



FINANCIAL LITERACY AND FINANCIAL WELL-BEING: A SYSTEMATIC LITERATURE REVIEW AND FUTURE RESEARCH AGENDA

NEHA GUPTA^{1*} and ASHUTOSH VASHISHTHA²

¹School of Business, Shri Mata Vaishno Devi University. (*Corresponding Author)

²Professor, School of Business, Shri Mata Vaishno Devi University.

Abstract

Purpose- The present study aims to identify the trends and development of the research in the field of Financial Literacy and Financial Well-being and suggest future research opportunities. **Methodology-** Authors employ systematic literature review techniques and the theory-characteristics-context-methodology (TCCM) framework on an array of 277 publications retrieved from Scopus data base related to chosen field of research over the duration of 1988 to 2022. **Findings-** The study assesses the current state of academic research on the topic while discovering the most contributing authors, countries, institutions, and articles and mapping the trends in the research area to streamline the path for future research. **Research Limitations/ Implications-** The current research employs the bibliometric analysis and therefore usual limitations related to this technique may there. Even though the chosen database, Scopus, compiles the vast majority of the most significant publications in the marked research area, it is possible that few pertinent publications could not be retrieved from the selected database. **Originality- Financial Literacy And Financial Well-being** continue to be largely ignored, and the terms of financial literature are less understood despite the increasing cases of financial distress and financial fraud all over the world. This is a unique study which examine the domain of Financial Literacy and Financial Well-being together employing bibliometric analysis followed by the TCCM framework.

Keywords: Financial Literacy, Financial Well-being, bibliometrics, TCCM.

JEL Classification: C-18, C-88, D-14, G-18

1. INTRODUCTION

Financial literacy, delineated as the proficiency to comprehend and adeptly apply an array of financial skills encompassing personal financial management, budgeting, and investing, has burgeoned into an indispensable asset in the contemporary, fast-evolving digital economy (Graña-Alvarez et al., 2024; Akpuokwe et al., 2024; Lone and Bhat, 2024; Arquero et al., 2024; Haung et al., 2024). As technological innovations incessantly reshape the financial landscape, individuals encounter increasingly intricate financial products and services, mandating an elevated level of financial sagacity (Panos and Wilson, 2020). Despite the escalating importance of financial literacy, it remains a nascent competency among the broader populace, thereby engendering significant perils to their financial well-being.

The seamlessness of online transactions coupled with the proliferation of credit facilities has simplified spending and borrowing, yet these conveniences often beget heightened financial susceptibility (Li et al., 2020; Agarwal and Nalwaya, 2021; Bojang and Ceesay, 2020). In an economy driven by capitalism where consumerism is vigorously endorsed, individuals might make financial decisions without a holistic understanding of the long-term ramifications. This deficiency in financial literacy can precipitate detrimental financial behaviors such as overindulgence in spending, the accrual of exorbitant debt levels, and inadequate savings for future exigencies, all of which can imperil an individual's financial well-being (Kaiser and Menkhoff, 2017; Lone and Bhat, 2024). Financial well-being is characterized as a state where an individual can comprehensively fulfil their present and ongoing financial obligations, harbor a sense of security regarding their financial future, and possess the liberty to make choices that



enhance their quality of life (Wijaya et al., 2024; Pitthan and De Witte, 2024; Sajid et al., 2024; Nutassey et al., 2024). It transcends financial stability, encompassing a holistic condition where individuals feel in command of their finances and confident in their financial decisions. Nevertheless, the attainment of this state is influenced by a myriad of factors, including financial literacy (Perry et al., 2024; Karki et al., 2024; Munir et al., 2024; Chetioui et al., 2024; Chaity et al., 2024).

Research posits that financial literacy is a pivotal determinant of financial well-being, as it endows individuals with the knowledge and skills requisite for making informed and efficacious financial decisions (Arjun and Subramanian, 2024; Louis et al., 2024). Alongside personal biases and psychological determinants that shape financial decisions, external factors such as demographic characteristics (e.g., age, education, income level), economic variables (e.g., inflation, unemployment rates), and the overarching level of financial literacy within a society also wield considerable influence. Comprehending these factors is vital for devising strategies aimed at augmenting financial literacy and, by extension, enhancing financial well-being across diverse populations (Graña-Alvarez et al., 2024; Idris et al., 2023; Zaimovic et al., 2023). As the financial milieu continues to metamorphose, nurturing financial literacy transcends individual responsibility, emerging as a societal imperative to safeguard economic stability and personal financial health.

The 2008 Global Financial Crisis, followed by the European Financial Crisis, disrupted economies and illuminated the pervasive lack of financial knowledge among investors and the general populace. More recently, the COVID-19-induced supply chain disruptions (Sudan and Taggar, 2021) have once again destabilized economies and financial markets globally, underscoring the critical importance of grasping the role of financial literacy in economic recovery. This scenario has also placed the onus on academicians and researchers to contribute to financial literacy and well-being discourse. In recent years, the domains of financial literacy and financial well-being have garnered substantial scholarly attention (Wijaya et al., 2024; Pitthan and De Witte, 2024; Sajid et al., 2024; Nutassey et al., 2024; Perry et al., 2024; Karki et al., 2024; Munir et al., 2024; Chetioui et al., 2024; Chaity et al., 2024), with a predominant focus on aspects such as religiosity (Wijaya et al., 2024), heuristics awareness (Pitthan and De Witte, 2024), financial confidence (Sajid et al., 2024), artificial intelligence (De La Rosa and Bechler, 2024), financial inclusion (Nutassey et al., 2024), financial anxiety (Perry et al., 2024), financial information ignorance (Barrafrem et al., 2024), financial training literacy (Karki et al., 2024), and stock market participation (Munir et al., 2024). Previous studies have undertaken Systematic Literature Reviews (SLRs) of financial literacy (Arjun and Subramanian, 2024; Louis et al., 2024; Graña-Alvarez et al., 2024; Idris et al., 2023; Zaimovic et al., 2023) and financial well-being (Bashir and Qureshi, 2023; Hwang and Park, 2023; Kaur et al., 2021).

However, a dearth of studies has conducted SLRs exploring the nexus between financial literacy and financial well-being (Hwang and Park, 2023). There is a lack of understanding regarding integrating financial literacy and well-being in theoretical and practical contexts, particularly during the recent pandemic (Hwang and Park, 2023). Earlier studies have predominantly analyzed the influence of financial literacy on financial well-being through quantitative analysis (Vörös et al., 2021; Lone and Bhat, 2024; Lusardi and Streeter, 2023). Nonetheless, studies that have employed bibliometric and network analyses alongside comprehensive SLRs to identify theoretical underpinnings, future research themes, unexplored characteristics and contexts, and frameworks are scant. This study aims to employ bibliometric and network analysis techniques in conjunction with SLR to delve into Financial Literacy and Well-being (FLW) and suggest potential avenues for future research.

Consequently, this study seeks to address the following research questions:

- RQ1:** What is the current state of research on FLW, encompassing the chronological distribution of publications, publication types, author performance, prolific journals, most productive geographical regions, and the co-occurrence network of keywords?
- RQ2:** What is the current status of characteristics, contexts, methodologies, and theories utilized in FLW?
- RQ3:** What are the potential research inconsistencies and future research directions in FLW for researchers and academicians to explore?

The remainder of the paper is structured as follows: Section 1 elucidates the introduction and background of Financial Literacy and Financial Well-being; Section 2 delves into the research methodology with a focus on data collection and analysis; Section 3 encapsulates the results, and Section 4 succinctly discusses the conclusion, limitations, and future research directions of the study.

2. MATERIALS AND METHODS

SLRs are commonly used in academic and scientific research to provide a thorough structure for analyzing the existing literature in a particular field (Sudan et al., 2023; Bueno et al., 2019; Følstad & Kvale, 2018). Using SLRs requires a systematic and coordinated process to identify, choose, evaluate, and combine relevant material that is currently available (Denyer & Tranfield, 2009).

The objective of SLRs (Koseoğlu et al., 2016) is to conduct a comprehensive and objective analysis of the existing literature based on solid evidence. Academics and researchers have acknowledged that implementing Systematic Literature Reviews (SLRs) offers numerous advantages. These include clear and readily available methods for evaluating a particular research problem (Macpherson & Holt, 2007; Deng, 2011), decreased selection bias (Denyer & Tranfield, 2009), and the ability to identify research gaps in a specific field (Sudan et al., 2023).

Significant research papers published in prominent business journals have utilized SLRs to perform thorough, high-quality reviews (Sudan et al., 2023; Sharma et al., 2020; Dabić et al., 2020; Gupta et al., 2020). This study employed SLRs to provide a thorough and organized assessment of the literature on FLW, conducted a thorough analysis based on a review of existing literature, and presented a plan for future research. The theoretical assessment of FLW was conducted using the seven-step technique outlined by Sudan et al. (2023) and Sharma et al. (2020).

2.1 Research Protocol

2.1.1 Research Question Formulation

A comprehensive and evidence-based review was undertaken to identify shortcomings in the research and propose innovative research propositions and arguments (Srivastava et al., 2020). To fully comprehend the existing literature, it is necessary to formulate clear and specific research questions. The study issue about FLW was formulated by a cooperative endeavor comprising scholars, researchers, and finance industry professionals (Srivastava et al., 2020; Adams et al., 2016; Sudan et al., 2023). This study investigates the following research question: "What are the current trends in the field of FLW that need to be further explored in future research?"



2.1.2. Inclusion Criteria

Choosing a database containing a comprehensive compilation of pertinent literature is essential when conducting an SLR analysis of a research question (Durán-Sánchez et al., 2017). In the past, research on SLRs has been identified and selected from various sources, including the Web of Science (WOS), SCOPUS, and Google Scholar (Harzing & Alakangas, 2015; Sharma et al., 2020). Nevertheless, this investigation implemented the SCOPUS database as a search boundary to circumvent potential duplicates and non-academic sources in contrast to Google Scholar. Scopus is renowned for its reliability and curated nature (Harzing & Alakangas, 2015). It contains over 7000 high-quality journals and 82 million documents (Elsevier, 2022). The SCOPUS database was more appropriate due to its prolonged association with the humanities and social sciences.

Additionally, the research employed a variety of search criteria to identify and select the most pertinent documents (Natalicchio et al., 2017) and provided a comprehensive examination of FLW. As a result, the search keywords were mountaineering, wellness tourism, adventure tourism, and tourism. Nevertheless, the selection of search articles could not have been restricted by a specific time frame; as a result, no such restriction was imposed.

2.1.3. Search Strategy

The primary emphasis is on exploring the presence of specific search terms in the title, abstract, and keywords to provide an initial sample (Bindra et al., 2022; Danese et al., 2018). The search terms utilized in the SCOPUS database include the keywords comprising "Financ* literacy" OR "Financ* knowledge" OR "Financ* education" OR "Financ* capability*" OR "Financ* ability*" OR "Financ* skill*" OR "Financ* training" AND "Financ* well-being" OR "Financ* well-being" OR "Financ* well being" OR "Financ* wellness" OR "Financ* health" OR "Financ* satisfaction" over the subfields "title, abstract, and keyword" to provide 319 articles extracted in the initial phase.

2.1.4. Exclusion Criteria

The exclusion criteria were used to conduct an initial assessment that involved an in-depth evaluation to identify more relevant and appropriate research papers. First and foremost, this FLW review did not include conference proceedings, editorials, or extended abstracts but scholarly journal articles, books, and book chapters (Ng, 2022; Sharma et al., 2020a). Second, the literature search has been restricted by including only high-quality publications (Sudan et al., 2023), which also involved the removal of duplicates (De Bruyn et al., 2023). Third, the analysis was refined to concentrate on English and Business and Management domains to ensure accuracy and comprehensiveness. These criteria were satisfied by articles that comprised the sample.

2.1.5 Selecting Relevant Studies

After establishing inclusion and exclusion criteria, the assessment procedure has become more rigorous and comprehensive. Consequently, the initial phase entailed meticulously examining the titles, abstracts, and a concise summary of the introduction section of 319 documents. The initial screening procedure was adaptable to assess the study's relevance to the research query. Locating all pertinent studies for the FLW review was the primary objective. This led to the exclusion of studies that concentrated on financial aspects other than FLW. The identification of 300 research articles was the outcome of this. In the subsequent phase of primary screening, academicians, industry experts, and finance researchers collaborated to rigorously review all 300 research articles by analyzing the full text of the documents. A total of 290 articles were



selected after two rounds of initial screening. Titles, abstracts, and full-text documents were meticulously examined during the final round to incorporate pertinent studies. The total number of articles detected was 269. Eight additional articles were identified after thoroughly examining the selected articles' reference lists. Furthermore, two academic specialists meticulously reviewed the list to ensure no pertinent articles were left out (Nofal et al., 2018). Following this, eight additional provisions were incorporated. Following an exhaustive evaluation procedure, 277 articles of exceptional quality were chosen.

2.1.6. Extraction, Analysis, and Synthesis

VOSviewer software has been employed to compile a variety of bibliometric parameters, such as the number of documents, categories of publications, years of publication, keywords, authors, titles, and originating countries. These parameters are obtained through bibliometric analysis (Atsız et al., 2022; Ng, 2022). Since the 1980s, bibliometric methods have been employed in the fields of financial literacy (Goyal & Kumar, 2021; Ansari et al., 2022; Ingale and Paluri, 2022) and financial well-being (Singh and Malik, 2020; Nguyen, 2022; Kaur et al., 2021). Consequently, bibliometric and network analyses have been conducted on various financial aspects (Baker et al., 2020; Goodell et al., 2023; Zabavnik and Verbič, 2021). The VOSViewer software was employed to visually represent the scientific attributes of the publications and identify the research's constraints, thereby conducting a bibliometric analysis (Sharma et al., 2020a; Van Eck & Waltman, 2009). Subsequently, methodologies such as co-citation analysis, most cited articles, most productive countries, most influential journals, keyword co-occurrence, and bibliographic coupling were employed to investigate the relationships among bibliographic components (keywords, documents, authors, sources, countries, and so forth). Additionally, an SLR was implemented to consolidate the theory and evaluate tourism measures, contextual information of the selected articles, and methodological characteristics (Bindra et al., 2022; Sudan et al., 2023). This was achieved by considering the theoretical attributes, industry type, and country of origin. These analyses provide data on knowledge gaps and integrative frameworks that contribute to accumulating a comprehensive corpus by identifying current trends, cognitive structure, recent developments, and future orientations.

3. RESULTS

3.1. Trends in Publications

Over the last 25 years (1998–2022) research in the area of Financial Literacy and Financial Well-being has produced about 277 articles. The growing interest of researchers witnessed a sudden outburst of research papers related to financial literacy and financial well-being in 2019. With the initial article (Parrotta & Johnson, 1998) being published in 1998, the field did not witness any major growth for the till 2013 when suddenly 8 articles were published. The governments of many countries initiated and expanded the Financial Literacy campaign after the meltdown of the global economies due to the US and European financial crisis with the purpose of educating the investors about the risk in financial markets. The same can be seen in Fig. 1 shows that the years following the financial crisis witnessed surging interest in the area, doubling the article count to 8 in 2013 from 4 in 2012 and further rising to 18 publications in 2015. The publications number dwindled to 8 in 2016, then increased to 15 publications in 2017 and remained same in 2018, however it peaked to 28 publications in 2019. The year 2020 observed an altogether new scenario when the pandemic hit the world, forcing the governments to announce unprecedented nationwide lockdowns. The financial markets turmoil and economic slowdown followed but the publications in Financial Literacy and Financial Well-

being witnessed the impressive growth with number of research articles reaching 48 in 2020, 52 in 2021, and touched 50 till 5 August 2022. Financial Literacy and Financial Well-being continue to garner the interest and attention of academic world. Figure 1 depicts the trends of publications in the marked research area for a period of 25 years.

3.2. Country and Institution of Authors

277 publications on Financial Literacy and Financial Well-being have been submitted by 567 academic organizations across 64 countries. As is evident from Table I about 42.6% of the total publications are from the United States (n=118) exhibiting a paramount interest in the topic. Followed by India contributing 29 publications (10.47%) and Malaysia ranking third with 28 publications (10.10%).

Australia, China, Brazil, Canada, United Kingdom, Indonesia, and Portugal together produced a total of 69 publications covering nearly 25% of the total publications in the field. In addition to the above, some countries that need to be highlighted for their contribution to the field would include South Africa, the Czech Republic, South Korea, Germany, and Hong Kong, contributing about 9% of the articles (n=6,5,5,4,4 respectively).

Of the above list, 6 are Asian countries with 85 publications accounting for about 30.68% of the total reflecting the growing interest of researchers in these countries. In addition, amongst the top 15 countries, 4 even made it to the top most financially literate countries according to the report on “Literacy Rates Around the world”, where Canada has 68%, the UK has 67%, Germany 66%, and Australia 64% of financial literacy rates (Wafula, 2022). Figure 2 shows the most productive countries (meeting the threshold of at least 5 documents) and the strength of their links with other nations.



Figure 1: 25 years evolution of Financial Literacy and Financial Well-being publications

(Source: Scopus)

The marked research area has been actively researched in various universities across the world, contributing their parts in exploring and strengthening the research on the topic. The top institutions with 13 publications each are “University of Rhode Island”, “Kansas State University”, and “Universiti Putra Malaysia”. Of these, two are US-based institutions while the third is in Malaysia. As a matter of fact, out of the top 10 most productive institutions, 8 belong to the US, confirming that the US is the most actively contributing country. The last entry in the list of top 10 extensive institutions is a European institution “Linkoping University” of Sweden with 5 publications.

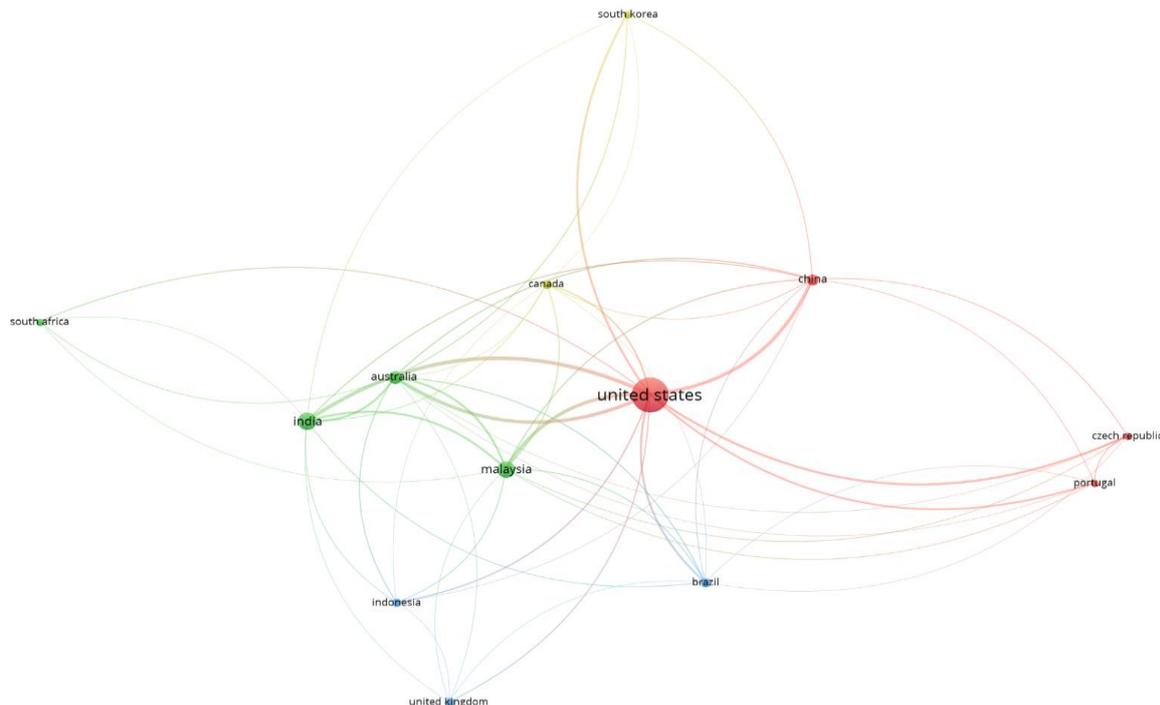


Figure 2: Citation network of countries, created using Vos viewer

Table I: Countries and Institutions with the highest number of publications in the marked area

	Countries			Institutions		
		N	%		N	%
1	United States	118	42.59	University of Rhode Island	13	4.69
2	India	29	10.47	Kansas State University	13	4.69
3	Malaysia	28	10..10	Universiti Putra Malaysia	13	4.69
4	Australia	17	6.13	University of Georgia	9	3.25
5	China	12	4.33	Iowa State University	8	2.89
6	Brazil	9	3.25	University of Arizona	7	2.53
7	Canada	9	3.25	University of Alabama	6	2.17
8	United Kingdom	9	3.25	George Washington University	6	2.17
9	Indonesia	7	2.53	University of Maryland	5	1.8
10	Portugal	6	2.17	Linkoping University	5	1.8

Note: Table I represents the top 10 countries and institutions ranked in accordance with the number of publications in the research field, based on the data collected from the Scopus database. The percentage included in the table is based on the total no. of publications considered as a sample for the study (N=277).



3.3. Prolific Journals

The 277 publications that were examined have been taken from 163 journals. The top journals that communicated the articles on Financial Literacy and Financial Well-being are in Table II. The top 13 journals, which account for 36.82% of the total, have published 102 of the total number of articles. Financial Literacy and Financial Well-being, the marked research area is covered under the subject domain of economics and econometrics followed by psychology, social sciences, and finance. Some interest in the research area can also be noticed in the domains of marketing, business, management & accounting, and arts & humanities.

With 17 published articles (Ammerman & Stueve, 2019; Atlas et al., 2019; Cao et al., 2020; Dowling et al., 2009; Fan & Park, 2021; Garman et al., 1999; Huang et al., 2018; Huston, 2015; Johnson et al., 2021; Kim et al., 2021; Loibl & Hira, 2005; McGregor, 2020; Parrotta & Johnson, 1998; Prawitz & Cohart, 2014; Robb & Woodyard, 2011; Seay et al., 2015; Xu, 2018), the “Journal of Financial Counseling & Planning” is the most prolific journal, followed by the “Journal of Family and Economic Issues” publishing 16 articles (Anvari-Clark & Ansong, 2022; Birkenmaier, Rothwell, et al., 2022; Chen & Zurlo, 2022; Fan & Henager, 2022; Gerrans et al., 2014; Gutter & Copur, 2011; Joo & Grable, 2004; LeBaron & Kelley, 2021; J. M. Lee et al., 2020; S. T. Lee & Kim, 2021; L’Esperance, 2020; Lind et al., 2020; Montalto et al., 2019; Robb et al., 2019; Santos et al., 2022; Tharp et al., 2020) both sharing the same publisher - Springer. Both journals cover the fields of finance, economics & econometrics, and psychology confirming the growth of the research domains.

Many of the journals in the top 13 list are also ABDC ranked with 4 journals ranked A-category followed by 3 ranked B- and 1 ranked C-category journal.

Table II: Journals with the highest number of publications in the research area

	Journal	No. of Publications	%	ABDC ranking	Publisher
1	Journal of Financial Counseling and Planning	17	6.14	C	Springer
2	Journal of Family and Economic Issues	16	5.78	B	Springer
3	International Journal of Bank Marketing	11	3.97	A	Emerald
4	International Journal of Consumer Studies	11	3.97	A	Wiley
5	Journal of Consumer Affairs	9	3.25	A	Wiley
6	Frontiers in Psychology	7	2.53		Frontiers Media S.A.
7	Social Indicators Research	6	2.17	A	Springer
8	International Journal of Social Economics	5	1.8	B	Emerald
9	Emerging Adulthood	4	1.44		SAGE
10	Malaysian Journal of Consumer and Family Economics	4	1.44		MACFEA
11	Managerial Finance	4	1.44	B	Emerald
12	Pertanika Journal of Social Sciences and Humanities	4	1.44		Universiti Pytra Malaysia
13	Sustainability (Switzerland)	4	1.44		MDPI

Note: Table II represents the top 13 journals ranked in accordance with the number of publications in the research field, based on the data collected from the Scopus database. The percentage included in the table is based on the total no. of publications considered as a sample for the study (N=277). MACEFA= Malaysian Consumer and Family Economics, MDPI= Multidisciplinary Digital Publishing Institute.

As evident from Figure 3, the publications related to Financial Literacy and Financial Well-being are grouped under four major categories represented by different clusters. The “Journal of Financial Counseling and Planning” and the “Journal of Family and Economic Issues” are the two examples of the first group, represented by the green cluster, which is focused on individuals, groups, and families.

The primary focus of this theoretical foundation relates to the perceptions and knowledge of individuals and groups regarding financial literacy and financial well-being and the practices they undertake to improve them.

Journals related to changes in various sectors and society are included in the second set of publications, represented by the red cluster. Here, the “International Journal of Bank Marketing” has the most citations, but it is fascinating to note that two of the cluster’s four journals have their roots in psychology.

Publications in the social sciences, such as the “International Journal of Social Economics”, are included in a third, less populated category (blue cluster). The “Journal of Consumer Affairs” and “Emerging Adulthood”, the fourth group of journals (yellow cluster), is associated with sociology, psychology, and social sciences.

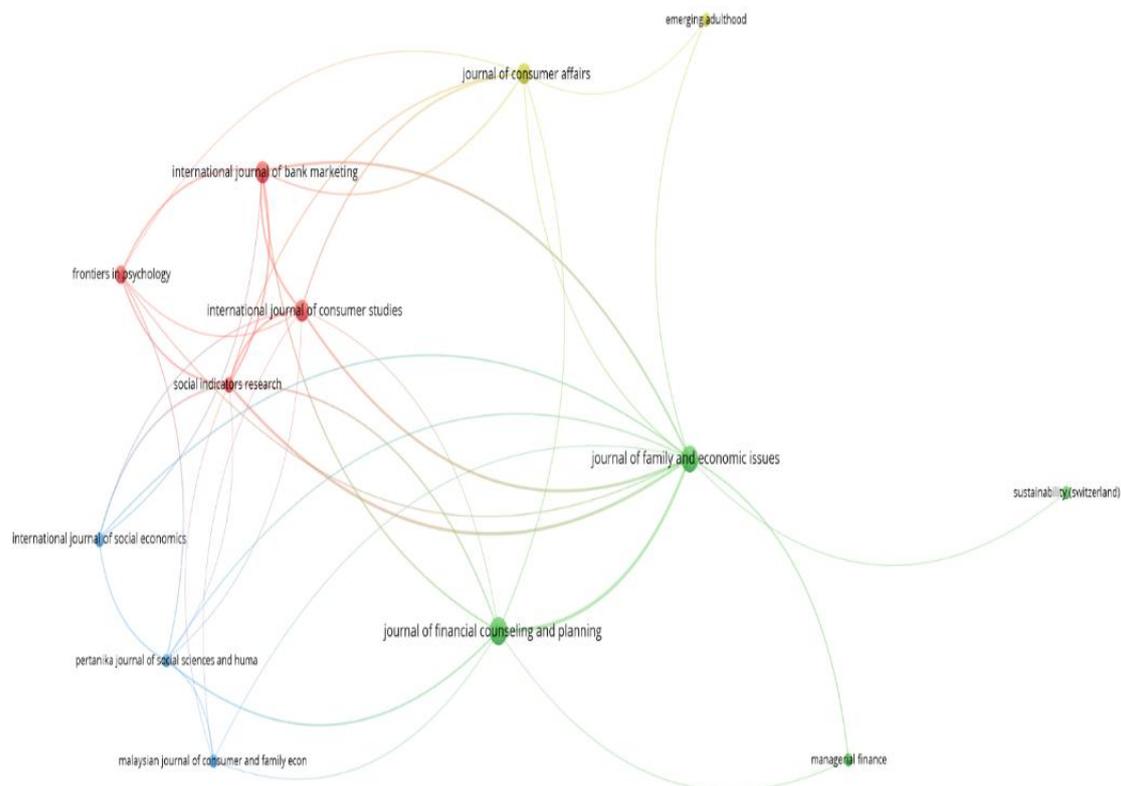


Figure 3: Citation network of journals created using Vos viewer

3.4. Most Contributing Authors

There are 687 authors who contributed to the 277 publications. The majority of authors i.e., 90.97% (n=625/687) are listed as authors in just one work, followed by 6.25% (n=43/687) who are associated with 2 publications, and 1.74% of authors (n=12/687) who have published 3 articles.

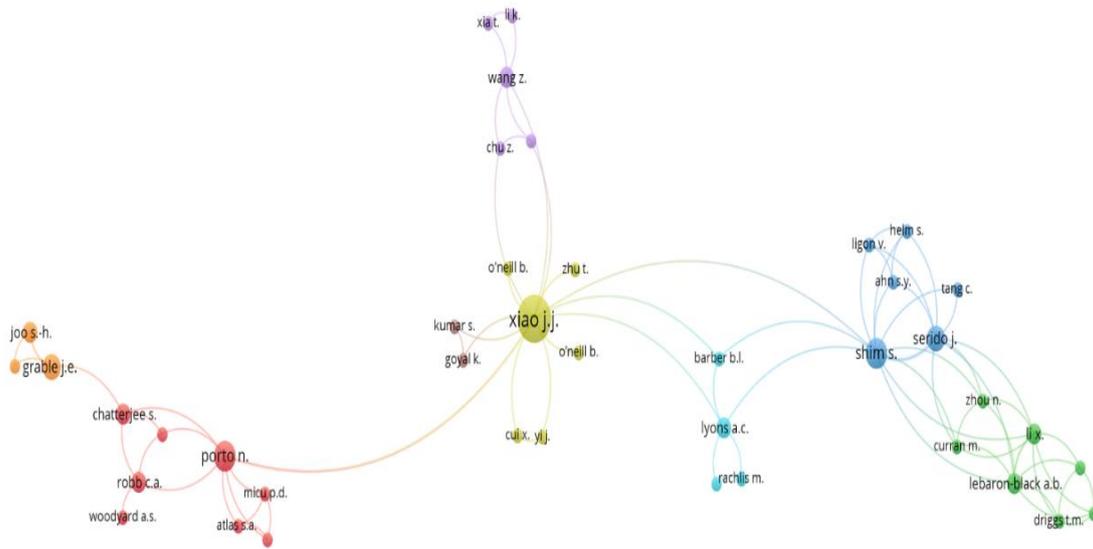


Figure 4: Co-authorship network of authors, created using Vos viewer

The most effective ones, with more than 3 publications in the research field are listed in Table III. There are only 7 authors who could make it to the list of prolific authors with Khan, Lusardi, Porto, Shim, and Vieira each having 4 publications in their names, while Sabri has published 8 articles (Abdullah et al., 2019; Falahati & Sabri, 2015; Mokhtar et al., 2015; M. Sabri et al., 2013, 2020; M. F. Sabri et al., 2022; M. F. Sabri & Zakaria, 2015a, 2015b), and then we have Xiao topping the list with 11 publications (Chu et al., 2017; Cui et al., 2019; Goyal et al., 2021; Shim et al., 2009; Xiao, 2022; Xiao et al., 2014; Xiao & O’Neill, 2018, 2022a; Xiao & Porto, 2017, 2022a; Zhu & Xiao, 2022).

Out of his 11 publications Jing Jian Xiao has collaborated with Porto for 2 articles and Shim for 1, there is another author named O’Neill who could not make it to the list but has prominent collaborations with Xiao. The other co-authorship collaborations of different authors can be seen in Figure 4.

All 7 authors are linked to different institutions, but one important observation is that out of these 7 authors, 4 belong to the USA which again confirms the prominent contribution of the country to the field.

Table III: Most contributing authors in the research field

	Author	Country	Institution	No. of Publications
1	Xiao, J.J.	United States	Department of Human Development and Family Studies at University of Rhode Island	11
2	Sabri, M.F.	Malaysia	Universiti Putra Malaysia	8
3	Khan, K.A.	Czech Republic	Faculty of Management and Economics, Tomas Bata University in Zlin	4
4	Lusardi, A.	United States	George Washington University	4
5	Porto, N.	United States	University of Rhode Island	4
6	Shim, S.	United States	School of Human Ecology · University of Wisconsin-Madison	4
7	Vieira, K.M.	Brazil	Federal University of Santa Maria	4

3.5. Most Cited Articles

Out of the 277 publications that have been taken as a sample for this paper, Table IV lists the top 10 most cited articles ranked in accordance with citations per year. It is important to note that for the purpose of the study, the sample consisted of articles, book chapters, review papers, and conference papers, but the top 10 most cited publications are all articles. (Joo & Grable, 2004) which is the highest-quoted publication in arbitrary terms (281 citations) describing the creation and evaluation of a framework for comprehending the factors influencing financial contentment, while (Shim et al., 2009) the most quoted publication (279 citations) as per rank aims to provide a description and testing of a conceptual model of the perspective causes and effects of the young adults' financial satisfaction. All 10 articles communicated a positive relationship between Financial Literacy and Financial Well-being.

Financial Literacy and its association with Financial Well-being are examined from different perspectives, (Joo & Grable, 2004) reports the perspective of salaried workers, while the stance of young adults has been evaluated by (Drever et al., 2015; Shim et al., 2009). In addition, (Gutter & Copur, 2011; Norvilitis et al., 2006) depict the viewpoints of college students, and the position of consumers has been reported by (Mende & van Doorn, 2015; Xiao et al., 2014).

Further, the marked area has been discussed in relation to different countries, (Shim et al., 2009) delineates the work in the Southwestern United States, (Gutter & Copur, 2011) throughout the United States, and (Chu et al., 2017) in China. Additionally, (Norvilitis et al., 2006) covers the credit card debt perspective of college students, (Mende & van Doorn, 2015) examine the effect of counselling services on Financial Well-being, and (Chu et al., 2017) pertain to household portfolio choice and investment returns. It is important to note that the two most cited articles are from the *Journal of Family and Economic Issues*, and two are from journal titled *Social Indicators Research*.

Table IV: Most cited articles in the research field

Rank	Title	Authors	Year	Journal	TC	C/Y
1	Pathways to life success: A conceptual model of financial well-being for young adults	Shim S., Xiao J.J., Barber B.L., Lyons A.C.	2009	Journal of Applied Developmental Psychology	279	20.54
2	Consumer financial capability and financial satisfaction	Xiao J., Chen C., Chen F.	2014	Social Indicators Research	170	19.81
3	Financial education and financial satisfaction: Financial literacy, behavior, and capability as mediators	Xiao J.J., Porto N.	2017	International Journal of Bank Marketing	107	19.17
4	Financial knowledge and best practice behavior	Robb C.A., Woodyard A.S.	2011	Journal of Financial Counseling and Planning	178	15.37
5	An exploratory framework of the determinants of financial satisfaction	Joo S.-H., Grable J.E.	2004	Journal of Family and Economic Issues	281	15.12
6	Personality factors, money attitudes, financial knowledge, and credit-card debt in	Norvilitis J.M., Merwin M.M., Osberg T.M., Roehling P.V.,	2006	Journal of Applied Social Psychology	241	14.53

	college students	Young P., Kamas M.M.				
7	Financial Literacy, Portfolio Choice and Financial Well-Being	Chu Z., Wang Z., Xiao J.J., Zhang W.	2017	Social Indicators Research	80	14.33
8	Foundations of financial well-being: Insights into the role of executive function, financial socialization, and experience-based learning in childhood and youth	Drever A.I., Odders-White E., Kalish C.W., Else-Quest N.M., Hoagland E.M., Nelms E.N.	2015	Journal of Consumer Affairs	95	12.53
9	Financial Behaviors and Financial Well-Being of College Students: Evidence from a National Survey	Gutter M., Copur Z.	2011	Journal of Family and Economic Issues	144	12.43
10	Coproduction of Transformative Services as a Pathway to Improved Consumer Well-Being: Findings from a Longitudinal Study on Financial Counseling	Mende M., van Doorn J.	2015	Journal of Service Research	94	12.4

Note: Table IV lists the top 10 most cited articles ranked in accordance with citations per year. TC= Total Citations, C/Y= Citations per year.

3.6. Keywords

The themes of research publications are represented by the author’s keywords (Comerio & Strozzi, 2019). Table V depicts the keywords with the highest frequency of occurrence. We found 628 keywords in the 277 articles and 26 of them met the threshold of at least 5 occurrences.

“Financial literacy” (with a frequency of 119 & total link strength of 148), “financial well-being” (with a frequency of 65 & total link strength of 101), “financial knowledge” (with a frequency of 37 & total link strength of 82) and “financial capability” (with a frequency of 36 & total link strength of 61) are the main keywords forming the core around which the links are created. Figure 5 exhibits the different nodes and their links.

First: The blue cluster with “financial literacy” at its center is having high link strengths with “financial well-being”, “financial education”, “financial capability”, “financial satisfaction”, “financial knowledge”, “financial behavior”, and “financial attitude”. The blue cluster may be related to savings, considering its links with “financial behaviour” and “savings”. The keyword “financial stress” also belonging to the same cluster has its links with “personal finance”, “financial satisfaction”, “financial knowledge”, and “well-being” indicating the stress faced by individuals while making personal financial decisions.

Second: The green cluster having “financial well-being” at its center shows links with all other three clusters “financial literacy”, “financial capability”, and “financial knowledge” in the order of highest to lowest link strength. The cluster is associated with the research area of “financial inclusion” considering its links with “financial education” and “financial inclusion”.

The keyword “gender” belonging to the same cluster and showing links with “financial inclusion”, “financial well-being”, and “financial literacy” reflects the presence of gender issues in the same area.

Third: The yellow cluster having the center as “financial knowledge” represents people’s confidence in financial matters displayed by its links with “financial behavior”, “financial attitude”, “financial self-efficacy”, and “overconfidence”.

Finally: The red cluster with “financial capability” at its center, can be associated with financial satisfaction considering the links with “financial advice”, “financial socialization”, “subjective well-being”, and “financial satisfaction”. This cluster has also highlighted “India” showing links with young adults” depicting the growing research on Indian young adults.

Table V: Keywords with the highest frequency of occurrence

Keywords	Frequency of Occurrence
financial literacy	119
financial well-being	65
financial knowledge	37
financial capability	36
financial satisfaction	30
financial education	26
financial behavior	25
financial behaviour	17
financial inclusion	15
financial wellbeing	11

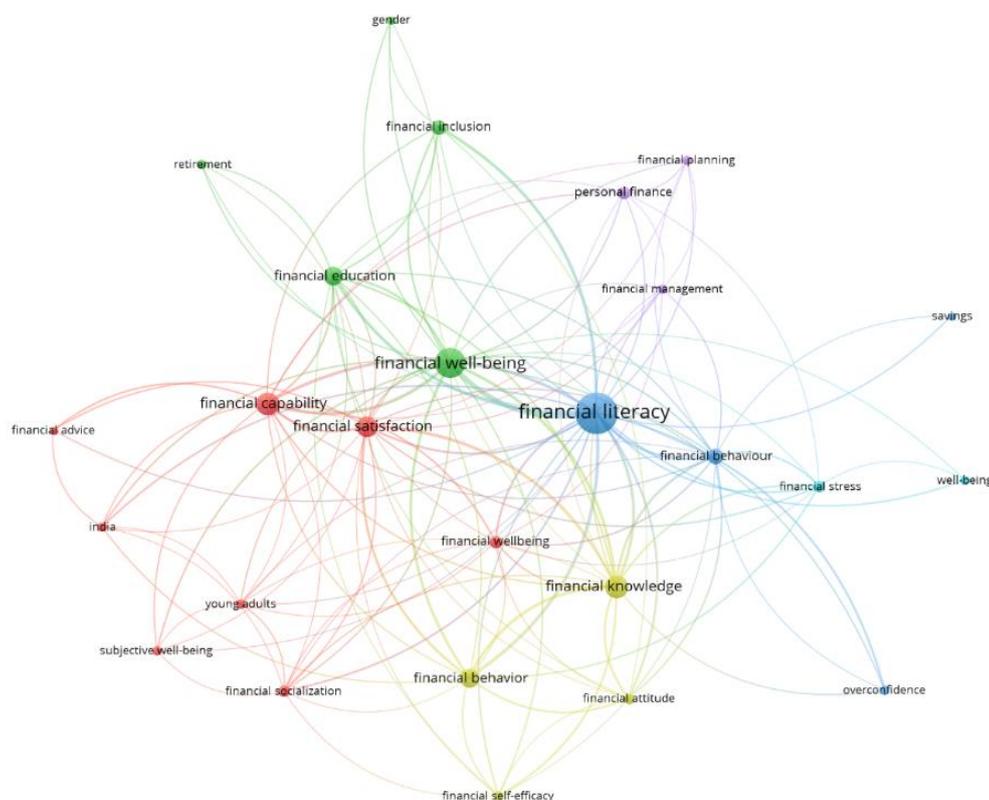


Figure 5: Co-occurrence network of author keywords created using Vosviewer



Table VI: Recent Trends in the research field

	Reference	Objectives
1	(Mahendru et al., 2020)	Apprehending the concept of financial well-being from the viewpoint of impoverished countries.
2	(Zhu & Xiao, 2022)	evaluating the mediators while examining the relationship between financial literacy and ownership of risky financial assets
3	(Vosylis & Klimstra, 2022)	exploring how the perception of early-stage emerging adulthood traits is influenced by working in the financial arena
4	(She et al., 2022)	analyzing how psychological beliefs affect financial well-being among working individuals in Malaysia while considering the mediation of financial behavior in this relationship
5	(Rostamkalaei et al., 2022)	presenting findings from research that examines the level of financial literacy and the degree to which self-employed people are looking after their long-term financial health, with a focus on retirement-related financial decisions
6	(Xiao & Porto, 2022)	investigating the relative contribution of various financial competence factors on the financial well-being of vulnerable consumers
7	(Nathan et al., 2022)	examining the use of fintech, financial literacy, and the COVID-19 crisis' effects on Vietnamese consumers' financial well-being
8	(Ng et al., 2022)	evaluating the impact of financial wellness programs on the financial decision-making of the medical residents
9	(Mavlutova et al., 2021)	examining the impact of the COVID-19 pandemic on the readiness to invest in securities that adhere to environmental, social, and governance (ESG) standards as well as the variables affecting investors' decision-making according to their level of financial literacy
10	(Sunderaraman et al., 2022)	evaluating the relevance and impact of numeracy (numerical reasoning, math accomplishments, and mental calculations) on financial literacy
11	(Santos et al., 2022)	exploring the relationship between financial well-being and how people use credit cards
12	(Nguyen, 2022)	examining the factors that influence financial awareness and how that affects the usage of fintech services
13	(Meneau & Moorthy, 2022)	investigating the connection between consumers' financial actions and their levels of financial literacy, thinking patterns, and self-control and determining whether financial management solutions could help the consumers
14	(K. Khan et al., 2022)	examining how the financial capability of a person is impacted by financial well-being, financial advice, and financial literacy components; while recommending an upgraded scale for measuring financial capability
15	(Lučić et al., 2022)	advancing a novel financial capability conceptual model while providing a definition of the same by examining its integrative conceptual context
16	(Madinga et al., 2022)	examining how the financial well-being of individuals is affected by financial literacy and financial socialization
17	(Li et al., 2022)	discerning how undergraduate young individuals handled the transition to adulthood's goal-setting process by evaluating the projection of financial behaviors on depressed traits and financial barriers to goal attainment through financial well-being
18	(Salas-Velasco, 2022)	evaluating the effectiveness of financial education involvement on decision-making toward debt-financed graduate education
19	(Lin & Bates, 2022)	investigating how cognitive ability is correlated with both financial and economic literacy
20	(Kienzler et al., 2022)	evaluating the impact of verbal financial claims that look impressive and are presented as accurate and meaningful but are false



21	(Isler et al., 2022)	examining the impact of default and educative nudges on financial fallacy, savings, and organizational confidence through a self-management of online retirement accounts experiment
22	(Fan & Henager, 2022)	creating a theoretical model for a thorough comprehension of financial well-being
23	(Harcourt-Cooke et al., 2022)	determining the impact of comics in promoting the understanding of complex financial products by consumers
24	(Xiao & O'Neill, 2022)	determining whether the kind of impairment and financial capacity were linked to the possession of risky assets by individuals with disabilities
25	(Puelz & Puelz, 2022)	investigating the link between financial literacy and reflective, self-reported economic results
26	(LeBaron-Black et al., 2022)	investigating whether the locus of control functions as an intermediary variable in the relationship between parental financial socialization acquired during childhood and adolescence and mental health in emerging adulthood
27	(Pak & Fan, 2022)	analyzing the impact of the childhood experience of parental affection on an individual's objective and subjective financial well-being
28	(Parvathy & Kumar, 2022)	investigating how women's financial satisfaction in community-based organizations is influenced by their financial capacity and how this relationship is mediated by their capacity for decision-making
29	(Eberhardt et al., 2022)	comprehending the links between behavioral participation, cognitive participation, emotional participation, and socio-demographic characteristics, by creating and validating the retirement engagement model
30	(Anvari-Clark & Ansong, 2022)	examining the functions of structural, interactional and behavioral variables in influencing financial well-being using a framework for financial competence
31	(M. F. Sabri et al., 2022)	examining the relationships among young adults from low-income households in Malaysia, adjusting for education and income, between financial behavior and financial knowledge, locus of control and perceived financial well-being
32	(Garrett et al., 2022)	investigating how medical residents pay for their medical education and how these experiences affect the residents' outlook towards financial education throughout residency
33	(Birkenmaier, Kim, et al., 2022)	providing a structured and systematized review of the impact of financial capability interventions on financial outcomes and financial well-being of low-income households
34	(Tian & Wang, 2022)	evaluating the impact and importance of financial literacy education on high school students
35	(Paşa et al., 2022)	examining the role of financial literacy as a factor in economic growth and financial well-being in three EU member states: Bulgaria, Romania, and Croatia
36	(Singh & Malik, 2022)	based on a nationwide household survey, this article aims at evaluating the financial steadiness of financially vulnerable Indian households
37	(Shankar et al., 2022)	evaluating the financial satisfaction of Generation Z students of India in connection to financial technology, financial behavior, financial fragility, and financial literacy, while also looking into the elements like gender, age, parental education, employment status, and monthly income
38	(Chen & Zurlo, 2022)	evaluating and comparing the connection between retirement planning and secured and unsecured debt among people approaching the retirement stage
39	(Birkenmaier, Rothwell, et al., 2022)	advancing the subject while evaluating the quantitative peer-reviewed research literature in order to create an evidence base for policies and interventions related to the financial capability that will enhance family financial well-being and lessen economic inequality

40	(Hudson & Young, 2022)	obtaining a better understanding of the reason behind the non-accumulation of wealth by African Americans in comparison to other racial groups, the reason being the considering accumulation of wealth to be crucial for financial well-being
41	(Cossa et al., 2022)	examining Mozambique's financial literacy, evaluating its levels, and finding the sociodemographic factors that affect it while applying a generalization to emerging nations
42	(Wikoff, 2022)	evaluating how the problems faced during the COVID-19 pandemic can be eased by the basic knowledge of numeracy
43	(Prakash et al., 2022)	using confirmatory factor analysis to recognize components affecting the financial health of Indian employees in the IT sector
44	(Miller et al., 2022)	evaluating the impact of loans on the financial capability of student borrowers
45	(Rabbani et al., 2022)	determining and categorizing the graduate level students on the basis of objective, subjective, and comparative financial knowledge
46	(M. N. Khan et al., 2022)	evaluating and understanding the financial knowledge levels of immigrants

3.7. Mapping the Trends in Research Area

We have extensively examined the research articles to identify the most actively pursued research topics and contemporary research trends. Many interesting observations surfaced after identifying the key research domains for the articles published in 2022 (January to July) and summarising them in Table VI. The emerging themes in the Financial Literacy and Financial Well-being research area include the impact of awareness programs and policies, Financial Literacy and Financial Well-being during the COVID-19 period, involvement of fintech, use of debt, retirement planning, parental guidance, and the impact of proficiency and cognitive ability, with young adults and consumers being the most researched groups.

In addition to examining the recently published articles, we also focused on considering the articles with maximum citations whose summary has been provided in Table VII. The themes that are emerging here include the formation of a framework or model to explain the concepts, the impact of various interventions, counseling and programs, debt literacy, stock investment, the effect of demographic factors, and gender differences. The groups in focus were students, consumers, young adults, and the working class.

Table VII: Trends of the most cited articles in the research field

	Reference	Objectives
1	(Joo & Grable, 2004)	describing the creation and evaluation of a framework for comprehending the factors that financial well-being
2	(Shim et al., 2009)	delineating and testing an intellectual model of the potential causes and effects of young adults' financial well-being
3	(Norvilitis et al., 2006)	investigating the causes and repercussions of credit card debt among college students
4	('Robb & 'Woodyard, 2011)	exploring the association between financial well-being, objective and subjective personal financial knowledge, and selected demographic characteristics
5	(Xiao et al., 2014)	exploring the relationship between consumer financial capability and financial well-being
6	(Gutter & Copur, 2011)	while controlling for demographic and financial factors, financial education, and financial dispositions, the goal of this study is to examine the relationship between financial behaviour and financial well-being of college students
7	(Xiao & Porto, 2017)	examining how financial behaviour competence, and financial literacy function as mediators between financial education and financial well-being



8	(Drever et al., 2015)	assessing various fields to gather knowledge of the stages of early development where interventions are most likely to be effective
9	(Mende & van Doorn, 2015)	evaluating the impact of financial counseling on effectively improving the financial well-being
10	(Chu et al., 2017)	investigating potential implications of household portfolio choice and investment returns, a measure of financial wellness on financial literacy
11	(Gerrans et al., 2014)	positing the attention on the importance of financial literacy, investigating the concept of financial wellness and how it relates to personal well-being
12	(Parrotta & Johnson, 1998)	in a sample of recently wed people, this study looked at the influence of financial attitudes and knowledge on money management and satisfaction with financial status
13	(Sivaramakrishnan et al., 2017)	examining how elements like financial literacy affect a consumer's decision to invest especially in the stock market
14	(Xia et al., 2014)	evaluating how overconfidence in financial literacy can impact an individual's engagement in the stock exchange
15	(Hira, 2012)	examining ways to improve people's economic performance through financial education, for both their own well-being and welfare of the society as a whole
16	(Garman et al., 1999)	analyzing how productively the financial education provided in an organizational structure can improve an individual's life decisions
17	(Sanders et al., 2007)	using a quasi-experimental methodology, investigating the results of a financial education program developed especially for battered women
18	(Garg & Singh, 2018)	depending on earlier research, evaluating the degree of financial literacy among young people worldwide
19	(Potrich et al., 2016)	developing and contrasting models for evaluating the level of financial literacy among university students
20	(Ali et al., 2015)	creating and evaluating a theoretical framework to forecast financial contentment among Malaysian workers
21	(Dowling et al., 2009)	assessing the factors that contribute to financial troubles and discontent, as well as how attitudes toward financial counseling were affected by these factors
22	(Xiao & O'Neill, 2018)	examining the factors of propensity to plan and exploring the relationship of propensity to plan with both financial capability and financial well-being
23	(Schmeiser & Seligman, 2013)	exploring whether some previously raised questions to gauge financial literacy are reliable indicators of financial knowledge and reliable forecasters of future wealth changes
24	(Alsemgeest, 2015)	outlining arguments against and for financial literacy education as well as potential directions for government and institutional initiatives to improve the financial well-being
25	(Riitsalu & Murakas, 2019)	examining how socio-economic status, financial behavior, subjective and objective financial knowledge, and financial well-being interact
26	(Loibl & Hira, 2005)	examining the impact of self-directed financial learning on financial management practices, financial contentment, and career satisfaction utilizing employer-provided financial newsletters, magazines, financial planning software, and the internet
27	(Postmus et al., 2015)	exploring the curriculum of financial education provided by Allstate Foundation and the National Network with the goal to end domestic violence
28	(Karakurum-Ozdemir et al., 2019)	endeavoring to open the way for the better and effective working of financial literacy policies to improve financial well-being in middle-income nations
29	(Lind et al., 2020)	analyzing how a variety of financial actions and attitudes toward money are influenced by individual differences in subjective and

		objective financial knowledge, numeric ability, and cognitive reflection
30	(Ponchio et al., 2019)	investigating the effects of materialism, financial literacy, self-control on consumer spending, personal saving induction, and time perspective on reported financial well-being
31	(Ergün, 2018)	exploring the financial literacy levels of university students
32	(Montalto et al., 2019)	analyzing the main facets of financial behavior and financial well-being among undergraduate students
33	(Zyphur et al., 2015)	examining the role of gender in subjective financial well-being
34	(Lyons et al., 2007)	determining which population segments might profit from more specialized consumer policy and financial education
35	(M. F. Sabri & Zakaria, 2015b)	assessing the impact of financial burdens, money attitude, and financial literacy on the financial well-being of young employees
36	(Buckland, 2010)	investigating the effectiveness of an individual's financial literacy based on personal and structural constraints
37	(Atlas et al., 2019)	reviewing the impact of financial knowledge confidence on financial satisfaction and financial behavior
38	(West & Friedline, 2016)	analyzing how financial behavior and financial capability relate from the perspective of millennials with relatively low income
39	(Abdullah et al., 2019)	exploring the connection between young workers' financial well-being and their views regarding money, financial literacy, and debt management
40	(Despard et al., 2012)	examining the role of social workers and service professionals in improving the financial practices of the clients
41	(Falahati & Sabri, 2015)	assessing how gender affects the determinants of college students' financial welfare in Malaysia
42	(Collins & Urban, 2020)	investigating the constructs of financial well-being to develop the factors of a standardized financial well-being score
43	(Helm et al., 2019)	examining young consumers' financial and pro-environmental conduct as useful proactive measures done in the present to satisfy materialistic desires and optimize well-being
44	(Bayuk & Altobello, 2019)	exploring the possible advantages of gamification for saving motivation and financial well-being
45	(Potrich & Vieira, 2018)	creating a model that can show how materialism, compulsive shopping, and a predisposition for debt may all be affected by financial literacy
46	(Adam et al., 2017)	analyzing the effects of retirement preparation, dependents, family support, financial behavior, and financial literacy on the financial well-being of retirees
47	(Starkey et al., 2013)	evaluating the connection between depressive symptoms and reported financial distress, along with identifying the financial demands and priorities that may cause financial difficulty
48	(Shim et al., 2013)	analyzing specific elements that can affect young adults' faith in banks and other financial institutions

4. THE WAY FORWARD: TCCM FRAMEWORK

4.1 Theories

Theoretical foundations for financial literacy and well-being have been significantly advanced in the field of study. In the past few years, researchers have concentrated on the development and relevance of theories in financial literacy and well-being (Rasiah et al., 2020; Moolman, 2020; Sirsch et al., 2020; Shim et al., 2009; Mokhtar and Rahim, 2017; Sabri et al., 2022; Xiao & Porto, 2017; Buckland, 2010; Adam et al., 2017; Prawitz & Cohart, 2014; Thomas & Gupta, 2021) such as traditional economic theory (Rasiah et al., 2020), diffusion of innovation theory (Cao et al., 2020), financial theory (Chu et al., 2017), grounded theory (Mahendru et al., 2022), social capital theory (Thomas and Gupta, 2021), and theory of money ambivalence (Klontz et al., 2015). This study identified the 48 theories utilized to provide theoretical integration into



financial literacy and well-being. The most prominent theories were the Theory of Planned Behavior (TPB) (Shim et al., 2009; Sivaramakrishnan et al., 2017; Postmus et al., 2015; Arifin, 2018; Iramani and Lufti, 2021; Santos et al., 2022; Xiao et al., 2014; Putri & Wardatul, 2020; Kaur & Singh, 2022), followed by Item Response Theory (IRT) (Ponchio, et al., 2020; Ponchio et al., 2019; Xue et al., 2019; Patel & Wolfe, 2019; Ranyard et al., 2020), life cycle theory (Xiao and Porto, 2017; Buckland, 2010; Adam et al., 2017; Prawitz & Cohart, 2014) and social learning theory (Sirsch, et al., 2020; Hira, 2012; Drever, et al., 2015) as illustrated in **Table VIII**. Hence, the subsequent section discusses the most prominent theories in detail.

Theory of Planned Behavior

TPB is a psychological model that elucidates how individuals' attitudes, subjective standards, and perceived behavioral control impact their intentions and subsequent acts. The theory, developed by Icek Ajzen in 1985, further develops the Theory of Reasoned Action (TRA). TPB asserts that an individual's intention to participate in an activity is the main determinant of whether they will conduct that. This intention is determined by three factors: the individual's attitude towards the behavior (the extent to which they have a positive or negative evaluation of the behavior), subjective norms (the perceived social pressure to engage or not engage in the behavior), and perceived behavioral control (the perceived ease or difficulty of performing the behavior, influenced by past experiences and anticipated obstacles). An individual's stance on financial education and responsible financial habits is paramount in financial literacy and welfare (Shim et al., 2009; Sivaramakrishnan et al., 2017). An optimistic mindset toward acquiring knowledge about finances and efficiently handling money can result in improved financial choices and results (Postmus et al., 2015; Arifin, 2018). Likewise, if people believe that their financial literacy and good financial habits are highly valued by their family, friends, and society, they are more inclined to adopt behaviors that improve their financial well-being (Postmus et al., 2015; Arifin, 2018; Iramani and Lufti, 2021). Perceived behavioral control refers to an individual's trust in their capacity to comprehend and handle financial matters. Increased perceived control frequently results in greater engagement in proactive financial action, enhancing financial wellness (Santos et al., 2022; Xiao et al., 2014; Putri & Wardatul, 2020; Kaur & Singh, 2022). Therefore, future research can leverage the TPB to better understand financial literacy and financial well-being by examining the intricate relationships between attitudes, subjective norms, and perceived behavioral control. Researchers can identify the underlying psychological factors that drive financial behaviors by focusing on these components. For instance, investigating how positive attitudes toward financial education influence the pursuit of financial knowledge can provide insights into effective educational strategies. Moreover, exploring the role of subjective norms, such as the impact of family, peers, and societal expectations, can help design community-based programs that foster supportive environments for financial learning. Additionally, assessing perceived behavioral control can reveal individuals' barriers to managing their finances and highlight areas where intervention is needed to boost confidence and capability. Longitudinal studies using TPB can track changes in financial behaviors over time, offering a dynamic view of how attitudes, norms, and control perceptions evolve and affect financial decisions. By integrating TPB with demographic and socio-economic variables, future research can uncover how different populations uniquely experience financial literacy and well-being, leading to more tailored and effective policies and educational programs. Applying the TPB framework can guide researchers in developing comprehensive models that predict financial behaviors and inform interventions to enhance financial literacy and well-being.



Item Response Theory

IRT is a modern approach to designing, analyzing, and scoring assessments, widely used in educational testing and psychological measurement. IRT focuses on the relationship between individuals' latent traits (unobservable characteristics or attributes) and their item responses (answers to questions on a test). This theory helps in understanding how specific questions on a test relate to the underlying trait being measured and how different items vary in difficulty and discrimination. The characteristics of IRT involve latent traits (latent traits are the underlying abilities or characteristics that a test aims to measure), item characteristics (items based on their difficulty, discrimination, and guessing), and person parameters (estimation of a person's ability level based on their pattern of responses to the items). Applying IRT to financial literacy involves creating assessments that accurately measure an individual's financial knowledge and skills across various domains. IRT can help in identifying which items on a financial literacy test are most effective at distinguishing between individuals with different levels of financial knowledge (Ponchio et al., 2020; Ponchio et al., 2019; Xue et al., 2019; Patel & Wolfe, 2019; Ranyard et al., 2020). IRT can be used to analyze financial literacy test items to ensure they are appropriately challenging and effectively discriminate between individuals with varying levels of financial knowledge (Ponchio et al., 2020). For instance, questions about basic budgeting might be easier and have lower discrimination, while questions about complex investment strategies might be more difficult and have higher discrimination. IRT can help create items covering a broad range of financial behaviors and attitudes, ensuring that the assessment captures all relevant aspects of financial well-being (Patel & Wolfe, 2019; Ranyard et al., 2020). This includes items on saving habits, debt management, financial planning, and the psychological aspects of financial stress and confidence. By applying IRT, researchers can ensure that the items used to measure financial well-being are reliable and valid, providing precise estimates of an individual's financial health. This can be crucial for identifying specific areas where interventions are needed. The precision and reliability of IRT-based assessments can uncover subtle differences in financial behaviors and attitudes, enabling a deeper exploration of the factors that contribute to financial well-being. Furthermore, IRT's capacity to provide detailed item-level information can guide the creation of more effective financial education programs and policies. By integrating IRT with demographic and socio-economic variables, future research can explore how different populations experience financial literacy and well-being, leading to more inclusive and impactful strategies. Overall, IRT offers a sophisticated approach to understanding and enhancing financial literacy and well-being, paving the way for research that can drive meaningful improvements in financial education and outcomes.

Life Cycle Theory

The Life Cycle Theory, proposed by Franco Modigliani and Richard Brumberg, posits that individuals plan their consumption and savings over their lifetime to achieve a stable standard of living. This theory suggests that people accumulate wealth during their working years and deplete it during retirement to smooth consumption throughout their lives. This theory posits that the theory consists of three phases i.e.: accumulation, decumulation, and consumption smoothing. Individuals are generally in the accumulation phase during life's early and middle stages. They are focused on earning income, saving, and investing to build wealth for future needs, such as retirement. In later life, particularly during retirement, individuals enter the decumulation phase. Here, they rely on the accumulated wealth to fund their consumption and maintain their standard of living. According to the Life Cycle Theory, individuals' primary goal is to smooth consumption over their lifetime. This means adjusting savings and spending to



avoid significant fluctuations in living standards. Integrating the Life Cycle Theory with financial literacy and well-being provides a comprehensive framework to understand how individuals manage their finances across different life stages (Xiao & Porto, 2017; Buckland, 2010; Adam et al., 2017; Prawitz & Cohart, 2014). For instance, in the early stages of life, financial literacy helps individuals understand the importance of saving and investing for future needs. Educating young adults about budgeting, debt management, and the benefits of compound interest can encourage early and sustained wealth accumulation. During mid-life, financial literacy aids in managing more complex financial decisions, such as purchasing a home, funding children's education, and maximizing retirement savings (Xiao & Porto, 2017). Awareness of tax advantages, investment diversification, and retirement planning becomes crucial. In later life, financial literacy ensures that individuals can effectively manage their retirement savings, understand withdrawal strategies, and make decisions that prolong the sustainability of their resources (Buckland, 2010). Knowledge about healthcare costs, estate planning, and long-term care is also essential. Investigating how financial literacy supports individuals in planning for major life events, like purchasing a home or funding retirement, can reveal critical factors contributing to financial stability and well-being.

Additionally, research can explore how variations in financial literacy affect the ability to manage financial risks and maintain a desired standard of living throughout the life cycle. By integrating demographic and socio-economic variables, future studies can also identify how different populations experience financial challenges and opportunities at various life stages. This approach will help design targeted interventions and educational programs that address specific needs, ultimately improving financial outcomes and well-being across different life stages.

Social Learning Theory

Social learning theory, developed by Albert Bandura, posits that individuals learn behaviors and attitudes through observing others, imitating their actions, and experiencing the consequences of those actions. This theory emphasizes the role of social influences, modeling, and reinforcement in shaping behavior. Social learning theory has characteristics of observational learning, modeling and reinforcement, and punishment. Observational learning involves mimicking behaviors and adopting attitudes that one sees as effective or desirable. Role models, such as parents, mentors, or financial advisors, play a crucial role in shaping learning. Similarly, positive reinforcement (rewards) and negative consequences (punishments) affect learning. Social Learning Theory helps explain how individuals develop financial literacy through observation and interaction with others (Sirsch et al., 2020; Hira, 2012; Drever et al., 2015). The individual often learns about money management from their parents. Observing parents' saving habits, budgeting practices, and financial decisions can significantly impact their financial literacy. Future research can explore how parental modeling affects children's financial behaviors and understanding. Individuals who observe and emulate effective financial management practices, such as budgeting, investing, and debt management, are likelier to experience improved financial well-being (Hira, 2012). Research can examine how modeling positive financial behaviors contributes to achieving financial stability and security. Positive reinforcement from social networks, such as encouragement and support for good financial practices, can enhance financial well-being. Conversely, social pressures or negative reinforcement for poor financial decisions can lead to financial stress and instability (Drever et al., 2015). Research can explore how social reinforcement and feedback influence financial health. Social Learning Theory can inform the development of community-based financial education programs that use role models and peer networks to promote financial

literacy. Programs incorporating observational learning and social reinforcement can be more effective in improving financial well-being. Researchers can uncover the mechanisms through which financial habits are formed by investigating how individuals acquire financial knowledge and behaviors through observing and imitating role models, such as family members, peers, and media figures. This includes examining how parental financial practices impact children’s financial literacy, how peer influences shape young adults’ financial decisions, and how exposure to financial role models in media affects financial attitudes and behaviors. Additionally, research can explore how reinforcement and feedback from social networks—whether positive or negative—affect individuals’ financial choices and overall well-being. By focusing on these social dynamics, future studies can develop targeted educational programs and interventions that utilize social learning principles to enhance financial literacy and promote better financial outcomes. This approach can lead to more effective strategies for improving financial education by harnessing the power of social influence and observational learning to foster positive financial behaviors and greater financial well-being.

Table VIII: Prominent Theories

S.no.	Theories	Supporting Studies	No. of Studies
1	Theory of Planned Behavior	(Shim, et al., 2009); (Sivaramakrishnan, et al., 2017); (Postmus, et al., 2015); (Arifin, 2018); (Iramani & Lufti, 2021); (Santos, et al., 2022); (Xiao, et al., 2014); (Putri & Wardatul, 2020); (Kaur & Singh, 2022)	9
2	Item Response Theory	(Ponchio, et al., 2020); (Ponchio, et al., 2019); (Xue, et al., 2019); (Patel & Wolfe, 2019); (Ranyard, et al., 2020)	6
3	Life Cycle Theory	(Xiao & Porto, 2017); (Buckland, 2010); (Adam, et al., 2017); (Seay, et al., 2015); (Prawitz & Cohart, 2014)	5
4	Social Learning Theory	(Sirsch, et al., 2020); (Hira, 2012); (Drever, et al., 2015)	3
5	Consumer Socialization Theory	(Sirsch, et al., 2020); (Shim, et al., 2009)	2
6	Family Financial Socialization Theory	(Zhao & Zhang, 2020); (LeBaron & Kelly, 2021)	2
7	Economic Theory	(Puelz & Puelz, 2022); (Newsom, 2021)	2
8	Family Resource Management Theory	(Mokhtar & Rahim, 2017); (Sabri, et al., 2022)	2
9	Social Cognitive Theory	(Thomas & Gupta, 2021); (Ali, et al., 2021)	2
10	Social Comparison Theory	(Bayuk & Altobello, 2019); (Kaur & Singh, 2022)	2
11	Academic Theory	(Rasiah, et al., 2020)	1
12	Traditional Economic Theory	(Rasiah, et al., 2020)	1
13	Actor-Network Theory	(Moolman, 2020)	1
14	Attribution Theory	(Hansen, 2016)	1
15	Diffusion of Innovation Theory	(Cao, et al., 2020)	1
16	Educative Theory	(Newsom, 2021)	1
17	Emerging Adulthood Theory	(Vosylis & Kilmstra, 2022)	1
18	Empowerment Theory	(Johnson, 2021)	1

19	Financial Theory	(Chu, et al., 2017)	1
20	Gender Role Theory	(Zyphur, et al., 2015)	1
21	Human Capital Theory	(Soroko, 2020)	1
22	Gerit Theory	(Soroko, 2020)	1
23	Grounded Theory	(Mahendru, et al., 2022)	1
24	Practice Theory	(Blue, 2019)	1
25	Proactive Coping Theory	(Helm, et al., 2019)	1
26	Prospect Theory	(Liu, et al., 2021)	1
27	Push-Pull Theory	(Khan, et al., 2022)	1
28	Self-determination Theory	(Mende & Van Doorn, 2015)	1
29	Self-regulation Theory	(Mende & Van Doorn, 2015)	1
30	Situated Learning Theory	(Buckland, 2010)	1
31	Neoclassical Economic Theory	(Buckland, 2010)	1
32	Behavioral Economic Theory	(Buckland, 2010)	1
33	Institutional Theory	(Buckland, 2010)	1
34	Social Capital Theory	(Thomas & Gupta, 2021)	1
35	Social Exchange Theory	(Thomas & Gupta, 2021)	1
36	Uncertainty Reduction Theory	(Bayuk & Altobello, 2019)	1
37	Dual process theory	(Drever, et al., 2015)	1
38	Fuzzy-trace theory	(Drever, et al., 2015)	1
39	Theory of money ambivalence	(Klontz, et al., 2015)	1
40	Theory of Change	(Khalil, 2020)	1
41	Theory of Counterfactual	(Santos, et al., 2022)	1
42	Theory of Financial Socialization	(Starobin, et al., 2013)	1
43	Theory of Life Span Development	(Shim, et al., 2009)	1
44	Credit Card Use Theory	(Santos, et al., 2022)	1
45	Standard Economic Theory	(Xiao, et al., 2014)	1
46	Theory of self-efficacy	(Salas-Velasco, 2022)	1
47	Theory of subjective well-being	(Gerrans, et al., 2014)	1
48	Utility Theory	(Kengatharan, et al., 2020)	1

4.2 Context

Research that has identified determinants and outcomes, among other essential characteristics, has made significant progress in comprehending the expanding financial literacy and well-being field. Conversely, the literature on financial literacy and well-being is fragmented and diverse, challenging the derivation of accurate inferences. Numerous researchers have employed the SLR to investigate financial literacy and well-being in the context of countries and industries, as illustrated in **Tables IX and X**. The United States, Malaysia, and India were the most prominent research destinations, with Canada, Australia, and Indonesia following in that order. Europe (including Austria, Czech Republic, France, Italy, and the Netherlands), Asia (including Srilanka, Pakistan, Hong Kong, Philippines, and Vietnam), the Russian Federation) and African countries have been less explored in terms of the role of financial literacy in the

economy and its deeper impact on the financial well-being of the country's performance. Furthermore, students, adults, workers, and households were the test subjects in analyzing financial literacy and well-being with 45, 31, 26, and 23 articles, respectively, as illustrated in **Table X**. SME owners, women, financially excluded individuals, investors, and farmers have received minimal attention among the test subjects.

Nevertheless, people with disability, the aboriginal community, and secondary data surveys as test subjects remain unexplored. Therefore, considerable gaps exist in extant research focusing on less exploration to comprehend the holistic propagation of financial literacy practices among diverse test subjects. Future research should focus on developing and underdeveloped nations to understand the change in the dynamics of financial management in the post-COVID-19 pandemic.

Table IX: Industries Studied in Previous Research

S.no.	Countries	Supporting Studies	No. of Studies
1	United States	(Santos, et al., 2022); (Soroko, 2020); (García-Santillán, et al., 2021); (McGregor, 2020); (Postmus, et al., 2015); (Shim, et al., 2009); (Norvilitis, et al., 2006); (Robb & Woodyard, 2011); (Xiao, et al., 2014); (Gutter & Copur, 2011)	78
2	Malaysia	(Ali & Talha, 2021); (Ali, et al., 2015); (Sabri & Zakaria, 2015); (Abdullah, et al., 2019); (Falahati & Sabri, 2015); (Mokhtar, et al., 2015); (Mokhtar & Rahim, 2017); (Mahdzan, et al., 2019); (Sabri & Zakaria, 2015); (Md.Sapir & Wan Ahmad, 2020)	24
3	India	(Sivaramkrishnan, et al., 2017); (Saurabh & Nandan, 2018); (Mahendru, et al., 2022); (Utkarsh, et al., 2020); (Chavali, et al., 2021); (Sehrawat, et al., 2021); (Nandru, et al., 2021); (Khan & Akhtar, 2020); (Bhonde-Saraf, 2016); (Singh & Venkataramani, 2014)	21
4	Canada	(Buckland, et al., 2020); (Buckland, 2010); (Rostamkalaei, et al., 2022); (Blue, 2019); (Khan, et al., 2022); (McGregor, 2020); (Oehler, et al., 2018); (Lusardi, 2015); (Soroko, 2020); (Parrotta & Johnson, 1998)	10
5	Australia	(Dowling, et al., 2009); (Grant-Smith & de Zwaan, 2019); (Xue, et al., 2019); (Tahir, et al., 2021); (West & Cull, 2020); (West & Ramcharan, 2019); (Warren, et al., 2019); (Buckland, et al., 2020); (Gerrans, et al., 2014)	9
6	Indonesia	(Zhou, et al., 2020); (Arifin, 2018); (Yuesti, et al., 2020); (Iramani & Lufti, 2021); (Devi & Kartawinata, 2021); (Sisharini, et al., 2019); (Junviani, et al., 2021); (Putri & Adawiyah, 2020)	8
7	Brazil	(Potrich, et al., 2016); (Ponchio, et al., 2019); (Potrich & Vieira, 2018); (Ramalho & Forte, 2019); (Vieira, et al., 2018); (Vieira, et al., 2021); (Santos, et al., 2021); (Santos, et al., 2022)	7
8	China	(Drever, et al., 2015); (Chu, et al., 2017); (Xia, et al., 2014); (Zhu & Xiao, 2022); (Cui, et al., 2019); (Zhu, et al., 2021)	6
9	United Kingdom	(Ranyard, et al., 2020); (Dare, et al., 2020); (Summers, et al., 2005); (Lin & Bates, 2022); (Wikoff, 2022); (Chiu, 2021)	6
10	South Africa	(van Deventer, et al., 2021); (Sithole, et al., 2021); (Madinga, et al., 2022); (Moolman, 2020); (Engelbrecht & Ornellas, 2019)	5
11	Spain	(Çera, et al., 2020); (Salas-Velasco, 2022); (Khan, et al., 2022); (Gómez-Biscarri, et al., 2021); (Rey-Ares, et al., 2021)	5
12	Germany	(Oehler, et al., 2018); (Ergün, 2018); (Lusardi, 2015); (Siegfried & Wuttke, 2021); (Brühl, 2019)	5
13	Poland	(Ergün, 2018); (Çera, et al., 2020); (Cwynar, 2020); (Thiessen, 2014)	4
14	Estonia	(Ergün, 2018); (Titko, et al., 2015); (Riitsalu, et al., 2018); (Riitsalu & Murakas, 2019)	4

15	Vietnam	(Nathan, et al., 2022); (Nguyen, 2022); (Sang, 2021)	3
16	Turkey	(Karakurum-Ozdemir, et al., 2019); (Ergün, 2018); (Bird, et al., 2014)	3
17	Russia	(Ergün, 2018); (Gilenko & Chernova, 2021); (García-Santillán, et al., 2021)	3
18	Romania	(Ergün, 2018); (Ianole-Calin, et al., 2021); (Pasa, et al., 2022)	3
19	Croatia	(Pasa, et al., 2022); (Kirbiš Škreblin, et al., 2017); (Bahovec, et al., 2017)	3
20	Latvia	(Titko, et al., 2015); (Ciemeleja, et al., 2014); (Mavlutova, et al., 2022)	3
21	Lithuania	(Titko, et al., 2015); (Vosylis & Klimstra, 2022); (Vosylis, et al., 2021)	3
22	Pakistan	(Liu, et al., 2021); (Munir, et al., 2020); (Ali & Talha, 2021)	3
23	Czech Republic	(Thiessen, 2014); (Pospíšil, et al., 2021)	2
24	Hungary	(Thiessen, 2014); (Vörös, et al., 2021)	2
25	Sri Lanka	(Kengatharan, et al., 2020); (Kumari, et al., 2020)	2
26	Sweden	(Kienzler, et al., 2022); (Lind, et al., 2020)	2
27	Denmark	(Oehler, et al., 2018); (Hansen, 2017)	2
28	Italy	(Ergün, 2018); (Lusardi, 2015)	2
29	Netherlands	(Ergün, 2018); (Lusardi, 2015)	2
30	Ghana	(Adam, et al., 2017); (Agyei, et al., 2019)	2
31	South Korea	(Kim, et al., 2018); (Kim & Chawla, 2022)	2
32	New Zealand	(Crossan, 2011); (Newsom, 2021)	2
33	Brunei	(Salleh, 2015)	1
34	Austria	(Sirsch, et al., 2020)	1
35	Virginia	(Garman, et al., 1999)	1
36	Slovakia	(Thiessen, 2014)	1
37	France	(Santos, et al., 2022);	1
38	Slovenia	(Sirsch, et al., 2020)	1
39	Bulgaria	(Pasa, et al., 2022)	1
40	Finland	(Ranta & Salmela-Aro, 2018)	1
41	Iceland	(Oehler, et al., 2018)	1
42	Greece	(Philippas & Avdoulas, 2020)	1
43	Hong Kong	(Zhou, et al., 2020)	1
44	Mexico	(Karakurum-Ozdemir, et al., 2019)	1
45	Lebanon	(Karakurum-Ozdemir, et al., 2019)	1
46	Uruguay	(Karakurum-Ozdemir, et al., 2019)	1
47	Colombia	(Karakurum-Ozdemir, et al., 2019)	1
48	Mozambique	(Cossa, et al., 2022)	1
49	Philippines	(Tsai, et al., 2017)	1
50	Portugal	(Tavares, et al., 2020)	1
51	Saudi Arabia	(Ali, et al., 2021)	1
52	Switzerland	(Henchoz, 2016)	1
53	Nigeria	(Adegbite, et al., 2020)	1

Table X: Responding Samples of Prior Research

S.no.	Responding Sample	Supporting Studies	No. of Studies
1	Students	(Norvilitis, et al., 2006); (Gutter & Copur, 2011); (Potrich, et al., 2016); (Ergün, 2018); (Montalto, et al., 2019); (Falahati & Sabri, 2015); (Bayuk & Altobello, 2019); (Shim, et al., 2013); (Philippas & Avdoulas, 2020); (Starobin, et al., 2013)	45
2	Adults	(Xiao & Porto, 2017); (Schmeiser & Seligman, 2013); (Lind, et al., 2020); (Ponchio, et al., 2019); (Buckland,	31



		2010); (Starkey, et al., 2013); (Lee, et al., 2020); (Fu, 2020); (Robb, et al., 2019); (Ammerman & Stueve, 2019)	
3	Employees/ Workers	(Joo & Grable, 2004); (Ali, et al., 2015); (Dowling, et al., 2009); (Sabri & Zakaria, 2015); (Abdullah, et al., 2019); (Despard, et al., 2012); (Mokhtar, et al., 2015); (Mokhtar & Rahim, 2017); (Prawitz & Cohart, 2014); (Sabri & Zakaria, 2015)	26
4	Households	(Potrich & Vieira, 2018); (Mahdzan, et al., 2019); (Saurabh & Nandan, 2018); (Osteen, et al., 2007); (Kirbiš Škreblin, et al., 2017); (Yuesti, et al., 2020); (Salleh, 2015); (Patel & Wolfe, 2019); (Zhu & Xiao, 2022); (Charron-Chénier & Seamster, 2021)	23
5	Youth/ Young Adults	(Shim, et al., 2009); (Drever, et al., 2015); (Garg & Singh, 2018); (Helm, et al., 2019); (Ranta & Salmela-Aro, 2018); (Utkarsh, et al., 2020); (Vosylis & Klimstra, 2022); (Heath, 2016); (Williams, et al., 2011); (Fan & Park, 2021)	17
6	Consumers of Financial Products & Services	(Lyons, et al., 2007); (Atlas, et al., 2019); (Hansen, 2017); (Mahendru, et al., 2022); (Losada-Otalora, et al., 2020); (Bahovec, et al., 2017); (Xiao & Porto, 2022); (Kienzler, et al., 2022); (Park, 2019); (Pillai, et al., 2017)	10
7	Millennials/Gen X/Gen Y	(West & Friedline, 2016); (Cwynar, 2020); (van Deventer, et al., 2021); (Rey-Ares, et al., 2021); (Devi & Kartawinata, 2021); (Shobha & Kumar, 2020)	6
8	Retirees	(Adam, et al., 2017); (Murphy, 2013); (Seay, et al., 2015); (Xue, et al., 2019); (Clark & Liu, 2020); (Chuan, et al., 2017)	6
9	Investors	(Sivaramakrishnan, et al., 2017); (Bhattacharjee & Singh, 2017); (Kengatharan, et al., 2020); (Munir, et al., 2020); (Putri & Adawiyah, 2020)	5
10	Women	(Gonçalves, et al., 2021); (Ali, et al., 2021); (Bhonde-Saraf, 2016); (Parvathy & Kumar, 2022); (Warren, et al., 2019);	5
11	Financial Capability Survey	(Robb & Woodyard, 2011); (Xiao, et al., 2014); (Karakurum-Ozdemir, et al., 2019)	3
12	Couples	(Parrotta & Johnson, 1998); (L'Esperance, 2020); (Lee & Dustin, 2021)	3
13	Survivors of Domestic Violence	(Sanders, et al., 2007); (Postmus, et al., 2015); (Johnson, 2021)	3
14	People with disability	(McGarity, et al., 2020); (Janes, et al., 2021); (Xiao & O'Neill, 2022)	3
15	Chinese Survey of Consumer Finance	(Mende & Van Doorn, 2015); (Xia, et al., 2014)	2
16	SME Owners	(Agyei, et al., 2019); (Sisharini, et al., 2019)	2
17	Aboriginal Community	(Blue, 2019); (Rahim & Abdul Samad, 2012)	2
18	trafficking survivors	(Tsai, et al., 2017)	1
19	Black and Hispanic Women	(Clark, et al., 2021)	1
20	beneficiaries of the Minha Casa Minha Vida program	(Vieira, et al., 2021)	1
21	Financially excluded people	(Kim, et al., 2018)	1
22	Farmers	(Adegbite, et al., 2020)	1
23	93 Royal Signals Regiment	(Jamil, et al., 2021)	1

4.3 Methodology

The methodologies employed to enumerate and comprehend financial literacy and well-being are detailed in **Table XI**. Quantitative analysis (46.57%) was frequently implemented methodologies. The financial literacy and well-being domain has been accessed, managed, and developed prominently by exploratory factor analysis (Saurabh and Nandan, 2018; Rahim et al., 2016), binomial logistic regression (Abd Rahim and Othman, 2013), ANNOVA (Chauhan and Indapurkar, 2020; García-Santillán et al., 2021), structural equation modeling including confirmatory factor analysis and path analysis (Junvaini et al., 2021; Ali and Talha, 2021; Sang, 2021), Mann-Whitney U tests and chi-square analysis (Shobha et al., 2020), and t-test (Rahim et al., 2012). To analyze the current body of knowledge on financial literacy and well-being, certain studies have employed qualitative analysis techniques (18.77%), such as systematic literature review (Drever et al., 2015; Mahendru, 2021; Bhattacharjee and Singh, 2017), interviews analysis (Auckland, 2010), and semi-structured interviews (Blue, 2019), followed by econometric analysis (17.32%) and statistical analysis (13.71%). Nevertheless, only two articles implemented the case study approach, followed by eight articles that used a mixed methods approach. There is a considerable skewness in the utilization of methodologies to comprehend the concept and evolution of financial literacy and well-being. Future researchers must investigate financial literacy and well-being antecedents and drivers and adopt strategies, particularly on real-time industry data and information-based case studies, mixed methods, and mathematical analysis.

Table XI: Methodologies used in Prior Research

S.no.	Methodology Used	Supporting Studies	No. of Studies
1	Quantitative	(Joo & Grable, 2004); (Shim, et al., 2009); (Norvilitis, et al., 2006); (Robb & Woodyard, 2011); (Chu, et al., 2017); (Gerrans, et al., 2014); (Parrotta & Johnson, 1998); (Sanders, et al., 2007); (Potrich, et al., 2016); (Dowling, et al., 2009) 2017);	129
2	Qualitative	(Drever, et al., 2015); (Hira, 2012); (Garg & Singh, 2018); (Alsemgeest, 2015); (Montalto, et al., 2019); (Mahendru, 2021); (LeBaron & Kelly, 2021); (Goyal, et al., 2021); (Shappell, et al., 2018); (Mahendru, et al., 2022)	52
3	Econometrics	(Xiao, et al., 2014); (Gutter & Copur, 2011); (Xiao & Porto, 2017); (Mende & Van Doorn, 2015); (Xia, et al., 2014); (Xiao & O'Neill, 2018); (Lyons, et al., 2007); (West & Friedline, 2016); (Philippas & Avdoulas, 2020); (Fu, 2020)	48
6	Statistical Analysis	(Abdullah, et al., 2019); (Mokhtar, et al., 2015); (Osteen, et al., 2007); (Utkarsh, et al., 2020); (Ciemleja, et al., 2014); (Oehler, et al., 2018); (Md.Sapir & Wan Ahmad, 2020); (Cwynar, 2020); (McGarity, et al., 2020); (Heath, 2016)	38
4	Mixed	(Sivaramakrishnan, et al., 2017); (Buckland, 2010); (Salleh, 2015); (Harcourt-Cooke, et al., 2022); (Grable, et al., 2021); (Junviani, et al., 2021); (Warren, et al., 2019); (Postmus, et al., 2015);	8
5	Case Study	(Xu, 2018); (Williams, et al., 2011)	2

4.4 Characteristics

The existing body of literature has predominantly concentrated on identifying and analyzing the most pertinent characteristics within the financial domain, aiming to foster research that underscores the importance of relationship-building. These characteristics have been identified and employed as either antecedents or outcomes of financial literacy and well-being. The increasing number of academic studies on financial literacy, financial and investment behavior,

financial stress, financial satisfaction, financial status, and financial well-being, as illustrated in **Table D**. The majority of the research shows that the financial literacy and well-being domain has its roots in financial literacy (148 studies), followed by financial well-being (140 studies), financial behavior (81 studies), financial knowledge (79 studies), financial education (46 studies), and financial attitude (35 studies). However, there was a lack of research on financial solvency (Joo and Grable, 2004), debt repayment/ debt management (Norvilitis et al., 2006; Abdullah et al., 2019), financial status (Norvilitis et al., 2006; Iramani & Lufti, 2021), financial skills (Xiao and Porto, 2022; Kaur and Singh, 2022; Tian and Wang, 2022; Sang, 2021), financial intuition and habit (Drever et al., 2015), and financial crisis (Bhonde-Saraf, 2016; Nathan et al., 2022), which requires more attention as depicted in **Table XII**. Therefore, the future researcher must focus on the characteristics that are least explored falling from 1-10 studies. For instance, future research should explore how financial literacy programs can enhance individuals' ability to maintain financial solvency, reducing the likelihood of insolvency and improving overall financial literacy. How financial literacy can prepare individuals to better manage financial crises and reduce the adverse impacts of such events on personal and household finances must be investigated. In addition, future research should investigate how financial literacy programs can cultivate positive financial habits and intuitive decision-making processes that contribute to long-term financial well-being. Identifying the financial skills that contribute most significantly to financial well-being and how financial literacy education can enhance these skills are essential to preparing the autonomous plan for developing long-term financial well-being.

Table XII: Characteristics Studied in Previous Research

S.no.	Characteristics	Supporting Studies	No. of Studies
1	Financial Literacy	(Xiao, et al., 2014); (Xiao & Porto, 2017); (Mende & Van Doorn, 2015); (Chu, et al., 2017); (Gerrans, et al., 2014); (Sivaramakrishnan, et al., 2017); (Xia, et al., 2014); (Garg & Singh, 2018); (Potrich, et al., 2016); (Ali, et al., 2015); (Xiao & O'Neill, 2018); (Schmeiser & Seligman, 2013)	148
2	Financial Well-Being/ wellness	(Shim, et al., 2009); (Norvilitis, et al., 2006); (Gutter & Copur, 2011); (Mende & Van Doorn, 2015); (Chu, et al., 2017); (Gerrans, et al., 2014); (Hira, 2012); (Garman, et al., 1999); (Sanders, et al., 2007); (Xiao & O'Neill, 2018)	140
3	Financial Behavior/Behaviour	(Joo & Grable, 2004); (Shim, et al., 2009); (Robb & Woodyard, 2011); (Xiao, et al., 2014); (Gutter & Copur, 2011); (Xiao & Porto, 2017); (Gerrans, et al., 2014); (Garg & Singh, 2018); (Xiao & O'Neill, 2018)	81
4	Financial Knowledge	(Joo & Grable, 2004); (Shim, et al., 2009); (Norvilitis, et al., 2006); (Robb & Woodyard, 2011); (Xiao, et al., 2014); (Drever, et al., 2015); (Parrotta & Johnson, 1998); (Garg & Singh, 2018); (Riitsalu & Murakas, 2019); (Karakurum-Ozdemir, et al., 2019)	79
5	Financial Education	(Joo & Grable, 2004); (Gutter & Copur, 2011); (Xiao & Porto, 2017); (Hira, 2012); (Garman, et al., 1999); (Sanders, et al., 2007); (Alsemgeest, 2015); (Postmus, et al., 2015); (Despard, et al., 2012); (Mokhtar, et al., 2015)	46
6	Financial Capability	(Xiao, et al., 2014); (Xiao & Porto, 2017); (Xiao & O'Neill, 2018); (Montalto, et al., 2019); (Sabri & Zakaria, 2015); (West & Friedline, 2016); (Despard, et al., 2012); (Mahendru, 2021); (Fu, 2020); (Seay, et al., 2015)	45
7	Financial Satisfaction	(Robb & Woodyard, 2011); (Xiao, et al., 2014); (Xiao & Porto, 2017); (Drever, et al., 2015); (Parrotta & Johnson, 1998); (Ali, et al., 2015); (Dowling, et al., 2009); (Atlas, et al., 2019); (Murphy,	40



		2013); (Saurabh & Nandan, 2018)	
8	Financial Attitude	(Shim, et al., 2009); (Norvilitis, et al., 2006); (Gerrans, et al., 2014); (Parrotta & Johnson, 1998); (Garg & Singh, 2018); (Potrich & Vieira, 2018); (LeBaron & Kelly, 2021); (Fu, 2020); (Saurabh & Nandan, 2018); (Robb, et al., 2019)	35
9	Financial Stress / Strain / Anxiety	(Joo & Grable, 2004); (Norvilitis, et al., 2006); (Mende & Van Doorn, 2015); (Sabri & Zakaria, 2015); (Falahati & Sabri, 2015); (Starkey, et al., 2013); (Mokhtar & Rahim, 2017); (Mahdzan, et al., 2019); (Robb, et al., 2019); (Grant-Smith & de Zwaan, 2019)	22
10	Savings/ Emergency Savings	(West & Friedline, 2016); (Shappell, et al., 2018); (Xu, 2018); (Tsai, et al., 2017); (Lusardi, 2015); (Gilenko & Chernova, 2021); (Maman & Rosenhek, 2020); (Ianole-Calin, et al., 2021); (Ranyard, et al., 2020)	19
11	Financial Inclusion/ Access	(Nanda & Banerjee, 2021); (Williams & Oumlil, 2015); (Charron-Chénier & Seamster, 2021); (Nandru, et al., 2021); (Despard, et al., 2020); (Singh & Venkataramani, 2014); (Nathan, et al., 2022); (Kim, et al., 2018); (Adegbite, et al., 2020); (Buckland, et al., 2020)	19
12	Risk Tolerance/ Risk Avoidance / Risk Diversification	(Joo & Grable, 2004); (Sivaramakrishnan, et al., 2017); (Lusardi, 2015); (Çera, et al., 2020); (Maman & Rosenhek, 2020); (Zhu & Xiao, 2022); (Estelami, 2016); (Tavares, et al., 2020); (Zhu, et al., 2021); (Pospíšil, et al., 2021)	17
13	Financial Decision Making	(Drever, et al., 2015); (Hira, 2012); (Estelami, 2016); (Tavares, et al., 2020); (Vieira, et al., 2018); (Zimbardo, et al., 2017); (Mavlutova, et al., 2022); (Lee, et al., 2021); (Yakoboski, et al., 2020); (Greenberg, et al., 2020)	17
14	Debt/ Credit /Borrowings	(Lyons, et al., 2007); (West & Friedline, 2016); (Shim, et al., 2013); (Jiang & Lim, 2018); (Seay, et al., 2015); (Shappell, et al., 2018); (Pereira & Coelho, 2019); (Geyer, et al., 2019); (Ng, et al., 2022); (Greenberg, et al., 2020)	16
15	Financial Management	(Parrotta & Johnson, 1998); (Dowling, et al., 2009); (Falahati & Sabri, 2015); (Bemel, et al., 2016); (Bird, et al., 2014); (van Deventer, et al., 2021); (Husniyah & Fazilah, 2011); (Fan & Park, 2021); (Lučić, et al., 2022); (Shobha & Kumar, 2020)	14
16	Retirement/ Retirement Planning	(Garman, et al., 1999); (Adam, et al., 2017); (Xue, et al., 2019); (Lusardi, 2015); (Salleh, 2015); (Rostamkalaei, et al., 2022); (Clark & Liu, 2020); (Lusardi, 2014); (Fisch & Seligman, 2021); (Eberhardt, et al., 2022)	13
17	Financial Skills	(Drever, et al., 2015); (Mahendru, et al., 2022); (Ciemleja, et al., 2014); (Md.Sapir & Wan Ahmad, 2020); (Patel & Wolfe, 2019); (van Deventer, et al., 2021); (Vieira, et al., 2018); (Fan & Park, 2021); (Xiao & Porto, 2022); (Kaur & Singh, 2022)	12
18	Consumer Socialization/ Financial Socialization	(Falahati & Sabri, 2015); (Saurabh & Nandan, 2018); (Utkarsh, et al., 2020); (Ammerman & Stueve, 2019); (Ali, et al., 2021); (Fan & Park, 2021); (Khalil, 2020); (Madinga, et al., 2022); (Kim & Chawla, 2022); (LeBaron-Black, et al., 2022)	12
19	Personal Finance	(Chu, et al., 2017); (Xia, et al., 2014); (Atlas, et al., 2019); (Xu, 2018); (Grant-Smith & de Zwaan, 2019); (Cao, et al., 2020); (West & Cull, 2020); (Yakoboski, et al., 2020); (Shobha & Kumar, 2020); (Xiao, 2022)	11
20	Financial Self-Efficacy	(Ranta & Salmela-Aro, 2018); (Huang, et al., 2018); (Thomas & Gupta, 2021); (Ali, et al., 2021); (Zhu, et al., 2021); (McCoy, et al., 2019); (Salas-Velasco, 2022); (Kaur & Singh, 2022); (Eberhardt, et al., 2022); (Sang, 2021)	11
21	Income/ earnings	(Buckland, 2010); (Zyphur, et al., 2015); (West & Friedline, 2016); (Shappell, et al., 2018); (Clark & Liu, 2020); (L'Esperance, 2020); (Nathan, et al., 2022); (Sabri, et al., 2020)	8
22	Financial Planning	(Adam, et al., 2017); (Shappell, et al., 2018); (Ammerman &	8



		Stueve, 2019); (Bird, et al., 2014); (Ng, et al., 2022); (Kengatharan, et al., 2020); (Park, 2019); (Rahim & Othman, 2013)	
23	Parental SES (Socioeconomic Status)/ Family Factors	(Ranta & Salmela-Aro, 2018); (Vosylis & Klimstra, 2022); (Sirsch, et al., 2020); (Clark, et al., 2021); (Zhu, et al., 2021); (Janes, et al., 2021); (Pak & Fan, 2022); (Birkenmaier, et al., 2022)	8
24	Money Management / Credit Management	(Salleh, 2015); (Ranyard, et al., 2020); (Lee, et al., 2021); (West & Cull, 2020); (Sabri, et al., 2020); (Kim & Chawla, 2022); (Singh & Malik, 2022); (Chuan, et al., 2017)	8
25	Financial Health	(Nathan, et al., 2022); (Huang, et al., 2018); (Zimbardo, et al., 2017); (Huston, 2015); (Bemel, et al., 2016); (Hassan, et al., 2021); (Vörös, et al., 2021); (Milovanska-Farrington & Farrington, 2021)	8
26	Overconfidence/ confidence	(Chu, et al., 2017); (Xia, et al., 2014); (Atlas, et al., 2019); (Rostamkalaei, et al., 2022); (Krische & Mislin, 2020); (Vörös, et al., 2021); (Lee & Kim, 2021)	7
27	Investment Behavior	(Sivaramakrishnan, et al., 2017); (Schmeiser & Seligman, 2013); (Maman & Rosenhek, 2020); (Mavlutova, et al., 2022); (Greenberg, et al., 2020); (Shobha & Kumar, 2020); (Chauhan & Indapurkar, 2020)	7
28	COVID-19	(Yuesti, et al., 2020); (Nathan, et al., 2022); (Mavlutova, et al., 2022); (Wikoff, 2022); (Moghavvemi & Muniandy, 2021); (Sukumaran & Alamelu, 2021); (Ali & Talha, 2021)	7
29	Financial Counseling	(Mende & Van Doorn, 2015); (Despard, et al., 2012); (Huang, et al., 2018); (West & Ramcharan, 2019); (Janes, et al., 2021); (McGregor, 2020)	6
30	Stock Market Participation	(Sivaramakrishnan, et al., 2017); (Xia, et al., 2014); (Michael Collins & Urban, 2020); (Zhu & Xiao, 2022); (Fisch & Seligman, 2021); (Munir, et al., 2020)	6
31	Money Attitude	(Dowling, et al., 2009); (Sabri & Zakaria, 2015); (Abdullah, et al., 2019); (Falahati & Sabri, 2015); (Sabri & Zakaria, 2015); (Pereira & Coelho, 2019)	6
32	Student Loans	(Montalto, et al., 2019); (Robb, et al., 2019); (Williams & Oumlil, 2015); (Kim, et al., 2021); (Britt-Lutter & Heckman, 2020); (Garrett, et al., 2022)	6
33	Financial Experience	(Lyons, et al., 2007); (Goyal, et al., 2021); (Shappell, et al., 2018); (Iramani & Lufti, 2021); (Vieira, et al., 2018); (Kim & Chawla, 2022)	6
34	Gender Differences	(Zyphur, et al., 2015); (Falahati & Sabri, 2015); (Gonçalves, et al., 2021); (Bahovec, et al., 2017); (Sabri, et al., 2020); (Kim, et al., 2018)	6
35	Trust	(Shim, et al., 2013); (Jiang & Lim, 2018); (Hansen, 2017); (Thomas & Gupta, 2021); (Fisch & Seligman, 2021); (Isler, et al., 2022)	6
36	Locus of Control	(Mokhtar & Rahim, 2017); (Mahdzan, et al., 2019); (She, et al., 2022); (Klontz, et al., 2015); (Dare, et al., 2020); (Sabri, et al., 2022)	6
37	Financial Awareness	(Bhattacharjee & Singh, 2017); (Md.Sapir & Wan Ahmad, 2020); (Bhonde-Saraf, 2016); (Huston, 2015); (Lee, et al., 2021); (Tian & Wang, 2022)	6
38	Financial Advice	(Çera, et al., 2020); (Westermann, et al., 2020); (Khan & Akhtar, 2020); (Khan, et al., 2022); (Moolman, 2020); (Khan & Akhtar, 2021)	6
39	Financial Problem	(Dowling, et al., 2009); (Despard, et al., 2012); (Rahim & Abdul Samad, 2012); (Li, et al., 2022); (Sabri, et al., 2013)	5
40	Credit Card Use/ Credit Use	(Norvilitis, et al., 2006); (Schmeiser & Seligman, 2013); (Atlas, et al., 2019); (Santos, et al., 2022)	4



41	Financial Security	(Hira, 2012); (Ianole-Calin, et al., 2021); (Despard, et al., 2020); (Chatterjee & Grable, 2022)	4
42	Youth	(Garg & Singh, 2018); (Dowling, et al., 2009); (West & Friedline, 2016); (Abdullah, et al., 2019)	4
43	Psychology	(Riitsalu & Murakas, 2019); (Estelami, 2016); (Klontz, et al., 2015); (Johnson, 2021)	4
44	Environment / Economic Environment/ Economic Situation	(Helm, et al., 2019); (Mahendru, et al., 2022); (Henchoz, 2016); (Pospíšil, et al., 2021)	4
45	Financial Information	(Charron-Chénier & Seamster, 2021); (Losada-Otalora, et al., 2020); (Huang, et al., 2018); (Summers, et al., 2005)	4
46	Consumer Involvement/ Consumer Behavior/ Consumer Attitude	(Mende & Van Doorn, 2015); (Hira, 2012); (Ponchio, et al., 2019)	3
47	Propensity to Plan	(Xiao & O'Neill, 2018); (Lee, et al., 2020); (Shobha & Chakraborty, 2017)	3
48	Numeracy	(Lind, et al., 2020); (Sunderaraman, et al., 2022); (Wikoff, 2022)	3
49	Financial Beliefs	(Seay, et al., 2015); (Eberhardt, et al., 2022); (Thiessen, 2014)	3
50	Financial Vulnerability	(Goyal, et al., 2021); (Singh & Malik, 2022); (Santos, et al., 2021)	3
51	Personality Traits	(Mahendru, et al., 2022); (Husniyah & Fazilah, 2011); (Janes, et al., 2021)	3
52	Self Control	(Ianole-Calin, et al., 2021); (Meneau & Moorthy, 2022); (Rey-Ares, et al., 2021)	3
53	Financial Stability	(McGarity, et al., 2020); (Husniyah & Fazilah, 2011); (Rahim & Othman, 2013)	3
54	Debt Repayment/ Debt Management	(Norvilitis, et al., 2006); (Abdullah, et al., 2019)	2
55	Financial Status	(Norvilitis, et al., 2006); (Iramani & Lufti, 2021)	2
56	Household Finance	(Chu, et al., 2017); (Lind, et al., 2020)	2
57	Equity Holding	(Sivaramakrishnan, et al., 2017); (Bhattacharjee & Singh, 2017)	2
58	Cognitive Reflection/ effort	(Lind, et al., 2020); (Hansen, 2017)	2
59	Materialism	(Helm, et al., 2019); (Potrich & Vieira, 2018)	2
60	Financial Expertise	(Bayuk & Altobello, 2019); (Power & Hira, 2010)	2
61	Financial Needs	(Starkey, et al., 2013); (Shankar, et al., 2022)	2
62	Financial Fragility	(Philippas & Avdoulas, 2020); (Shankar, et al., 2022)	2
63	Mindfulness	(Mahendru, et al., 2022); (Pereira & Coelho, 2019)	2
64	Cognitive & Practical Skills	(Henchoz, 2016); (Lin & Bates, 2022)	2
65	Financial Outcomes	(Cao, et al., 2020); (Zhao & Zhang, 2020)	2
66	Social Media	(Cao, et al., 2020); (Pillai, et al., 2017)	2
67	Financial Self Sufficiency	(Vosylis & Klimstra, 2022); (Geyer, et al., 2019)	2
68	Self employed	(Rostamkalaei, et al., 2022); (Patel & Wolfe, 2019)	2
69	Parental/Family Financial Socialization	(Sirsch, et al., 2020); (Zhao & Zhang, 2020)	2
70	Home Ownership	(Tharp, et al., 2020); (Hudson & Young, 2022)	2
71	Financial Assets	(Cui, et al., 2019); (Milovanska-Farrington & Farrington, 2021)	2
72	Electronic Payment System/ Digital Finance	(Khan & Akhtar, 2020); (Khan & Akhtar, 2021)	2
73	Economic/Financial Crisis	(Bhonde-Saraf, 2016); (Nathan, et al., 2022)	2



74	Expectations about the Future	(Lusardi, 2014); (West & Cull, 2020)	2
75	Fintech	(Nathan, et al., 2022); (Nguyen, 2022)	2
76	Financial Ratios	(Rahim & Abdul Samad, 2012); (Pak & Fan, 2022)	2
77	Professional Athletes / Student Athletes	(Moolman, 2020); (McCoy, et al., 2019)	2
78	Financial Solvency	(Joo & Grable, 2004)	1
79	Life Success	(Shim, et al., 2009)	1
80	Subjective Norms	(Shim, et al., 2009)	1
81	Financial Dispositions	(Gutter & Copur, 2011)	1
82	Financial Intuition and Habit	(Drever, et al., 2015)	1
83	Attachment Styles	(Mende & Van Doorn, 2015)	1
84	Coproduction	(Mende & Van Doorn, 2015)	1
85	Productivity	(Garman, et al., 1999)	1
86	Domestic Violence	(Sanders, et al., 2007)	1
87	Emerging Markets	(Karakurum-Ozdemir, et al., 2019)	1
88	Higher Education	(Montalto, et al., 2019)	1
89	Self Evaluations	(Zyphur, et al., 2015)	1
90	Financially Excluded/Unbanked	(Buckland, 2010)	1
91	Compulsive Buying	(Potrich & Vieira, 2018)	1
92	Family Support	(Adam, et al., 2017)	1
93	Financial Priorities	(Starkey, et al., 2013)	1
94	Hopelessness	(Murphy, 2013)	1
95	Financial Situation	(Ranta & Salmela-Aro, 2018)	1
96	Self Esteem	(Sabri & Zakaria, 2015)	1
97	Financial Updation	(Mahendru, et al., 2022)	1
98	Financial Exclusion	(Williams & Oumlil, 2015)	1
99	Financial Resilience	(Grant-Smith & de Zwaan, 2019)	1
100	Optimism	(Ianole-Calin, et al., 2021)	1
101	Future Orientation	(Ianole-Calin, et al., 2021)	1
102	Marital Status	(Iramani & Lufti, 2021)	1
103	Financial Resources	(Tharp, et al., 2020)	1
104	Social Network	(Thomas & Gupta, 2021)	1
105	Reciprocity	(Thomas & Gupta, 2021)	1
106	Socioeconomic Factors	(Williams, et al., 2011)	1
107	Financial Autonomy	(Zhu, et al., 2021)	1
108	Financial Protection	(Vieira, et al., 2021)	1
109	Cultural Dominance	(Agvei, et al., 2019)	1
110	Credit Score	(Geyer, et al., 2019)	1
111	Financial Preparedness	(Ng, et al., 2022)	1
112	ESG	(Mavlutova, et al., 2022)	1
113	Financial Exploitation of older adults	(Lee, et al., 2021)	1
114	Aged Care	(West & Ramcharan, 2019)	1
115	Thinking Styles	(Meneau & Moorthy, 2022)	1
116	Rural Farmers	(Adegbite, et al., 2020)	1
117	CSR	(Buckland, et al., 2020)	1
118	Holistic Development	(Sood, et al., 2012)	1
119	Financial Practices	(Power & Hira, 2010)	1

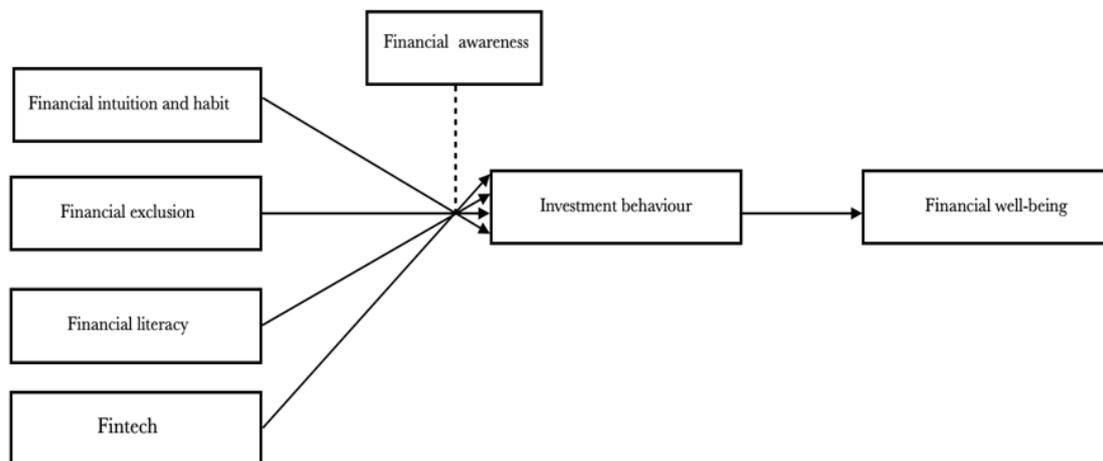


Figure 6: Proposed Framework

Source: Author’s own imagination

5. PROPOSED FRAMEWORK

The prior literature has demonstrated the scope and prospects for extending and developing ideas in the field of financial literacy and well-being (Xiao et al., 2014; Xiao & Porto, 2017; Mende & Van Doorn, 2015; Chu et al., 2017; Gerrans et al., 2014). Financial literacy and well-being are fundamental to achieving a stable and satisfying financial life (Mahendru, 2021; Lee et al., 2020; Mokhtar et al., 2015; Philippas & Avdoulas, 2020). By understanding and enhancing financial literacy, individuals can improve their financial well-being, reducing stress, better health, and a higher quality of life (Ergün, 2018; Sabri & Zakaria, 2015; Buckland, 2010).

The previous research has shown the extent of exploring the role of financial behaviour (Joo & Grable, 2004; Shim, et al., 2009; Robb & Woodyard, 2011); (Xiao, et al., 2014); (Gutter & Copur, 2011); (Xiao & Porto, 2017), financial knowledge (Joo & Grable, 2004; Shim, et al., 2009; Norvilitis, et al., 2006; Robb & Woodyard, 2011; Xiao, et al., 2014; Drever, et al., 2015; Parrotta & Johnson, 1998), financial education (Johnson, et al., 2021; Santos, et al., 2021; Sukumaran & Alamelu, 2021; Newsom, 2021; Junviani, et al., 2021), financial attitude (Dare, et al., 2020; Kim & Chawla, 2022; Kaur & Singh, 2022; Tian & Wang, 2022; Singh & Malik, 2022), financial satisfaction (Robb & Woodyard, 2011; Xiao, et al., 2014; Xiao & Porto, 2017; Drever, et al., 2015; Parrotta & Johnson, 1998), financial capability (Xiao, et al., 2014; Xiao & Porto, 2017; Xiao & O'Neill, 2018; Montalto, et al., 2019), and financial inclusion (Birkenmaier, et al., 2022; Liu, et al., 2021; Sukumaran & Alamelu, 2021; Chauhan & Indapurkar, 2020; Kumari, et al., 2020; Pillai, et al., 2017). However, a plethora of characteristics, including financial solvency (Joo & Grable, 2004), debt repayment/debt management (Norvilitis et al., 2006; Abdullah et al., 2019), financial status (Norvilitis et al., 2006; Iramani & Lufti, 2021), financial dispositions (Gutter & Copur, 2011), and financial intuition and habit (Drever et al., 2015) have received very less attention in understanding the intertwining with financial literacy and well-being.

This study recognized several variables such as financial intuition and habit (Drever et al., 2015), financial awareness (Bhattacharjee & Singh, 2017; Md.Sapir & Wan Ahmad, 2020; Bhonde-Saraf, 2016), fintech (Nathan et al., 2022; Nguyen, 2022), investment behavior (Sivaramakrishnan et al., 2017; Schmeiser & Seligman, 2013; Maman & Rosenhek, 2020) has



received little attention in financial literacy and well-being. These constructs can behave as an antecedent to facilitate financial literacy (Gómez-Biscarri et al., 2021; Lee & Kim, 2021; Jamil et al., 2021; Kumari et al., 2020; Zhou et al., 2020; Munir et al., 2020; Putri & Adawiyah, 2020; McGregor, 2020), and financial well-being (Vosylis et al., 2021; Harrison et al., 2020; Putri & Adawiyah, 2020; Sehrawat & Vij, 2020).

The proposed framework delineates the intricate relationships between various financial constructs and their collective impact on financial well-being. The model identifies four independent variables: financial intuition and habit (Drever et al., 2015), financial exclusion (Williams & Oumlil, 2015), financial literacy, and fintech (Nathan et al., 2022; Nguyen, 2022). These variables directly influence investment behavior (Sivaramakrishnan et al., 2017; Schmeiser & Seligman, 2013; Maman & Rosenhek, 2020), which is a mediating variable. The ultimate dependent variable in this framework is financial well-being. Additionally, the model is mediated by financial awareness (Bhattacharjee & Singh, 2017; Md.Sapir & Wan Ahmad, 2020; Bhonde-Saraf, 2016), which modifies the strength and direction of the relationships between the independent variables and the mediating variable.

Financial Intuition and Habit encompass individuals' ingrained cognitive patterns and customary practices in their financial decision-making processes. These include routine behaviors and intuitive judgments that significantly shape investment choices. For instance, an individual might habitually save a certain percentage of their income due to a deep-seated belief in financial prudence. Alternatively, they might rely on gut feelings when choosing stocks based on past experiences and learned behaviors. Conversely, Financial Exclusion highlights the barriers that prevent certain individuals from accessing essential financial services. These barriers can stem from socio-economic, geographic, or institutional factors, limiting participation in financial markets and investment opportunities. For example, individuals in remote rural areas may lack access to banking services. At the same time, those from lower socio-economic backgrounds may face challenges in meeting the criteria for opening bank accounts or securing loans. These exclusions restrict their ability to participate in the financial system and benefit from investment opportunities.

Financial Literacy is the knowledge and competency required to understand financial concepts and manage financial resources effectively. It encompasses comprehending and applying various financial skills, including budgeting, investing, and managing debt. Enhancing financial literacy is crucial for empowering individuals to make informed investment decisions. A financially literate person can analyze financial products, understand market trends, and make strategic decisions that optimize their financial health.

Fintech, or financial technology, is pivotal in integrating technological advancements into financial services. This integration facilitates greater access to financial information, tools, and platforms, influencing individuals' engagement with financial markets. For instance, mobile banking apps, online investment platforms, and robo-advisors have democratized access to financial services, allowing individuals to manage their finances, invest, and plan for the future with greater ease and efficiency.

Investment Behavior acts as a mediating variable that translates the influence of these independent variables into tangible financial outcomes. Positive investment behaviors, such as strategic diversification and long-term planning, can enhance financial well-being. For example, an investor diversifying their portfolio across various asset classes and maintaining a long-term perspective is more likely to achieve financial stability and growth. Conversely, poor investment behaviors, such as impulsive trading or lack of planning, can result in financial

instability and losses. Financial Awareness moderates the relationship between the independent variables and investment behavior. It encompasses how individuals are informed about financial opportunities, risks, and the broader economic environment. Higher financial Awareness can enhance the positive effects of financial literacy, fintech, and intuition while mitigating the negative impacts of financial exclusion. For example, individuals aware of the risks associated with high-interest loans are less likely to fall into debt traps. At the same time, one who understands the benefits of diversified investments is more likely to build a robust portfolio.

The proposed model posits that Financial Intuition and Habit, Financial Exclusion, Financial Literacy, and Fintech independently influence Investment Behavior, which affects Financial Well-being. This entire process is mediated by Financial Awareness, highlighting the importance of being well-informed in achieving optimal financial outcomes. By understanding these relationships, stakeholders can develop targeted strategies to promote better financial behaviors and enhance overall financial well-being.

For example, policymakers could focus on improving financial literacy programs, expanding access to fintech services, and reducing barriers to financial inclusion. Financial institutions might develop tools and resources catering to diverse populations, ensuring everyone can participate in the financial system and improve their financial health. By fostering a well-informed and inclusive financial environment, it is possible to drive positive investment behaviors and ultimately enhance the financial well-being of all individuals.

Concluding Remarks and Limitations

The current study is an attempt to explore and present the gamut of academic research in the field of Financial Literacy and Financial Well-being to identify the critical themes and impactful researchers. The paper employs bibliometric methodology to assess the current state and trajectory of academic research on the chosen topic while dispensing the most contributing authors, countries, institutions, and articles. An attempt has been made to map the trends in the research area to educate and enlighten future researchers. To aid the results drawn from the bibliometric theory, the study applies the TCCM framework and suggests the direction for future research.

Even though the chosen database, Scopus, compiles the vast majority of the most significant publications in the marked research area, however, it is possible that few pertinent publications might have escaped the selected data set. Additionally, there is a bleak possibility that some selected publications might not contain keywords, which could slightly alter the findings of the keyword analysis. It is recommended for future research to work on these limitations and plug these gaps. Financial Literacy and Financial Well-being has gained the attention of researchers and policymakers more importantly after the COVID-19 pandemic; to counter the distressed economies the governments and financial regulators have shifted focus to these critical areas. Present research may supplement their effort to strengthen economic recovery and growth.

References

- 1) Abdullah, N., Sabri, M., & Arif, A. (2019). The Relationship between attitude towards money, financial literacy and debt management with young worker's financial well-being. *Pertanika Journal of Social Sciences and Humanities*, 27(1), 361–387.
- 2) Adam, A. M., Frimpong, S., & Boadu, M. (2017). Financial literacy and financial planning: Implication for financial well-being of retirees. *Business and Economic Horizons*, 13(2),



- 3) Ali, A., Rahman, M. S. A., & Bakar, A. (2015). Financial Satisfaction and the Influence of Financial Literacy in Malaysia. *Social Indicators Research*, 120(1), 137–156.
- 4) Ali, M., Ali, I., Badghish, S. & Soomro, Y. A. (2021). Determinants of Financial Empowerment Among Women in Saudi Arabia. *Frontiers in Psychology*, 12.
- 5) Ali, S. & Talha, N. (2021). During COVID-19, impact of subjective and objective financial knowledge and economic insecurity on financial management behavior: Mediating role of financial wellbeing. *Journal of Public Affairs*, 22(1).
- 6) Alsemgeest, L. (2015). Arguments for and against financial literacy education: where to go from here? *International Journal of Consumer Studies*, 39(2), 155–161.
- 7) Ammerman, D. A., & Stueve, C. (2019). Childhood Financial Socialization and Debt-Related Financial Well-Being Indicators in Adulthood. *Journal of Financial Counseling and Planning*, 30(2), 213–230.
- 8) Anvari-Clark, J., & Ansong, D. (2022a). Predicting Financial Well-Being Using the Financial Capability Perspective: The Roles of Financial Shocks, Income Volatility, Financial Products, and Savings Behaviors. *Journal of Family and Economic Issues*, 43, 730-743.
- 9) Arifin, A. Z., 2018. Influence factors toward financial satisfaction with financial behavior as intervening variable on Jakarta area workforce. *European Research Studies Journal*, 21(1), 90-103.
- 10) Atlas, S., 'Lu, J., 'Micu, D., & 'Porto, N. (2019). Financial Knowledge, Confidence, Credit Use, and Financial Satisfaction. *Journal of Financial Counseling and Planning*, 30(2), 175–190.
- 11) Bayuk, J., & Altobello, S. A. (2019). Can gamification improve financial behavior? The moderating role of app expertise. *International Journal of Bank Marketing*, 37(4), 951–975.
- 12) Bhonde-Saraf, A. (2016). Are women financially educated? A study with reference to earning women of Aurangabad District, Maharashtra. *Indian Journal of Finance*, 10(3), 43-51.
- 13) Birkenmaier, J., Kim, Y., & Maynard, B. (2022). Financial Outcomes of Interventions Designed to Improve Financial Capability through Individual Development Accounts: A Systematic Review. *Journal of Evidence-Based Social Work*, 19(4), 408–439.
- 14) Birkenmaier, J., Rothwell, D., & Agar, M. (2022). How is Consumer Financial Capability Measured? *Journal of Family and Economic Issues*, 43, 654-666.
- 15) Blue, L. E., 2019. Financial literacy education with an aboriginal community: Identifying critical moments for enabling praxis. *Education Sciences*, 9(1).
- 16) Buckland, J. (2010). Are Low-Income Canadians Financially Literate? Placing Financial Literacy in the Context of Personal and Structural Constraints. *Adult Education Quarterly*, 60(4), 357–376.
- 17) Buckland, J., Daniels, C. & Godinho, V. (2020). Does Australia have an advantage in promoting financial well-being and what might Canada and other countries learn?. *Canadian Journal of Urban Research*, 29(1), pp. 39-54.
- 18) Cao, Y., Gong, F., & Zeng, T. (2020). Antecedents and Consequences of Using Social Media for Personal Finance. *Journal of Financial Counseling and Planning*, 31(1), 162–176.
- 19) Chavali, K., Raj, P. M. & Ahmed, R. (2021). Does Financial Behavior Influence Financial Well-being?. *Journal of Asian Finance, Economics and Business*, 8(2), 273-280.
- 20) Chen, Z., & Zurlo, K. A. (2022). The Role of Secured and Unsecured Debt in Retirement Planning. *Journal of Family and Economic Issues*, 43, 667-677.
- 21) Chu, Z., Wang, Z., Xiao, J. J., & Zhang, W. (2017). Financial Literacy, Portfolio Choice and Financial Well-Being. *Social Indicators Research*, 132(2), 799–820.
- 22) Collins, J. M., & Urban, C. (2020). Measuring financial well-being over the life course. *The European Journal of Finance*, 26(4–5), 341–359.
- 23) Comerio, N., & Strozzi, F. (2019). Tourism and its economic impact: A literature review using bibliometric tools. *Tourism Economics*, 25(1), 109–131.



- 24) Cossa, A., Madaleno, M., & Mota, J. (2022). Financial literacy environment scan in Mozambique. *Asia Pacific Management Review*, 27(4), 229-244.
- 25) Cui, X., Xioa, J. J., & Yi, J. (2019). Employment Type, Residential Status And Consumer Financial Capability: Evidence From China Household Finance Survey. *The Singapore Economic Review*, 64(01), 57–81. <https://doi.org/10.1142/S0217590817430032>
- 26) Despard, M. R., Chowa, G. A. N., & Hart, L. J. (2012). Personal Financial Problems: Opportunities for Social Work Interventions? *Journal of Social Service Research*, 38(3), 342–350.
- 27) Devi, K. & Kartawinata, B. R. (2021). Financial knowledge and financial behavior to financial satisfaction to the millennial generation in the city of Bandung. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 5530-5539
- 28) Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296.
- 29) Dowling, N., 'Corney, T., & 'Hoiles, L. (2009). Financial Management Practices and Money Attitudes as Determinants of Financial Problems and Dissatisfaction in Young Male Australian Workers. *Journal of Financial Counseling and Planning*, 20(2).
- 30) Drever, A. I., Odders-White, E., Kalish, C. W., Else-Quest, N. M., Hoaglang, E. M., & Nelms, E. N. (2015). Foundations of Financial Well-Being: Insights into the Role of Executive Function, Financial Socialization, and Experience-Based Learning in Childhood and Youth. *Journal of Consumer Affairs*, 49(1), 13–38.
- 31) Eberhardt, W., Post, T., Hoet, C., & Brüggem, E. (2022). Exploring the first steps of retirement engagement: a conceptual model and field evidence. *Journal of Service Management*, 33(6), 1–26.
- 32) Ergün, K. (2018). Financial literacy among university students: A study in eight European countries. *International Journal of Consumer Studies*, 42(1), 2–15.
- 33) Falahati, L., & Sabri, M. (2015). An Exploratory Study of Personal Financial Wellbeing Determinants: Examining the Moderating Effect of Gender. *Asian Social Science*, 11(4).
- 34) Fan, L., & Henager, R. (2022). A Structural Determinants Framework for Financial Well-Being. *Journal of Family and Economic Issues*, 43(2), 415–428.
- 35) Fan, L., & Park, N. (2021). Factors Mediating the Association Between Financial Socialization and Well-Being of Young Adults: Testing a Conceptual Framework. *Journal of Financial Counseling and Planning*, 32(2), JFCP-20-00056.
- 36) García-Santillán, A., Lizzeth, N. I., Molchanova, V. S. & Castro, D. L. (2021). Financial Literacy Level: An Empirical Study on Savings, Credit and Budget Management Habits in High School Students. *European Journal of Contemporary Education*, 10(4), 897-911.
- 37) Garg, N., & Singh, S. (2018). Financial literacy among youth. *International Journal of Social Economics*, 45(1), 173–186.
- 38) Garman, E. T., 'Kim, J., 'Kratzer, C., 'Brunson, B., & 'Joo, So. H. (1999). Workplace Financial Education Improves Personal Financial Wellness. *Journal of Financial Counseling and Planning*, 10(1).
- 39) Garrett, C. C., Doonan, R. L., Pyle, C., & Azimov, M. B. (2022). Student loan debt and financial education: a qualitative analysis of resident perceptions and implications for resident well-being. *Medical Education Online*, 27(1).
- 40) Gerrans, P., Speelman, C., & Campitelli, G. (2014). The Relationship Between Personal Financial Wellness and Financial Wellbeing: A Structural Equation Modelling Approach. *Journal of Family and Economic Issues*, 35(2), 145–160.
- 41) Goyal, K., Kumar, S., & Xiao, J. J. (2021). Antecedents and consequences of Personal Financial Management Behavior: a systematic literature review and future research agenda. *International Journal of Bank Marketing*, 39(7), 1166–1207.
- 42) Grant-Smith, D. & de Zwaan, L. (2019). Don't spend, eat less, save more: Responses to the financial stress experienced by nursing students during unpaid clinical placements. *Nurse Education in Practice*, Volume 35, 1-6.



- 43) Gutter, M., & Copur, Z. (2011). Financial Behaviors and Financial Well-Being of College Students: Evidence from a National Survey. *Journal of Family and Economic Issues*, 32(4), 699–714.
- 44) Hansen, T., 2016. The moderating effects of financial broad-scope trust on consumer knowledge, cognitive effort, and financial healthiness. *Journal of Consumer Behaviour*, 16(2), 161-175.
- 45) Harcourt-Cooke, C., Els, G., & Rensburg, E. (2022). Using comics to improve financial behaviour. *Journal of Behavioral and Experimental Finance*, 33, 100614.
- 46) Helm, S., Serido, J., Ahn, S. Y., Ligon, V., & Shim, S. (2019). Materialist values, financial and pro-environmental behaviors, and well-being. *Young Consumers*, 20(4), 264–284.
- 47) Hira, T. K. (2012). Promoting sustainable financial behaviour: implications for education and research. *International Journal of Consumer Studies*, 36(5), 502–507.
- 48) Huang, E. J., Lassu, R. A., & Chan, K. K. (2018). User-Source Fit and Financial Information Source Selection of Millennials. *Journal of Financial Counseling and Planning*, 29(2), 272–289.
- 49) Hudson, C. R., & Young, J. (2022). Wealth: Factors That Effect African American Wealth. *The Review of Black Political Economy*, 50 (1), 97-116 003464462210768.
- 50) Huston, S. J. (2015). Using a Financial Health Model to Provide Context for Financial Literacy Education Research: A Commentary. *Journal of Financial Counseling and Planning*, 26(1), 102–104.
- 51) Isler, O., Rojas, A., & Dulleck, U. (2022). Easy to shove, difficult to show: Effect of educative and default nudges on financial self-management. *Journal of Behavioral and Experimental Finance*, 34, 100639.
- 52) Iramani, R. & Lufti, L., 2021. An integrated model of financial well-being: The role of financial behavior. *Accounting*, 7(3), 691-700.
- 53) Johnson, J., Spraggon, D., Stevenson, G., Levine, E., & Mancari, G. (2021). Impact of the FutureSmart Online Financial Education Course on Financial Knowledge of Middle School Students. *Journal of Financial Counseling and Planning*, 32(3), 368–386.
- 54) Joo, S., & Grable, J. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*, 25(1), 25–50.
- 55) Junviani, N., Kartawinata, B. R., Moeliono, N. K. & Moeliono, A. F. (2021). The role of financial ability as a mediator of financial education and financial satisfaction case study at productive in Makassar city. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 5486-5493.
- 56) Karakurum-Ozdemir, K., Kokkizil, M., & Uysal, G. (2019). Financial Literacy in Developing Countries. *Social Indicators Research*, 143(1), 325–353.
- 57) Kaur, G. & Singh, M., 2022. Pathways to Individual Financial Well-Being: Conceptual Framework and Future Research Agenda. *FIIB Business Review*, 13(1)Kengatharan, N., Kengatharan, L., & Thilepan, M., 2020. Literacy is power and transforms lives: Channelling the relationship between financial literacy and financial satisfaction. *Journal of Asai-Pacific Business*, 20(1), 3-6.
- 58) Khalil, M., 2020. Financial citizenship as a broader democratic context of financial literacy. *Citizenship, Social and Economics Education*, 20(1), 3-16.
- 59) Khan, K. A. & Akhtar, M. A. (2020). Electronic payment system use: A mediator and a predictor of financial satisfaction. *Investment Management and Financial Innovations*, 17(3), 246-262
- 60) Khan, K., Çera, G., & Alves, S. R. (2022). Financial Capability As A Function Of Financial Literacy, Financial Advice, And Financial Satisfaction. *E&M Ekonomie a Management*, 25(1), 143–160.
- 61) Khan, M. N., Ferrer, I., Lee, Y., & Rothwell, D. W. (2022). Examining the financial knowledge of immigrants in Canada: a new dimension of economic inequality. *Journal of Ethnic and Migration Studies*, 48(13), 3184–3201.
- 62) Kienzler, M., Västfjäll, D., & Tinghög, G. (2022). Individual differences in susceptibility to financial bullshit. *Journal of Behavioral and Experimental Finance*, 34, 100655.
- 63) Kim, K. T., Lee, J. M., & Lee, J. (2021). Student Loans and Financial Satisfaction: The Moderating Role of Financial Education. *Journal of Financial Counseling and Planning*, 32(2), JFCP-19-00002.



- 64) Klontz, B. T., Sullivan, P., Seay, M. C. & Canale, A., 2015. The wealthy: A financial psychological profile. *Consulting Psychology Journal*, 67(2), 127-143.
- 65) LeBaron, A. B., & Kelley, H. H. (2021). Financial Socialization: A Decade in Review. *Journal of Family and Economic Issues*, 42(S1), 195–206.
- 66) LeBaron-Black, A. B., Li, X., Okamoto, R. M., Saxey, M. T., & Driggs, T. M. (2022). Finances and Fate: Parent Financial Socialization, Locus of Control, and Mental Health in Emerging Adulthood. *Emerging Adulthood*, 10(6), 1484–1496.
- 67) Lee, J. M., Lee, J., & Kim, K. T. (2020). Consumer Financial Well-Being: Knowledge is Not Enough. *Journal of Family and Economic Issues*, 41(2), 218–228.
- 68) Lee, K., Tang, W., Jones, S., Xu, L., & Cong, Z. (2021). The Money Smart for Older Adults Program: A Qualitative Study of the Participants' Financial Well-Being. *Journal of Gerontological Social Work*, 64(2), 120–134.
- 69) Lee, S. T., & Kim, K. T. (2021). A Decomposition Analysis of Racial/Ethnic Differences in Financial Knowledge and Overconfidence. *Journal of Family and Economic Issues*, 43, 815-831.
- 70) L'Esperance, M. (2020). Does Responsibility for Financial Tasks Influence Credit Knowledge and Behavior?: Evidence from a Panel of US Couples. *Journal of Family and Economic Issues*, 41(2), 377–387.
- 71) Li, X., Curran, M., Serido, J., LeBaron-Black, A. B., Shim, S., & Zhou, N. (2022). Financial behaviors, financial satisfaction, and goal attainment among college-educated young adults: A mediating analysis with latent change scores. *Applied Developmental Science*, 26(3), 603–617.
- 72) Lin, C.-A., & Bates, T. C. (2022). Smart people know how the economy works: Cognitive ability, economic knowledge and financial literacy. *Intelligence*, 93, 101667.
- 73) Lind, T., Ahmed, A., Skagerlund, K., Strömbäck, C., Västfjäll, D., & Tinghög, G. (2020). Competence, Confidence, and Gender: The Role of Objective and Subjective Financial Knowledge in Household Finance. *Journal of Family and Economic Issues*, 41(4), 626–638.
- 74) Liu, S. et al., 2021. The Behavioral Role of Digital Economy Adaptation in Sustainable Financial Literacy and Financial Inclusion. *Frontiers in Psychology*, 12.
- 75) Loibl, C., & 'Hira, T. (2005). Self-Directed Financial Learning and Financial Satisfaction. *Journal of Financial Counseling and Planning*, 16(1).
- 76) Losada, R. G., Navarro, A. M., Rodríguez-Sánchez, J.-L., & González-Torres, T. (2022). Retirement planning and financial literacy, at the crossroads. A bibliometric analysis. *Finance Research Letters*, 44, 102-109.
- 77) Lučić, A., Barbić, D., & Uzelac, M. (2022). Theoretical underpinnings of consumers' financial capability research. *International Journal of Consumer Studies*, 47 (1), 373-399.
- 78) Lyons, A. C., Rachlis, M., & Scherpf, E. (2007). What's in a Score? Differences in Consumers' Credit Knowledge Using OLS and Quantile Regressions. *Journal of Consumer Affairs*, 41(2), 223–249.
- 79) Madinga, N. W., Maziriri, E. T., Chuchu, T., & Magoda, Z. (2022). An Investigation of the Impact of Financial Literacy and Financial Socialization on Financial Satisfaction: Mediating Role of Financial Risk Attitude. *Global Journal of Emerging Market Economies*, 14(1), 60–75.
- 80) Mahendru, M., Sharma, G. D., & Hawkins, M. (2020). Toward a new conceptualization of financial well-being. *Journal of Public Affairs*, 22(2).
- 81) Mavlutova, I., Fomins, A., Spilbergs, A., Atstaja, D., & Brizga, J. (2021). Opportunities to Increase Financial Well-Being by Investing in Environmental, Social and Governance with Respect to Improving Financial Literacy under COVID-19: The Case of Latvia. *Sustainability*, 14(1), 339.
- 82) McGregor, S. L. T. (2020). Tailoring Bankruptcy Insolvency Education to Ensure Solvency Literacy. *Journal of Financial Counseling and Planning*, 31(1), 55–68.
- 83) Md.Sapir, A. S. & Wan Ahmad, W. M. (2020). Financial literacy among Malaysian Muslim undergraduates. *Journal of Islamic Accounting and Business Research*, 11(8), 1515-1529.



- 84) Meier, S., & Sprenger, C. D. (2013). Discounting financial literacy: Time preferences and participation in financial education programs. *Journal of Economic Behavior & Organization*, 95, 159–174.
- 85) Mende, M., & van Doorn, J. (2015). Coproduction of Transformative Services as a Pathway to Improved Consumer Well-Being. *Journal of Service Research*, 18(3), 351–368.
- 86) Meneau, L. K., & Moorthy, J. (2022). Struggling to make ends meet: can consumer financial behaviors improve? *International Journal of Bank Marketing*, 40(2), 263–296.
- 87) Miller, J., Balmuth, A., Brady, S., & Coughlin, J. (2022). Help When You Need It: Sources of Advice for Student Loan Borrowers Across the Life Course. *Families in Society: The Journal of Contemporary Social Services*, 103(1), 49–64.
- 88) Mokhtar, N., Husniyah, A. R., Sabri, M. F., & Abu Talib, M. (2015). Financial Well-Being among Public Employees in Malaysia: A Preliminary Study. *Asian Social Science*, 11(18).
- 89) Mokhtar, N. & Rahim, H. A., 2017. Determinants of financial well-being among public employees in Putrajaya, Malaysia. *Pertanika Journal of Social Sciences and Humanities*, 25(3), 1241-1260.
- 90) Montalto, C. P., Phillips, E. L., McDaniel, A., & Baker, A. R. (2019). College Student Financial Wellness: Student Loans and Beyond. *Journal of Family and Economic Issues*, 40(1), 3–21.
- 91) Moolman, J., 2020. Proposing a network of advisors that could guide a professional athlete’s financial decisions in pursuit of sustainable financial well-being. *Managing Sport and Leisure*, 27(6), 577-592.
- 92) Muizzuddin, Taufik, Ghasarma, R., Putri, L., & Adam, M. (2017). Financial Literacy; Strategies and Concepts in Understanding the Financial Planning With Self-Efficacy Theory and Goal Setting Theory of Motivation Approach. *International Journal of Economics and Financial Issues*, 7(4), 182–188.
- 93) Nathan, R. J., Setiawan, B., & Quynh, M. N. (2022). Fintech and Financial Health in Vietnam during the COVID-19 Pandemic: In-Depth Descriptive Analysis. *Journal of Risk and Financial Management*, 15(3), 125.
- 94) Nandru, P., Chendragiri, M. & Velayutham, A. (2021). Examining the influence of financial inclusion on financial well-being of marginalized street vendors: an empirical evidence from India. *International Journal of Social Economics*, 48(8), 1139-1158.
- 95) Newsom, J. G., 2021. Financial education is in need of a shake-up: Three guiding reorientations. *Waikato Journal of Education*, 26(2), 21-35.
- 96) Ng, P., Raghavan, S., Zhang, C., Pan, J.-Y., O’Rourke, P., & Wong, R. (2022). Money Talks: Pilot Financial Wellness Programs to Promote Positive Financial Planning Behaviors Among Residents. *Academic Medicine*, 97(3), 380–384.
- 97) Nguyen, T. A. N. (2022). Does Financial Knowledge Matter in Using Fintech Services? Evidence from an Emerging Economy. *Sustainability*, 14(9), 5083.
- 98) Norvilitis, J. M., Merwin, M. M., Osberg, T. M., Roehling, P. v., Young, P., & Kamas, M. M. (2006). Personality Factors, Money Attitudes, Financial Knowledge, and Credit-Card Debt in College Students. *Journal of Applied Social Psychology*, 36(6), 1395–1413.
- 99) Oehler, A., Horn, M., Reisch, L. A. & Walker, T. J. (2018). Young Adults and Their Finances: An International Comparative Study on Applied Financial Literacy. *Economic Notes*, 47(2-3), 305-330.
- 100) Pak, T., & Fan, L. (2022). Childhood experience of parental affection and financial well-being in later life: Evidence from the Health and Retirement Study. *Journal of Consumer Affairs*, 56(4), 1433-1453.
- 101) Parrotta, J., & Johnson, P. (1998). The impact of financial attitudes and knowledge on financial management and satisfaction of recently married individuals. *Journal of Financial Counseling and Planning*, 9(2), 59–75.
- 102) Parvathy, V. K., & Kumar, J. (2022). Financial capability and financial wellbeing of women in community-based organizations: mediating role of decision-making ability. *Managerial Finance*, 48(9/10), 1513–1529.
- 103) Paşa, A. T., Picatoste, X., & Gherghina, E. M. (2022). Financial Literacy and Economic Growth: How Eastern Europe is Doing? *Economics*, 16(1), 27–42.



- 104) Patel, P. C. & Wolfe, M. T., 2019. Money might not make you happy, but can happiness make you money? The value of leveraging subjective well-being to enhance financial well-being in self-employment. *Journal of Business Venturing Insights*, 12.
- 105) Ponchio, M. C., Cordeiro, R. A., & Gonçalves, V. N. (2019). Personal factors as antecedents of perceived financial well-being: evidence from Brazil. *International Journal of Bank Marketing*, 37(4), 1004–1024.
- 106) Ponchio, M. C., Cordeiro, R. A. & Gonçalves, V. N. (2020). Measuring financial well-being over the lifecycle. *European Journal of Finance*, 26(4-5), 341-359.
- 107) Postmus, J. L., Hetling, A., & Hoge, G. (2015). Evaluating a Financial Education Curriculum as an Intervention to Improve Financial Behaviors and Financial Well-Being of Survivors of Domestic Violence: Results from a Longitudinal Randomized Controlled Study. *Journal of Consumer Affairs*, 49(1), 250–266.
- 108) Potrich, A. C. G., & Vieira, K. M. (2018). Demystifying financial literacy: a behavioral perspective analysis. *Management Research Review*, 41(9), 1047–1068.
- 109) Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. (2016). Development of a financial literacy model for university students. *Management Research Review*, 39(3), 356–376.
- 110) Prakash, N., Alagarsamy, S., & Hawaldar, A. (2022). Demographic characteristics influencing financial wellbeing: a multigroup analysis. *Managerial Finance*, 48(9/10), 1334–1351.
- 111) Prawitz, A., & Cohart, J. (2014). Workplace financial education facilitates improvement in personal financial behaviors. *Journal of Financial Counseling and Planning*, 25(1), 5–26.
- 112) Puelz, D., & Puelz, R. (2022). Financial Literacy and Perceived Economic Outcomes. *Statistics and Public Policy*, 9(1), 1–14.
- 113) Putri, W. N. & Adawiyah, W. (2020). The effect of behavioral finance and financial literacy on investment intentions among Indonesian investors. *Research on Firm Financial Performance and Consumer Behavior*, 193-218.
- 114) Putri, W. N. D. & Wardatul, A., 2020. The effect of behavioral finance and financial literacy on investment intentions among Indonesian investors. *Research on Firm Financial Performance and Consumer Behavior*, 193-218.
- 115) Rabbani, A. G., Heo, W., & Lee, J. M. (2022). A latent profile analysis of college students' financial knowledge: The role of financial education, financial well-being, and financial risk tolerance. *Journal of Education for Business*, 97(2), 112–118.
- 116) Ramalho, T. B. & Forte, D. (2019). Financial literacy in Brazil – do knowledge and self-confidence relate with behavior?. *RAUSP Management Journal*, 54(1), 77-95.
- 117) Ranyard, R., McNair, S., Nicolini, G. & Duxbury, D., 2020. An item response theory approach to constructing and evaluating brief and in-depth financial literacy scales. *Journal of Consumer Affairs*, 54(3), 1121-1151.
- 118) Rasiah, R. et al., 2020. A structural equation modelling study of the determinants of retirement preparedness. *International Journal of Innovation, Creativity and Change*, 11(6).
- 119) Riitsalu, L., & Murakas, R. (2019). Subjective financial knowledge, prudent behaviour and income. *International Journal of Bank Marketing*, 37(4), 934–950.
- 120) Robb, C. A., Chatterjee, S., Porto, N., & Cude, B. J. (2019). The Influence of Student Loan Debt on Financial Satisfaction. *Journal of Family and Economic Issues*, 40(1), 51–73.
- 121) Robb, C., & 'Woodyard, A. (2011). Financial Knowledge and Best Practice Behavior. *Journal of Financial Counseling and Planning*, 22(1), 36–46.
- 122) Rostamkalaei, A., Nitani, M., & Riding, A. (2022). Self-employment, financial knowledge, and retirement planning. *Journal of Small Business Management*, 60(1), 63–92.
- 123) Sabri, M. F., Wahab, R., Mahdzan, N. S., Magli, A. S., & Rahim, H. A. (2022a). Mediating Effect of Financial Behaviour on the Relationship Between Perceived Financial Wellbeing and Its Factors Among Low-Income Young Adults in Malaysia. *Frontiers in Psychology*, 13.



- 124) Sabri, M. F., & Zakaria, N. F. (2015a). *Financial Well-Being among Young Employees in Malaysia. Handbook of Research on Behavioral Finance and Investment Strategies: Decision Making in the Financial Industry*, pp. 221–235.
- 125) Sabri, M. F., & Zakaria, N. F. (2015b). The influence of financial literacy, money attitude, financial strain and financial capability on young employees' financial well-being. *Pertanika Journal of Social Sciences and Humanities*, 23(4), 827–848.
- 126) Sabri, M., Paim, L., Falahati, L., & Masud, J. (2013). Determinants of employees' financial well-being: The moderation effect of work sectors. *Malaysian Journal of Consumer and Family Economics*, 16(1), 91–105.
- 127) Sabri, M., Wijekoon, R., Mokhtar, N., Ho, C., & Anthony, M. (2020). Effects of Gender and Income on Malaysian's Financial Capability. *Malaysian Journal of Consumer and Family Economics*, 24, 124–152.
- 128) Sabri, M. F. et al., 2022. Mediating Effect of Financial Behaviour on the Relationship Between Perceived Financial Wellbeing and Its Factors Among Low-Income Young Adults in Malaysia. *Frontiers in Psychology*, 13
- 129) Salas-Velasco, M. (2022). Causal Effects of Financial Education Intervention Aimed at University Students on Financial Knowledge and Financial Self-Efficacy. *Journal of Risk and Financial Management*, 15(7), 284.
- 130) Sanders, C. K., Weaver, T. L., & Schnabel, M. (2007). Economic Education for Battered Women. *Affilia*, 22(3), 240–254.
- 131) Santos, D. B., Mendes-Da-Silva, W., Norvilitis, J. M., Protin, P., & Onusic, L. (2022). Parents Influence Responsible Credit Use in Young Adults: Empirical Evidence from the United States, France, and Brazil. *Journal of Family and Economic Issues*, 43(2), 368–383.
- 132) Saurabh, K. & Nandan, T. (2018). Role of financial risk attitude and financial behavior as mediators in financial satisfaction: Empirical evidence from India. *South Asian Journal of Business Studies*, 7(2), 207–224. Schmeiser, M. D., & Seligman, J. S. (2013). Using the Right Yardstick: Assessing Financial Literacy Measures by Way of Financial Well-Being. *Journal of Consumer Affairs*, 47(2), 243–262.
- 133) Seay, M., Asebedo, S., Thompson, C., Stueve, C., & Russi, R. (2015). Mortgage holding and financial satisfaction in retirement. *Journal of Financial Counseling and Planning*, 26(2), 200–216.
- 134) Sehrawat, K., Vij, M. & Talan, G. (2021). Understanding the Path Toward Financial Well-Being: Evidence From India. *Frontiers in Psychology*, 12.
- 135) Shankar, N., Vinod, S., & Kamath, R. (2022). Financial well-being – A Generation Z perspective using a Structural Equation Modeling approach. *Investment Management and Financial Innovations*, 19(1), 32–50.
- 136) Shappell, E., Ahn, J., Ahmed, N., Harris, I., Park, Y., & Tekian, A. (2018). Personal Finance Education for Residents: A Qualitative Study of Resident Perspectives. *AEM Education and Training*, 2(3), 195–203.
- 137) She, L., Rasiah, R., Turner, J. J., Guptan, V., & Sharif Nia, H. (2022). Psychological beliefs and financial well-being among working adults: the mediating role of financial behaviour. *International Journal of Social Economics*, 49(2), 190–209
- 138) Shim, S., Serido, J., & Tang, C. (2013). After the global financial crash: Individual factors differentiating young adult consumers' trust in banks and financial institutions. *Journal of Retailing and Consumer Services*, 20(1), 26–33.
- 139) Shim, S., Xiao, J. J., Barber, B. L., & Lyons, A. C. (2009). Pathways to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology*, 30(6), 708–723.
- 140) Singh, K. N., & Malik, S. (2022). An empirical analysis on household financial vulnerability in India: exploring the role of financial knowledge, impulsivity and money management skills. *Managerial Finance*, 48(9/10), 1391–1412.
- 141) Singh, A. S. & Venkataramani, B. (2014). Financial education: Institutes of higher education as delivery channels. *International Journal of Business and Globalisation*, 12(4), 401–412.



- 142) Sisharini, N., Hardiani, S. & Ratnaningsih, C. S. (2019). Increasing financial literacy and financial inclusion model to achieve MSMEs financial well being. *International Journal of Scientific and Technology Research*, 8(10), 314-317.
- 143) Sirsch, U. et al., 2020. Does Parental Financial Socialization for Emerging Adults Matter? The Case of Austrian and Slovene First-Year University Students. *Emerging Adulthood*, 8(6), 509-520.
- 144) Sithole, N., Mort, G., & Souza, C. (2021). Financial well-being of customer-to-customer co-creation experience: a comparative qualitative focus group study of savings/credit groups. *International Journal of Bank Marketing*, 39(3), 381–401.
- 145) Sivaramakrishnan, S., Srivastava, M., & Rastogi, A. (2017). Attitudinal factors, financial literacy, and stock market participation. *International Journal of Bank Marketing*, 35(5), 818–841.
- 146) Soroko, A., 2020. Buying into dominant ideas about wealth and poverty: An examination of U.S. And canadian financial literacy standards. *Teachers College Record*, 122(3).
- 147) Starkey, A. J., Keane, C. R., Terry, M. A., Marx, J. H., & Ricci, E. M. (2013). Financial Distress and Depressive Symptoms among African American Women: Identifying Financial Priorities and Needs and why it Matters for Mental Health. *Journal of Urban Health*, 90(1), 83–100.
- 148) Starobin, S., Hagedorn, L. S., Purnamasari, A. & Chen, Y., 2013. Examining Financial Literacy among Transfer and Nontransfer Students: Predicting Financial Well-Being and Academic Success at a Four-Year University. *Community College Journal of Research and Practice*, 37(3), 216-225.
- 149) Sunderaraman, P., Barker, M., Chapman, S., & Cosentino, S. (2022). Assessing numerical reasoning provides insight into financial literacy. *Applied Neuropsychology: Adult*, 29(4), 710–717.
- 150) Tahir, M. S., Tahir, A. D. & Richards, D. W. (2021). Financial literacy and financial well-being of Australian consumers: a moderated mediation model of impulsivity and financial capability. *International Journal of Bank Marketing*, 39(7), 1377-1394.
- 151) Tharp, D. T., Seay, M., Stueve, C., & Anderson, S. (2020). Financial Satisfaction and Homeownership. *Journal of Family and Economic Issues*, 41(2), 255–280.
- 152) Thomas, A. & Gupta, V., 2021. Social Capital Theory, Social Exchange Theory, Social Cognitive Theory, Financial Literacy, and the Role of Knowledge Sharing as a Moderator in Enhancing Financial Well-Being: From Bibliometric Analysis to a Conceptual Framework Model. *Frontiers in Psychology*, 12.
- 153) Tian, C., & Wang, C. (2022). Financial literacy education and high school students - overview, analysis, suggestions and implications. *International Journal of Services, Economics and Management*, 13(1), 1.
- 154) Utkarsh, et al. (2020). Catch them young: Impact of financial socialization, financial literacy and attitude towards money on financial well-being of young adults. *International Journal of Consumer Studies*, 44(6), 531-541.
- 155) van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538.
- 156) Vosylis, R., & Klimstra, T. (2022). How Does Financial Life Shape Emerging Adulthood? Short-Term Longitudinal Associations Between Perceived Features of Emerging Adulthood, Financial Behaviors, and Financial Well-Being. *Emerging Adulthood*, 10(1), 90–108.
- 157) Wafula, P. (2022, April 15). *Financial Literacy Around the World*.
- 158) Warren, A., Merchant, T., Schulze, D. & Chung, D. (2019). From Economic Abuse to Economic Empowerment: Piloting a Financial Literacy Curriculum With Women Who Have Experienced Domestic and Family Violence. *Affilia - Journal of Women and Social Work*, 34(4), 498-517.
- 159) West, R. & Ramcharan, P. (2019). The emerging role of Financial Counsellors in supporting Older Persons in financial hardship and with management of Consumer-directed Care packages within Australia. *Australian Journal of Social Issues*, 54(1), 32-51.
- 160) West, T. & Cull, M. (2020). Future Expectations and Financial Satisfaction. *Economic Papers*, 39(4), 318-335.
- 161) West, S., & Friedline, T. (2016). Coming of Age on a Shoestring Budget: Financial Capability and Financial Behaviors of Lower-Income Millennials. *Social Work*, 61(4), 305–312.



- 162) Wikoff, N. (2022). Numeracy and Financial Wellbeing During the COVID-19 Pandemic. *Numeracy*, 15(1).
- 163) Williams, D., Grizzell, B. & Burrell, D. N. (2011). An applied case study analysis of potential societal importance of financial literacy education for African-American and Latino American adolescents. *International Journal of Interdisciplinary Social Sciences*, 6(3), 245-260.
- 164) Xia, T., Wang, Z., & Li, K. (2014). Financial Literacy Overconfidence and Stock Market Participation. *Social Indicators Research*, 119(3), 1233–1245.
- 165) Xiao, J. J. (2022). Personal Finance Research: An Editor's Perspective. In *De Gruyter Handbook of Personal Finance* pp. 585–598.
- 166) Xiao, J. J., Chen, C., & Chen, F. (2014). Consumer Financial Capability and Financial Satisfaction. *Social Indicators Research*, 118(1), 415–432.
- 167) Xiao, J. J., & O'Neill, B. (2018). Propensity to plan, financial capability, and financial satisfaction. *International Journal of Consumer Studies*, 42(5), 501–512. <https://doi.org/10.1111/ijcs.12461>
- 168) Xiao, J. J., & O'Neill, B. (2022). Disability Type, Financial Capability, and Risky Asset Holding. *Journal of Disability Policy Studies*, 32(4), 269–279.
- 169) Xiao, J. J., & Porto, N. (2017). Financial education and financial satisfaction. *International Journal of Bank Marketing*, 35(5), 805–817.
- 170) Xiao, J. J., & Porto, N. (2022). Financial capability and wellbeing of vulnerable consumers. *Journal of Consumer Affairs*, 56(2), 1004–1018.
- 171) Xu, X. (2018). Assessing a Community-Based Financial Literacy Program: A Case Study in California's Silicon Valley. *Journal of Financial Counseling and Planning*, 29(1), 142–153.
- 172) Xue, R. et al., 2019. Financial well-being amongst elderly Australians: the role of consumption patterns and financial literacy. *Accounting and Finance*, 60(4), 4361-4386.
- 173) Yakoboski, P. J., Lusardi, A. & Hasler, A. (2020). Financial literacy and wellness among African-Americans: New insights from the personal finance (P-Fin) index. *Journal of Retirement*, 8(1), 22-31.
- 174) Yuesti, A., Rustiarini, N. W. & Suryandari, N. N. (2020). Financial literacy in the covid-19 pandemic: Pressure conditions in indonesia. *Entrepreneurship and Sustainability Issues*, 8(1), 884-898.
- 175) Zaimah, R. et al. (2013). Financial behaviors of female teachers in Malaysia. *Asian Social Science*, 9(8), 34-41.
- 176) Zhao, H. & Zhang, L., (2020). Talking money at home: the value of family financial socialization. *International Journal of Bank Marketing*, 38(7), 1617-1634.
- 177) Zhou, H., Dai, H. & Jung, N. (2020). Empowering migrant domestic helpers through financial education. *International Journal of Social Welfare*, 29(2), 129-141.
- 178) Zhu, A. Y., Yu, C. W. & Chou, K. L., (2021). Improving Financial Literacy in Secondary School Students: An Randomized Experiment. *Youth and Society*, 53(4), 539-562.
- 179) Zhu, T. & Xiao, J. J. (2022). Consumer financial education and risky financial asset holding in China. *International Journal of Consumer Studies*, 46(1), 56-74.
- 180) Zhu, T., & Xiao, J. J. (2022). Consumer financial education and risky financial asset holding in China. *International Journal of Consumer Studies*, 46(1), 56–74.
- 181) Zyphur, M. J., Li, W.-D., Zhang, Z., Arvey, R. D., & Barsky, A. P. (2015). Income, personality, and subjective financial well-being: the role of gender in their genetic and environmental relationships. *Frontiers in Psychology*, 6.