landscape. Researchers have underscored that financial literacy is not merely about numeracy or basic economic understanding, but also involves a critical evaluation of financial products, risk management, and long-term financial planning [4]. Studies indicate that individuals with higher financial literacy are more likely to engage in beneficial financial behaviors, such as consistent saving, timely debt repayment, and informed investment decisions. Additionally, financial education programs have been shown to improve budgeting skills and reduce the propensity for risky borrowing behaviors. This body of literature consistently highlights that without a sound understanding of financial concepts, the benefits of financial inclusion initiatives may not be fully realized, as individuals might misuse or misinterpret the services available to them.

The millennial generation, broadly defined as those born between 1981 and 1996, presents a unique case in the discourse on financial inclusion and literacy. As digital natives, millennials have embraced technology at an unprecedented rate, transforming traditional financial behaviors. The rapid adoption of mobile banking, digital wallets, and online investment platforms reflects a shift in how this generation interacts with financial institutions [16]. However, while millennials exhibit a high degree of technological proficiency, they also face distinct challenges that complicate their financial decision-making. Many studies have pointed out that millennials are burdened by high levels of student debt, precarious employment conditions, and uncertain economic prospects, all of which may compromise their financial stability [17], [18]. This duality—technological adeptness on one hand and financial vulnerability on the other—suggests that conventional measures of financial literacy may need to be recalibrated to address the nuanced realities of millennial financial behavior.

The intersection of financial inclusion and financial literacy is particularly significant when examining the millennial demographic. While access to digital financial services has the potential to streamline transactions and improve financial management, the benefits of such access are contingent upon the user's understanding of these tools [19]. For example, digital platforms often involve complex fee structures and terms that, if not fully understood, can lead to inadvertent financial missteps. Researchers have found that when financial literacy is low, even innovative financial products can lead to adverse outcomes, such as over-indebtedness or misallocation of funds [20]. Conversely, enhanced financial literacy has been shown to improve the utilization of digital financial services, leading to better savings behavior and more informed borrowing decisions. This symbiotic relationship underscores the necessity for integrated policy approaches that simultaneously advance both financial inclusion and financial education.

Beyond substantive research on financial behaviors, methodological approaches have evolved significantly, with bibliometric analysis emerging as a vital tool for synthesizing the literature across diverse fields. Bibliometric methods allow researchers to quantitatively assess publication trends, citation networks, and the thematic evolution of research topics over time [12]. In the context of financial inclusion and literacy, bibliometric studies have helped delineate how these fields have matured and intersected with technological innovation and policy development. For example, bibliometric mapping can reveal the distribution of research outputs across regions, highlight influential works and authors, and identify underexplored areas that warrant further inquiry [21]. Such analyses are particularly valuable given the rapid growth of literature in these areas, as they provide clarity on where the research community has concentrated its efforts and where gaps remain.

Several studies have specifically employed bibliometric techniques to chart the intellectual landscape of financial research. [22] demonstrated how bibliometric indicators can track the evolution of research themes, thereby uncovering emerging trends that reflect shifts in academic and policy priorities. In the realm of financial inclusion and literacy, similar bibliometric approaches have uncovered a growing emphasis on digital transformation and its implications for economic participation. This shift is evident in the increasing number of publications that integrate discussions on fintech innovations, digital banking, and cybersecurity with traditional financial literacy metrics. By mapping these trends, researchers have been able to argue convincingly that modern financial challenges require an interdisciplinary perspective, combining insights from economics, information technology, and behavioral science.

The literature further suggests that the digital divide remains a critical issue in discussions of financial inclusion, even among technologically proficient groups like millennials. Despite widespread access to digital devices, disparities in digital skills and financial knowledge persist, particularly among those from lower socio-economic backgrounds. Several studies have highlighted that while technology can democratize access to financial services, it may also exacerbate existing inequalities if not paired with robust educational initiatives [4]. Consequently, researchers have called for targeted interventions that address both the supply side (availability of financial services) and the demand side (user competency and literacy) to ensure that digital advancements lead to equitable outcomes.

Moreover, comparative studies have shed light on the variation in financial inclusion and literacy across different regions and cultures. While some developed economies have managed to integrate advanced digital financial services with high levels of financial literacy, emerging economies often lag behind due to structural barriers and limited educational resources [23]. This regional disparity is particularly pertinent for the millennial generation, as the global economic crisis and varying fiscal policies have influenced the financial trajectories of young adults differently around the world. Such comparative analyses have enriched our understanding of how contextual factors, such as regulatory environments and cultural attitudes towards money, shape financial behaviors and outcomes.

3. METHODS

This study employs a bibliometric analysis to systematically map and evaluate the scholarly literature on financial inclusion and financial literacy among the millennial generation using data exclusively from the Scopus database. A structured search strategy was implemented on Scopus by combining key terms—such as "financial inclusion," "financial literacy," "millennial," and "digital banking"—with Boolean operators to capture the comprehensive range of relevant literature published in English. The search was limited to peer-reviewed journal articles, conference proceedings, and book chapters, ensuring a high-quality dataset while duplicates and non-relevant studies were rigorously excluded based on predefined inclusion and exclusion criteria. The curated dataset was then exported for analysis using VOSviewer, a specialized bibliometric software tool, which facilitated the visualization and mapping of co-authorship networks, citation patterns, and keyword co-occurrence clusters. This method allowed for the identification of prolific authors, leading institutions, and influential journals, as well as the uncovering of temporal trends and emerging themes within the field.

4. RESULTS AND DISCUSSION

Table 1. Top Cited Research

Citations	Authors and year	Title
277	[24]	In their own words: stressors facing medical students in the millennial generation
210	[25]	Millennials' career perspective and psychological contract expectations: Does the recession lead to lowered expectations?
186	[26]	Predictors of Compassion Fatigue and Compassion Satisfaction in Acute Care Nurses
72	[27]	Exploring job satisfaction and workplace engagement in millennial nurses
59	[28]	Trust in sharing encounters among millennials

Citations	Authors and year	Title
41	[29]	Cluster around Latent Variable for Vulnerability towards Natural Hazards, Non-Natural Hazards, Social Hazards in West Papua
39	[30]	Factors influencing individual in adopting eWallet
37	[31]	Correlates of Mental Health Symptoms Among US Adults During COVID-19, March–April 2020
37	[32]	Financial literacy among the millennial generation: Relationships between knowledge, skills, attitude, and behavior
34	[33]	Duration analyses of precision agriculture technology adoption: what's influencing farmers' time-to-adoption decisions?

Source: Scopus 2025

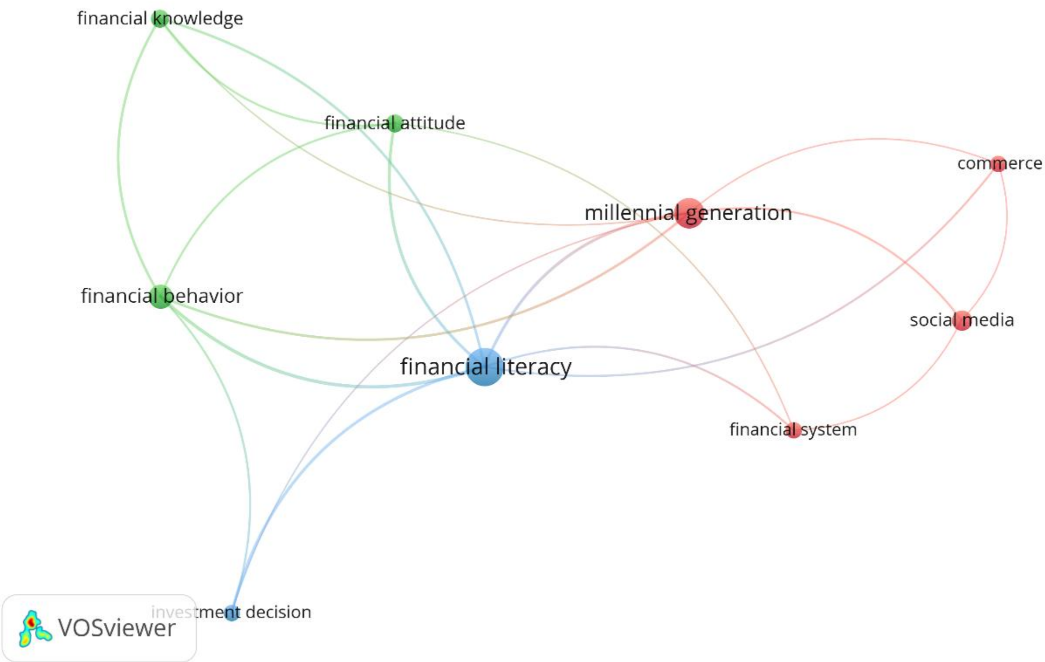

Figure 1. Network Visualization
Source: Data Analysis Result, 2025

The VOSviewer visualization presented in the image represents a bibliometric network analysis of keywords related to financial literacy and financial inclusion among the millennial generation. The network consists of different clusters, each depicted in distinct colors, illustrating the relationships between key terms found in the analyzed Scopus dataset. The size of the nodes indicates the frequency of keyword occurrences in the literature, while the thickness of the connecting lines represents the strength of co-occurrence between terms. The visualization provides a structured view of how academic research has interconnected various financial concepts, highlighting dominant themes and research trends.

One of the central nodes in the visualization is "financial literacy" (blue cluster), which has strong connections with "investment decision," "financial behavior," and "financial attitude." This indicates that much of the existing literature emphasizes how financial literacy influences individual financial behaviors and decision-making processes. The connections suggest that understanding financial concepts and principles is crucial for making sound investment decisions and maintaining responsible financial behavior, which is a key determinant of financial well-being, particularly among millennials. The blue cluster highlights a research focus on individual financial competencies and their impact on economic choices.

The red cluster is centered around the "millennial generation" and its links with "social media," "commerce," and "financial system." This cluster suggests a strong interest in how millennials engage with digital financial tools, e-commerce, and social media in relation to financial decision-making. Given that millennials are digital natives, their financial behaviors are increasingly influenced by online platforms and financial technologies, which may shape their financial inclusion and literacy levels. The link between "millennial generation" and "financial system" implies that researchers are also exploring how this demographic interacts with formal financial institutions and digital banking services.

The green cluster, which includes "financial knowledge," "financial behavior," and "financial attitude," represents another crucial theme in the literature. This cluster underscores the psychological and educational aspects of financial decision-making, indicating that financial behavior is not solely influenced by access to financial services but also by individual knowledge and attitudes toward money management. The presence of strong connections among these nodes suggests that financial education initiatives play a crucial role in shaping responsible financial behaviors. Overall, the visualization reveals an interconnected research landscape where financial literacy, millennial financial behavior, digital engagement, and financial decision-making are central themes in scholarly discourse.

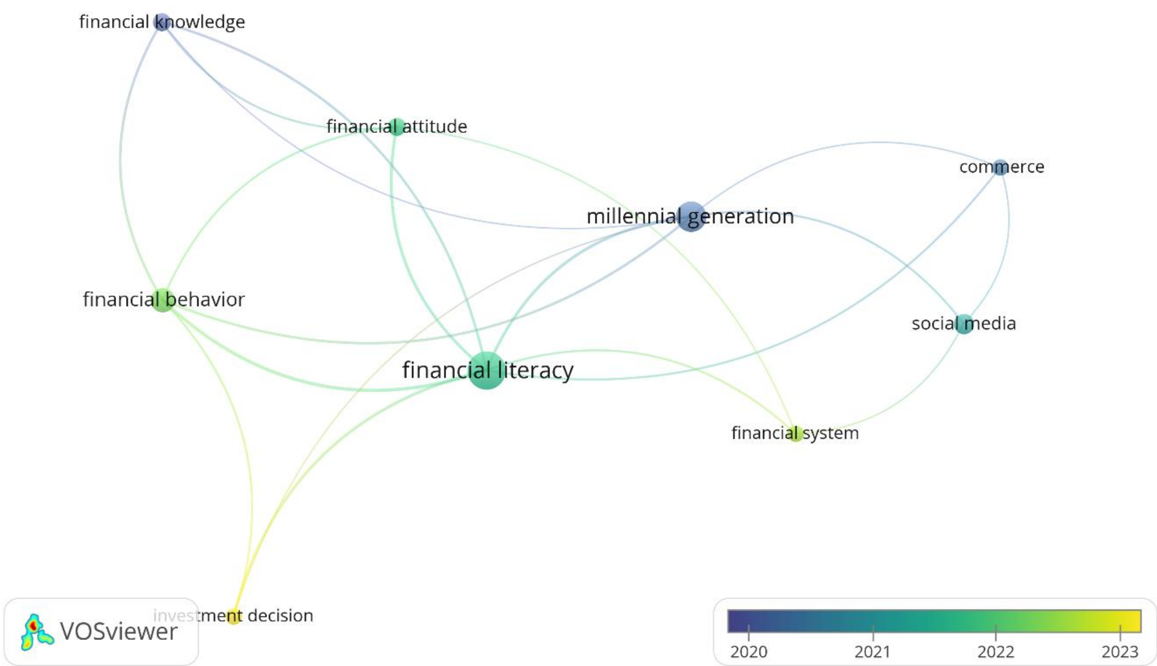

Figure 2. Overlay Visualization
Source: Data Analysis Result, 2025

The VOSviewer visualization illustrates a temporal bibliometric network of keywords related to financial literacy, financial inclusion, and millennial financial behavior. The color gradient (ranging from blue to yellow) represents the average publication year of each keyword, with blue indicating older research (2020) and yellow representing more recent studies (2023). The node size reflects the frequency of keyword occurrences in the dataset, while the connecting lines signify co-occurrence relationships between terms. The visualization reveals a progressive shift in research focus, particularly highlighting the evolving discourse around financial literacy and its link to millennial financial behavior in the digital economy.

The central theme of financial literacy (green) remains a dominant area of research, with strong connections to financial behavior, financial attitude, and financial knowledge. These terms, which appear in shades of green to yellow, indicate that studies on how individuals' financial knowledge and attitudes influence their behavior have been gaining momentum, especially in recent years. Notably, investment decision, one of the newest terms (yellow), suggests that recent research has been exploring how financial literacy influences millennials' investment choices. This reflects the rising interest in financial decision-making in the era of digital investment platforms and fintech innovations.

On the other hand, millennial generation, commerce, and social media appear in shades of blue to light green, suggesting that studies on millennials' engagement with digital finance and commerce were more prominent in earlier years (2020–2021) but have since evolved towards more specialized topics like financial decision-making. The presence of social media indicates that digital platforms play an increasing role in shaping millennials' financial literacy and behaviors, which aligns with recent trends in influencer-driven financial education and digital banking adoption.

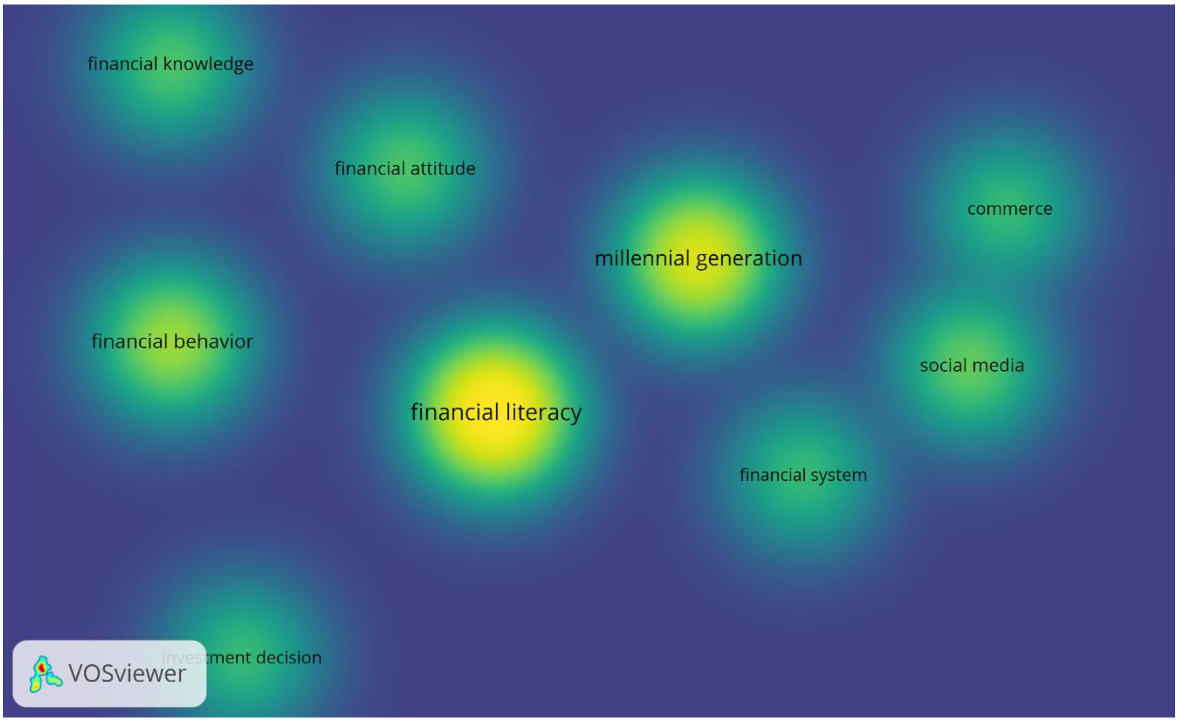

Figure 3. Density Visualization
Source: Data Analysis, 2025

The VOSviewer heatmap visualization represents the intensity of research focus on key terms related to financial literacy and financial inclusion among the millennial generation. The color gradient from blue to yellow indicates the density of occurrences, with yellow representing the most frequently appearing keywords in the analyzed Scopus dataset. The most prominent node in the visualization is "financial literacy," indicating that this concept is central to the literature and has been extensively studied. Another highly significant area is "millennial generation," suggesting a strong research focus on how financial literacy and financial behavior specifically impact this demographic. The brightness of these nodes implies that they are core themes driving academic discussions in this domain.

Other keywords such as "**financial behavior,**" "**financial attitude,**" **and** "**financial knowledge**" also appear as moderately strong nodes, signifying their close association with financial literacy. Additionally, "**investment decision**" appears in the lower section of the map, reflecting its growing but comparatively less intense research focus. The presence of "**social media**" **and** "**commerce**" in the visualization highlights an increasing interest in digital platforms and their role in shaping financial behaviors among millennials. The "**financial system**" node suggests an ongoing discourse on how millennials interact with traditional and digital financial institutions.

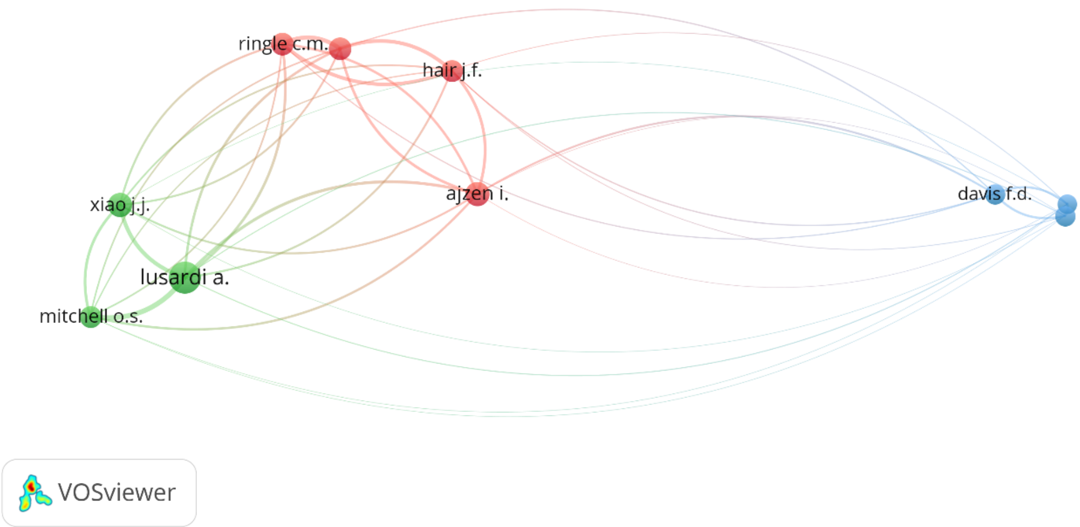

Figure 4. Author Collaboration Visualization
Source: Data Analysis, 2025

The VOSviewer co-authorship network visualization showcases the most influential authors in the research landscape of financial literacy and financial inclusion, categorized into different clusters based on citation relationships. The blue cluster highlights Davis F.D., a key figure in technology acceptance and financial behavior studies, with extensive citation connections, indicating a significant impact on the field. The green cluster, featuring Mitchell O.S., Lusardi A., and Xiao J.J., suggests a strong focus on financial literacy, personal finance, and behavioral economics, as these authors are well known for their contributions to financial education and decision-making research. The red cluster, including Ringle C.M., Hair J.F., and Ajzen I., appears to be centered on methodological frameworks and psychological theories related to financial behavior, such as the Theory of Planned Behavior (Ajzen) and structural equation modeling (Ringle & Hair). The interconnections among these clusters indicate that financial literacy research draws from multiple disciplines, including psychology, finance, and technology adoption, with Davis F.D.'s work serving as a bridge between financial behavior and technological influence

Discussion

1. Interconnections Between Financial Literacy and Financial Inclusion

The bibliometric analysis conducted in this study reveals a strong interrelationship between financial literacy and financial inclusion, particularly in the context of the millennial generation. The keyword co-occurrence analysis suggests that financial literacy plays a pivotal role in enabling financial inclusion, supporting previous research findings that individuals with higher financial knowledge are more likely to engage in banking, investment, and other financial services [4]. As evident from the network visualization, key concepts such as financial knowledge, financial behavior, and financial attitude are closely linked to financial literacy, reinforcing the argument that understanding financial principles is a prerequisite for making sound financial decisions.

The visualization further highlights investment decision as a growing research focus, suggesting an increasing interest in how financial literacy influences millennials' ability to manage assets and investments. This is particularly relevant given the rise of digital investment platforms and fintech innovations, which have made financial markets more accessible but also more complex. The role of financial literacy in digital finance is becoming more significant, as millennials—despite being tech-savvy—may still struggle to make informed financial choices due to a lack of deeper financial knowledge [34]. This finding aligns with Lusardi and Mitchell's (2014) argument that even when financial services are widely available, individuals may still face barriers to effective participation if they lack financial literacy.

2. Millennials and the Digital Financial Ecosystem

The temporal analysis of keywords suggests a shift in focus toward digital financial engagement, social media, and e-commerce, particularly in recent years (2022–2023). Millennials, as digital natives, are increasingly using digital payment systems, online banking, and investment applications, which necessitate a different approach to financial education. This observation aligns with previous research emphasizing the importance of digital financial literacy—the ability to navigate online financial tools effectively. The increasing prominence of social media as a co-occurring keyword also suggests a growing academic interest in the role of influencers, online financial education, and peer-to-peer knowledge sharing in shaping millennials' financial behaviors.

Social media platforms have become important channels for financial education, but they also present risks, such as misinformation and financial scams. The network analysis reveals a connection between financial literacy and social media, indicating a need for further research on how digital platforms impact financial decision-making. While platforms like TikTok, Instagram, and YouTube are now commonly used to disseminate financial advice, the credibility of such information remains a concern. Previous studies suggest that while social media can enhance financial awareness, it may not always contribute to financial literacy in a meaningful way. Therefore, future research should explore ways to harness digital platforms for effective financial education while minimizing the spread of misleading financial content.

3. Theoretical Contributions and Author Networks

The co-authorship analysis reveals three primary clusters of researchers contributing to financial literacy and financial inclusion studies. The green cluster, consisting of scholars such as Mitchell O.S., Lusardi A., and Xiao J.J., reflects a strong focus on financial literacy and personal finance research. These authors have extensively explored how financial knowledge and behaviors impact financial decision-making, retirement planning, and long-term financial stability [4]. Their influence in the field underscores the critical role of financial education in fostering financial well-being. The red cluster, including Ringle C.M., Hair J.F., and Ajzen I., represents a methodological and psychological perspective, emphasizing structural equation modeling and behavioral theories. Ajzen's Theory of Planned Behavior (TPB) is frequently cited in financial literacy research, demonstrating its relevance in understanding how attitudes and perceived behavioral control influence financial decisions [35]. The presence of these researchers suggests that financial literacy research is not only grounded in economic theory but also in behavioral psychology and advanced statistical modeling techniques. The blue cluster, dominated by Davis F.D., reflects a technology-driven research approach, particularly the Technology Acceptance Model (TAM). Davis' influence suggests that many financial literacy studies integrate technology adoption theories, which is essential given the increasing role of fintech and digital banking. This finding aligns with previous research emphasizing that financial literacy must now incorporate digital competencies, as fintech solutions reshape how individuals interact with financial systems.

5. Implications for Policy and Education

The findings from this study have important implications for policymakers, educators, and financial institutions seeking to enhance financial inclusion and literacy among millennials. The strong relationship between financial literacy and investment decision-making suggests that policymakers should focus on integrating investment education into financial literacy programs. Many millennials are now engaging in digital investment platforms, cryptocurrency trading, and decentralized finance (DeFi) markets, yet research suggests that they may not fully understand the risks involved. Tailored financial education programs should therefore emphasize risk management, long-term financial planning, and responsible investing. Additionally, the role of social media as a source of financial information highlights the need for regulatory oversight and digital literacy initiatives. Governments and financial regulators should work towards establishing guidelines for financial content shared on social media platforms, ensuring that individuals receive accurate and unbiased information. Partnerships between financial institutions and educational institutions could also leverage social media as an educational tool while mitigating misinformation risks.

6. Future Research Directions

Based on the bibliometric findings, several **key research gaps** and future directions emerge. First, **the integration of digital financial literacy** into traditional financial education requires further exploration. While existing research focuses on financial knowledge and behaviors, **there is limited work on how digital competencies impact financial inclusion**. Future studies should examine **how millennials acquire digital financial literacy skills and how these skills influence their financial well-being**. Second, **the relationship between financial literacy and financial well-being in different economic contexts** remains underexplored. While much research focuses on high-income economies, **there is limited bibliometric evidence on developing economies and how financial inclusion efforts impact millennials in these regions**. Future research could use **regional bibliometric analyses** to compare trends across different economies and assess how policy interventions influence financial behavior. Lastly, while **co-authorship networks indicate an interdisciplinary approach**, more collaboration between **technology experts, behavioral scientists, and financial educators** could enhance research outcomes. The influence of **Ajzen's TPB and Davis' TAM models** suggests that behavioral and technological factors play a crucial role in financial literacy studies. Future research should seek **to integrate behavioral**

finance, psychology, and technology acceptance theories into financial inclusion research to develop a more holistic understanding of how millennials interact with financial services.

5. CONCLUSION

The bibliometric analysis highlights that financial literacy is a central theme in academic research, with growing intersections in investment decision-making, digital engagement, and social media influence. The study's findings reinforce that millennials' financial behaviors are shaped not only by their knowledge and attitudes but also by technological advancements and social influences. Co-authorship patterns reveal an interdisciplinary research approach, with contributions from economists, psychologists, and technology adoption scholars. This study provides valuable insights for policymakers, financial educators, and researchers, emphasizing the need for updated financial literacy programs that incorporate digital competencies and investment knowledge. As financial technologies continue to evolve, the academic community must adapt research frameworks to reflect changing financial landscapes and behaviors. Future bibliometric studies should expand on these findings by incorporating regional analyses, emerging digital finance trends, and interdisciplinary methodologies to further enhance understanding in this crucial domain.

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