

Tri-Decadal Review on Personal Finance and Financial Well-Being

Jisa Babu, Velmurugan G*

Department of Commerce, School of Social Sciences and Languages, Vellore Institute of Technology, Vellore, India. *Corresponding Author's Email: gvelmurugan@vit.ac.in

Abstract

Individual money management directs funds to significant paths to achieve financial well-being. This study aims to analyse the articles already published in this research area and explore the future scope of expansion of this study. Systematic mapping and bibliometric analysis of 497 articles from the Scopus database were done to identify the trends in the study of personal finance and financial well-being for the last three decades. Researchers have used theoretical, graphical, and visualisation techniques to understand this drift to analyse and portray the results. It was found that research in the field of personal finance and financial well-being was protracted and made its impact in this research arena. Its trend has felt pervasive lately because of the rising relevance in the current trend patterns resulting from the advancements in various scenarios like technology and the availability of funds. The study will help researchers and other stakeholders to find unexplored avenues related to personal finance and attaining financial well-being for future research. The study is conducted because of the novelty in this area and this gap has motivated the researcher to adopt quantitative and qualitative techniques to explore this research avenue. The study directs us toward the conclusion that personal finance and financial well-being have a wider scope to expand in various multidisciplinary areas.

Keywords: Bibliometric, Financial Well-Being, Harzings' Publish and Perish, Personal Finance, Systematic Mapping.

Introduction

Since the ancient era, the concept of personal finance and financial well-being existed in one or the other form, and the significance of learning the concept discretely also rose drastically. These two constructs have become crucial factors for an individual's overall quality of life (1). Today in this contemporary world due to financial advancement, the availability of funds with the people is also plentiful (2). Personal finance has its significance both at individual and national levels since it includes the total savings that are made by the public and private sectors, including individuals (3). Hence it can be considered as one of the facets of the computation of Gross National Income (GNI), which is a metric where the whole sum of money which is earned by the citizens and undertakings of the country (4) is computed.

Personal finance can be defined as the efficient management and planning of the individual's or family's resources to achieve financial goals or financial success (5). Personal finance confines a wide sphere of aspects like budgeting, saving, investing, and managing debt (6). A budget is a plan

conveyed in the form of money (7) and based on the budget individuals should have proper savings. This will aid households and business organizations to invest productively and do smooth consumption of funds (8).

Prudent equilibrium between spending and saving balances long-term financial and personal well-being (9). However, the educational level of investors reflects their conception of financial literacy and their decision-making toward investment in the capital market (10). Financial literacy tacitly safeguards the consumer to achieve financial stability (11). Training on money management techniques has become necessary to instigate a more competitive and fruitful market for consumption and savings (12). Agyei *et al.*, 2019 (13) stated that financial well-being is a state where individuals become capable of managing their monetary circumstances like sustainable debt management, covering expenses, manage savings the overall sense of satisfaction will also rise, which will make us feel content and will put us at ease with our financial position. Practicing self-

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regulation skills is meant to be the cornerstone that strikes an individual's financial well-being (14). Financial well-being is not just the satisfaction of individuals with their monetary and financial situation, it is also affected by the factors confined by their household, community, and societal circumstances (15). The well-being of an individual depends mainly on the facets of their financial well-being (16).

Financial discipline determines one's capability to meet future uncertainties and planning for proper management of funds which is vital for every individual (17). As the proverb states "Little drops of water make a mighty ocean", similarly individual management of the fund is vital for the collective benefit of households and national growth (18, 19). Financial commitments can affect widely over individuals and the economy as a whole (20).

Referring to various reports and surveys researchers could find that research on financial well-being at the personal or individual level has received global consideration and importance (21). A report from the World Bank, 2013, (22) also noted the significance of improving the financial well-being of households to accelerate the financial sector and its stability, which shows the significance of this study to reveal the current state of personal finance and financial well-being. Recent studies are reflecting the fact that a significant number of individuals are making poor financial decisions and spending more which is making them unable to achieve financial contentment (23), which also points towards the incompetency in deciding how to choose between wants and needs (24-26).

This research seeks to comprehensively explore personal finance and financial well-being. To achieve this, it will pursue four key objectives. First, it will map the current research landscape by examining publication patterns across journals, institutions, and contributing countries. Second, it will identify leading authors and analyze trends in their productivity and collaboration. Third, it will delve into the field's knowledge base through citation analysis, keyword trends, and central theme identification. Finally, it will pinpoint emerging trends and knowledge gaps to chart future research directions for personal finance and financial well-being.

Methodology

For the mapping review, the analysis is mainly done using both bibliometric and systematic mapping. Bibliometric and systematic mapping approaches offer advantages in mitigating potential bias arising from qualitative analysis conducted by researchers with diverse backgrounds. This is achieved by focusing on a broad research area and employing quantitative data analysis techniques (27). The study follows a multifaceted technique where the constructs are analysed along with their dimensions. This study explores research questions concerning the intersection of personal finance and financial well-being over three decades. Conducting a tri-decadal study on personal finance and financial well-being will anticipate the transitions over the three decades in innumerable scenarios. Studies over three decades can address trend analysis, knowledge gaps, methodological evolutions, interdisciplinary connections, historical context, and future directions.

Systematic mapping aids research landscapes that are rapidly evolving and complex. Personal finance and financial well-being are rapidly growing and hence follow systematic phases starting with domain defining, database identification, data extraction, data refining, data interpretation, and outcome derivation. The domain identified for the study is to focus on previously studied articles on personal finance and financial well-being. To conduct this research, Scopus database is identified as the most relevant source and extracted the necessary data from it. Scopus follows a rigorous evaluation process by expert board members in the process of data tracking, analysing, and visualisation of peer-reviewed literature and web sources, which professes its reliability because of its transparency in the selection process and exclusion of predatory journals while selecting the articles that have to be indexed in the Scopus database (25). Studies systematically retrieved data from Scopus database based on inclusion standards (IS, Table 1) and segregation standards (SS) (Table 2) adopted by the researcher and the same data are refined by reading the title and abstract. Inclusion and segregation standards were decided based on the study objective and framework. This cleaning stage reflects the data extraction phase.

This data extraction process is depicted using a PRISMA flowchart (Figure 1) (26). Here the main

constructs are Personal finance and financial wellbeing. The first inclusion standard taken were keywords or key terms. The IS-1 that were used for analysis are ("Personal Finance" OR "Household Finance" OR "Management of Own funds" OR "Money Management" OR "Saving" OR "investment" OR "retirement planning" OR "estate planning" OR "tax planning") AND ("financial wellbeing" OR "financial wellness" OR "financial

well-being" OR " financial satisfaction" OR "financial security" OR "financial health" OR " financial freedom"). Researchers could retrieve 1178 documents from the Scopus database based on the occurrences of keywords and Boolean operators in the abstract, title, and keywords of the articles. These data were again filtered using the inclusion standards (Table 1).

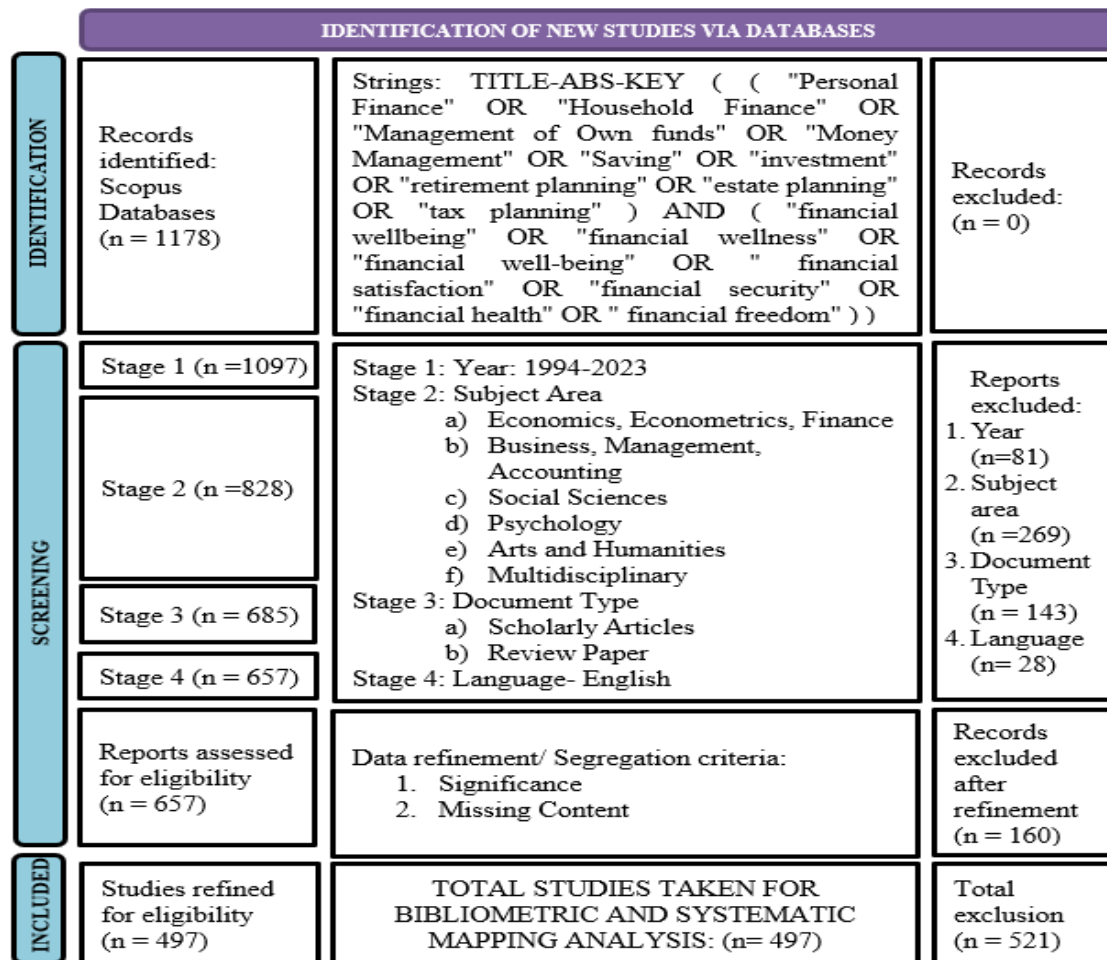


Figure 1: PRISMA Protocol 2020

Table 1: Inclusion Standards Used for Data Extraction

IS-1	Keywords/ Key terms	"Personal Finance", "Household Finance", "Management of Own funds", "Money Management", "Saving", "investment", "retirement planning", "estate planning", "tax planning", "financial wellbeing", "financial wellness", "financial well-being", "financial satisfaction", "financial security", "financial health", "financial freedom".
IS-2	Year	1994-2023 (3 decades)
IS-3	Subject Area	Limited to Economics, Econometrics and Finance, Limited to Business, Management and Accounting, Limited to Social Sciences, Limited to Psychology, Limited to Arts and Humanities,

Limited to Multidisciplinary.		
IS-4	Document Type	Limited to Conceptual and Empirical papers Limited to Review Papers
IS-5	Language	Limited to English

The retrieval and screening stage has been divided into five stages. Through IS-1 researchers have retrieved data in the first stage. In the second stage, the criteria taken in this stage is as year, and here study is restricted for the past three decades which fall from 1994-2023, where the data filtered and extracted were 1097 and eliminated 81 research papers that didn't fall in this criterion.

In the third stage of the screening process criteria were taken as subject area, Subjects were divided into different groups in Scopus. From the areas mentioned, researchers have selected six groups that were considered highly significant by the researcher in this field of study. The selected first group was Economics, Econometrics, and Finance, the second group was Business, Management, and Accounting, the third group was Social Science, the fourth group was Psychology, the fifth group selected was Arts and Humanities, and the last group selected were Multidisciplinary. This filtering resulted in the inclusion of 828 studies and the exclusion of 269 research papers.

During the fourth stage, researchers filtered the data to include only research articles and review papers, excluding book chapters, conference proceedings, books, notes, editorials, and data

papers. From this stage, researchers could retrieve 685 research papers studied previously on this topic and excluded other document types which were around 143. For the last stage of screening, researchers have taken languages as the criteria for filtering data, the researchers narrowed the selection to 657 papers written in English. This excluded 28 non-English papers. In total from the data extraction stage, Researchers have selected 657 papers and excluded 521 research papers after the initial data filtering. After the data extraction stage, the extracted data were refined by thoroughly reading the abstract and title to eliminate the studies that didn't fall under the research objective of the study in the data refinement process.

Data Refinement Process

Bibliometric data are often extracted from the database in a raw form so the researcher needs to clean data based on the study objective (27). After screening the data, the extracted research papers were marked for systematic scrutinizing. Data quality improvement was done based on the segregation standards (Table 2) selected by the researcher.

Table 2: Segregation Standards

SS- 1	Significance	Studies that are related to personal finance and financial well-being are only considered.
SS-2	Missing Content	Data that has missing contents are excluded.

The first segregation standard (SS-1) for filtration is chosen as "significance" and the studies unrelated to personal finance and financial well-being were excluded. Seven level criteria were selected for excluding the data based on the significance. The second standard (SS-2) selected for filtration is to eliminate the articles that lacked significant research paper details.

Figure 2 illustrates the filtration process aimed at extracting studies related to personal financial well-being by employing segregation standards. The first segregation standard (SS-1) excluded studies not directly relevant to personal or individual financial well-being. After initially

screening 657 document abstracts and titles, certain studies were identified and excluded as they focused on macroeconomic levels, organizational perspectives, domain-specific research, organizational capital investigations, artistic or thematic explorations, historical data analyses, methodology developments, which were unrelated to the area of study, and a few studies were also excluded due to lacking content.

These excluded studies were grouped under SS-1 and SS-2. SS-1 excluded variables like macro-level variables concentrated mainly on country, regional, or macroeconomic factors aimed at economic growth, foreign investment, trade policies, and

broader financial markets. Others concentrated on corporate financial affairs, investment decisions, financial systems, and productivity from an organizational or industrial standpoint. Some were domain or sector-specific, such as healthcare, construction, aviation, or manufacturing. Few studies concentrated on institutions like banks, insurance companies, pension funds, and investment firms, mainly for studying their performance, and regulations. Limited studies also focused on artistic, cultural, or historical perspectives rather than focusing on the practical applications of individual financial management. Hence researchers have refined the dataset based on the study focus.

In summary, studies were filtered out due to their lack of direct influence on personal finance practices, budgeting, savings, investing, debt management, financial literacy, and well-being at the personal or household level. Out of 657 studies, 160 were excluded based on SS-1 and SS-2, leaving 497 selected for further bibliometric and systematic mapping analysis.

Moving toward further exploration, Figure 3 outlines the scheme for the analysis employed in the study. The tools adopted for the analysis of the study based on the objectives are Bibliometrix, VOS viewer, and Harzhings Publish and Perish software.

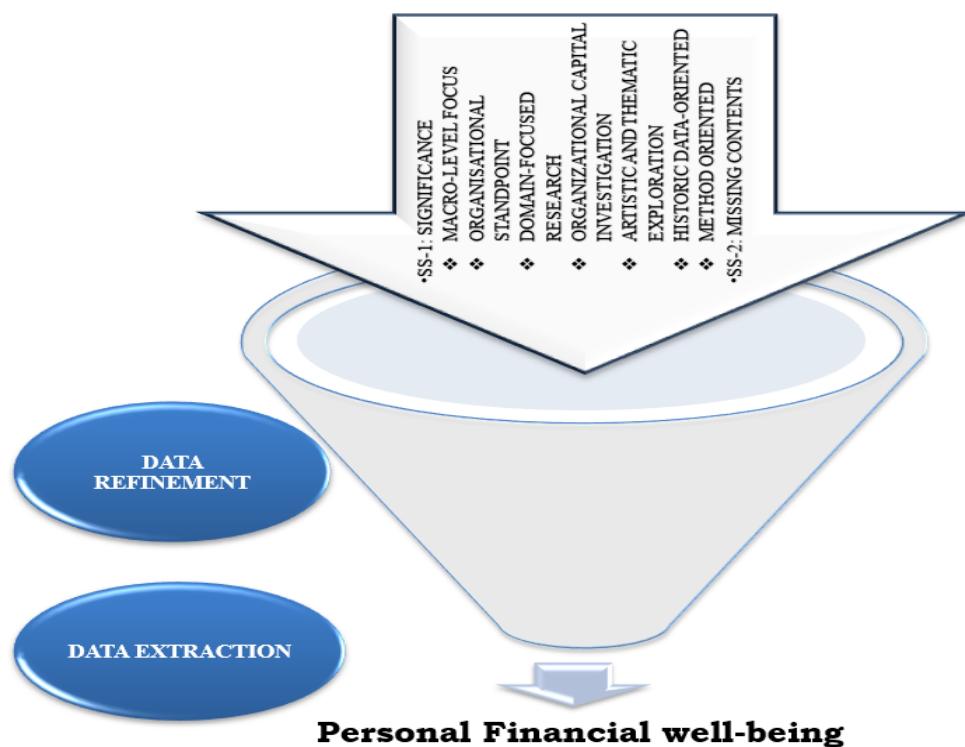


Figure 2: Data Refinement and Extraction Process

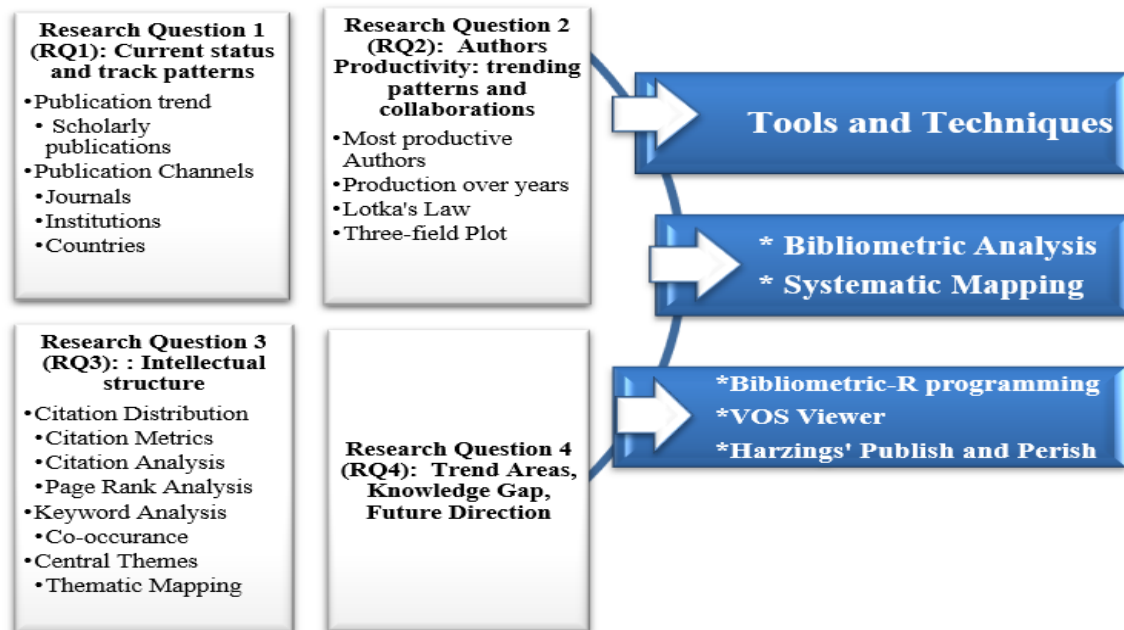


Figure 3: Framework of Analysis

Results

RQ1: Current Status of Scholarly Publications and Publication Channels

In this section, RQ1 is analysed to identify the present status and track the patterns of scholarly publications.

Present Status of Scholarly Publications: Biblioshiny, an R package for bibliometrics, analyses the publication trend of empirical and conceptual papers based on periods (28). It was found that though the analyses were conducted from 1994-2023, for the year 1994 the studies were

absent in the Scopus database related to financial well-being, so in Figure 4 analyses are portrayed from 1995. The current figure interprets that out of 497 total papers, 474 are empirical/conceptual articles and 23 are review papers. Further exploration of the demonstration by the trend line and the analysis of publication trends reveals a rising interest in personal finance and financial well-being among researchers. As evidenced by the upward trend line, the number of articles published on these topics has been steadily increasing, with the highest volume occurring in 2023.

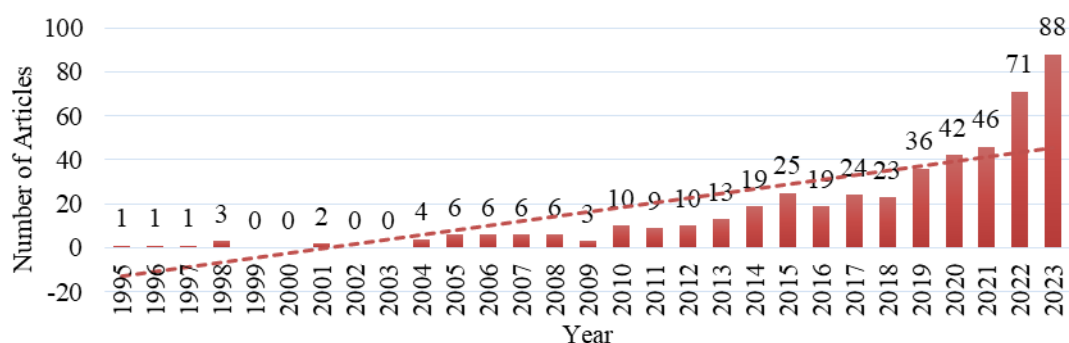


Figure 4: Publication Status of Scholarly Articles

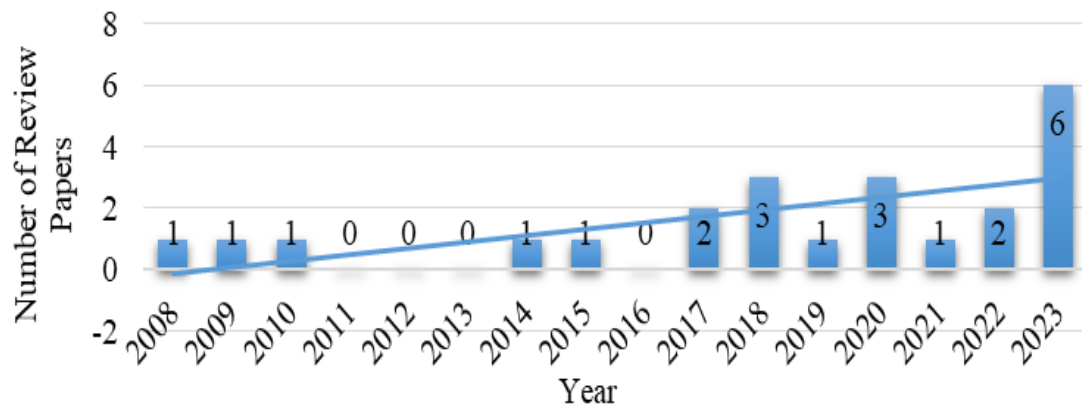


Figure 5: Publication Status of Review Articles

To delve deeper into the research area of personal financial well-being, the researcher has reviewed relevant literature published between 1994 and 2023, utilizing data extracted from the Scopus database. Figure 5 illustrates that review papers specifically addressing this topic began appearing in 2008 when covering the period from 1994-2023 based on the Scopus datasets. The emergence of these review studies in 2008 points to the global financial crisis which severely impacted economies worldwide (29). This economic turmoil directly highlighted the pressing need to study household indebtedness and liquidity constraints, explaining why review papers synthesizing prior research were written that year.

From the analysis, the researcher could identify 23 relevant documents, and the annual growth rate of these review articles was 12.69%. These papers were authored by 60 individuals, with 6 being single-author review papers. Figure 5 shows a growing trend in the publication of review papers on this topic, though there are some gaps between years without new studies. However, the overall trajectory shows steady growth from just one review paper in 2008 to six published in 2023.

Trend Patterns of Publication Channels: In this section, the main focus is on analysing the key performance of research components which encompasses journals, institutions, and countries in this research domain.

Journal: Publications of 497 research papers are spread across 297 journals. Table 3 shows the top 10 journals which have published articles related to personal finance and financial well-being. These top journals have published 99 articles which represents 19.9% of the total articles. Journal of

Financial Counselling and Planning is the most prominent journal which has published 22 articles, followed by the Journal of Family and Economic Issues published 18 articles.

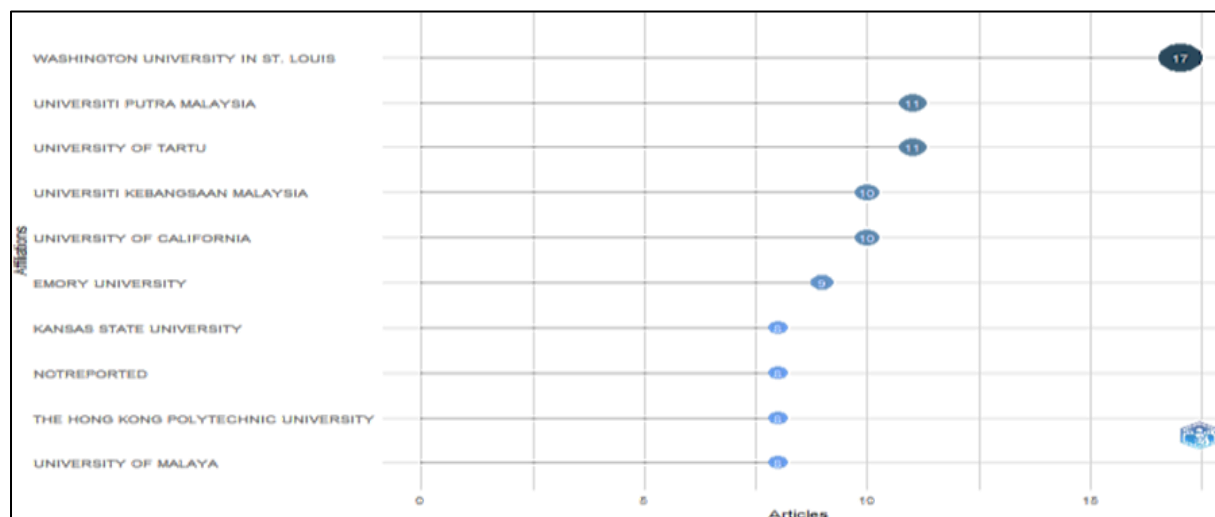
Analysis of the top journals portrays that all the journals are coming within the Q1 and Q2 quartiles. Quartile ranks show the highest-ranking journals in that set area of study (30). The highest ranking is denoted as Q1, which is given to the journals which are top 25%, and the next highest rank is denoted as Q2 which is given to journals based on their citation impact factor within 50%.

Institutions: The analysis of the affiliated institution's production of articles and over time distribution are depicted in Figures 6 and 7. Through the demonstration, it is identified that Washington University in St. Louis has the highest production in two adjacent years 2023 and 2022 with 17 and 15 articles. Second on the list are Universiti Putra Malaysia and the University of Tartu each has 11 publications.

From a different angle the article's publication is based on the consistency in the publication of articles, the Universiti Putra Malaysia from the year 2017 to 2023, every year they had a consistent publication of 11 articles in this field. The following information demonstrates a closer picture that Washington University of St. Louis is in the western side of the world specifically in North America and Universiti Putra Malaysia and the University of Tartu in the eastern world specifically in Southeast Asia and Northern Europe. This shows that the research on personal finance and financial well-being is spreading across western and eastern parts of the world.

Table 3: Top Publishing Journals in the Field of Personal Finance and Financial Well-Being

SOURCES	ARTICLES	SJR 2022	QUARTILE	PUBLISHER	H-INDEX
Journal of Financial Counselling and Planning	22	0.46	Q2	Springer Publishing Company	49
Journal of Family and Economic Issues	18	0.51	Q2	Springer International Publishing AG	52
International Journal of Bank Marketing	15	1.09	Q2	Emerald Group Publishing Ltd.	96
Sustainability (Switzerland)	8	0.66	Q1	MDPI AG	136
International Journal of Consumer Studies	7	1.75	Q1	Wiley-Blackwell Publishing Ltd	88
Social Indicators Research	7	0.98	Q1	Springer Netherlands	126
Journal of Consumer Affairs	6	0.65	Q1	Wiley-Blackwell	70
Journal of Economic Behavior and Organization	6	1.18	Q1	Elsevier	129
Frontiers In Psychology	5	0.89	Q2	Frontiers Media S.A.	157
Journal of Economic Psychology	5	1.6	Q1	Elsevier	112
Total Articles	99				

**Figure 6:** Most Relevant Affiliations

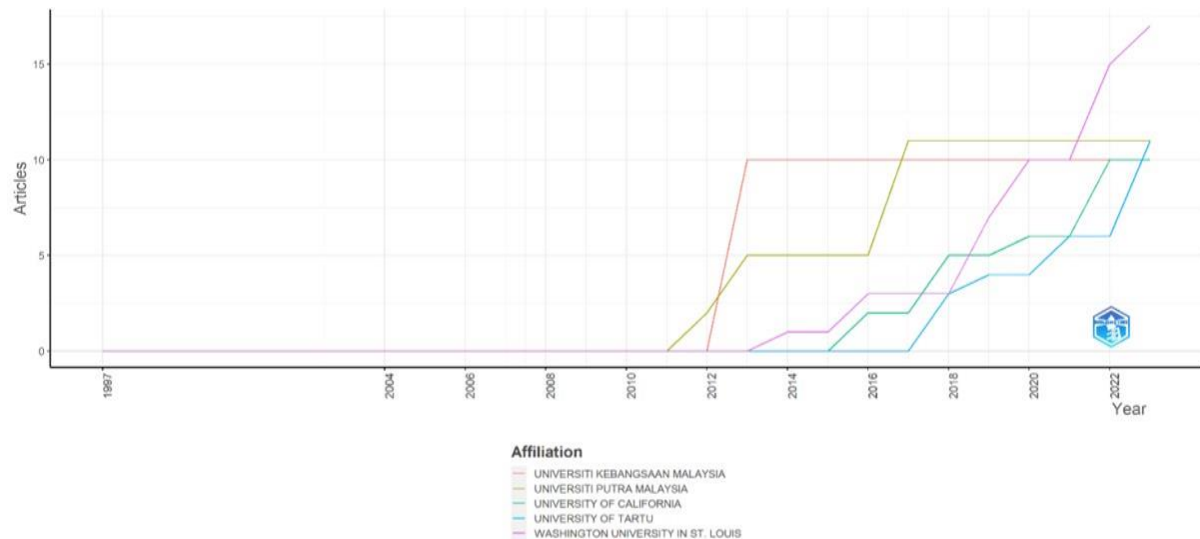


Figure 7: Affiliations Production Over Time

Countries: The power of the country is portrayed through the natural resources and the scientific output that it produces (31) and it acts as a yardstick for measuring the value and the extent of the research that is conducted. The scientific performance of the country is mainly based on the funding policies of the country and the research gaps which they feel in their country (32). Through analysing the scientific production of the country, the stakeholders will get a clear idea about the scientific and funding requirements of the country for further expansion and development of the country (33).

For the current study analysis, table 4 has demonstrated country-wise production, where it has considered decade-wise data, and through the systematic mapping and bibliometric analysis of data, it is revealed that towards the last decade, the

significance of the study shot highly. In the first decade among the top 10 production countries, only the USA has published articles related to personal finance and financial wellbeing. This suggests that other countries were ignorant of the significance of the study but slowly the traction was created among other countries moving towards the next decades. A global trend towards personal financial well-being is evident, with articles appearing in most countries except Ukraine and Indonesia. This rise in publication points to the change of focus towards personal finance, and this points towards one of the main indicators of that decade which is the Great Recession where there was about 33 percent of the households were struggling because of unemployment, and arrears of house payment expenses (34).

Table 4: Decade-wise Top 10 Publications and Cited Countries

COUNTRY	DECADES			TOTAL PUBLICATIONS	TOTAL CITATIONS
	1994-2003	2004-2013	2014-2023		
USA	5	101	386	492	2104
INDIA	0	4	86	90	337
MALAYSIA	0	20	52	72	73
AUSTRALIA	0	12	54	66	365
UK	0	9	41	50	518
UKRAINE	0	0	47	47	12
INDONESIA	0	0	35	35	35
CHINA	0	4	26	30	226
GERMANY	0	1	29	30	107
CANADA	0	5	23	28	65

And moving towards the last decade there was a filthy increase in the number of studies. By dissecting this information based on article production with the total citations of these top production countries, it is identified that the total citations of the USA weigh higher compared to other countries. Second in the line is the UK with 518 citations but in the article production list, it

comes in the 5th place. Analysing the article production list, the USA is again in the first position and India is second. The gap in the number of publications between the USA and India is also sufficiently high. Looking at the impact of India, it comes in the 4th position. But a closer look reveals that out of the top 10 article-producing countries, 6 countries come under the top cited countries also.

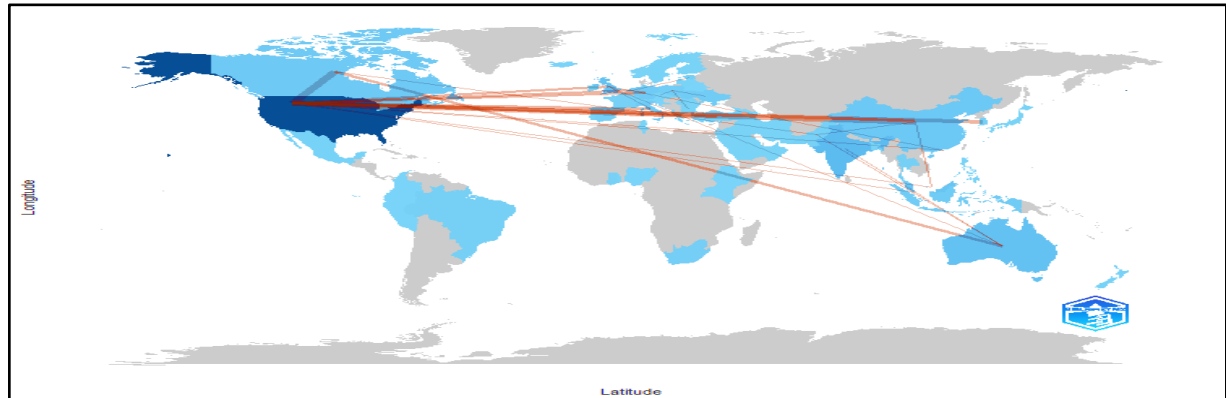


Figure 8: Collaboration of Countries

Countries' collaboration is influential for the scientific productivity from research (35). Based on the demonstration in Figure 8, it demonstrates that among the top ten, the highest 8 collaborations are done by the USA, and the collaboration and the frequency done by the USA to other countries are China with 7, Canada with 6, Korea with 5, Italy with 4, Germany with 3, Netherlands with 3, Turkey with 3, and United Kingdom with 3. The next highest collaboration among the top 10 countries is done by Australia to Canada which is 3 and then to Pakistan with 2 collaborations.

RQ2: Authors Productivity: Trending Patterns and Collaborations

Article Production and Over the Period Productivity of Authors: Mukherjee, 2010 (36) has defined Authors' productivity as the total number of papers that are published within a stipulated time frame by the author. Examining the dataset for analysing the author's productivity it was found that within this research field, 1281

authors, who were affiliated with 499 universities spread across 66 countries, had published their studies which are related to personal finance and financial well-being. Where individuals and their attainment of financial health is given significance. Figure 9 demonstrates the topmost contributors based on the counts of articles published. The top contributor in this field is Jing Jang Xiao who has published 8 articles followed by Leonore Riitsalu with 7 articles. Through the analysis of Figures 9 and 10, production of articles over the years by the top contributors were identified. Jing Jang Xiao out of his 8 articles the highest publication and citation for his article was received in the year 2017 and analysing the data systematically shows his consistency over the years in publishing articles related to financial well-being and personal finance. Based on the further analysis of frequency, Leonore Riitsalu has published 3 articles recently in 2023 in the same sphere and over the years from 2018 he was exploring on this research problem over different dimensions.

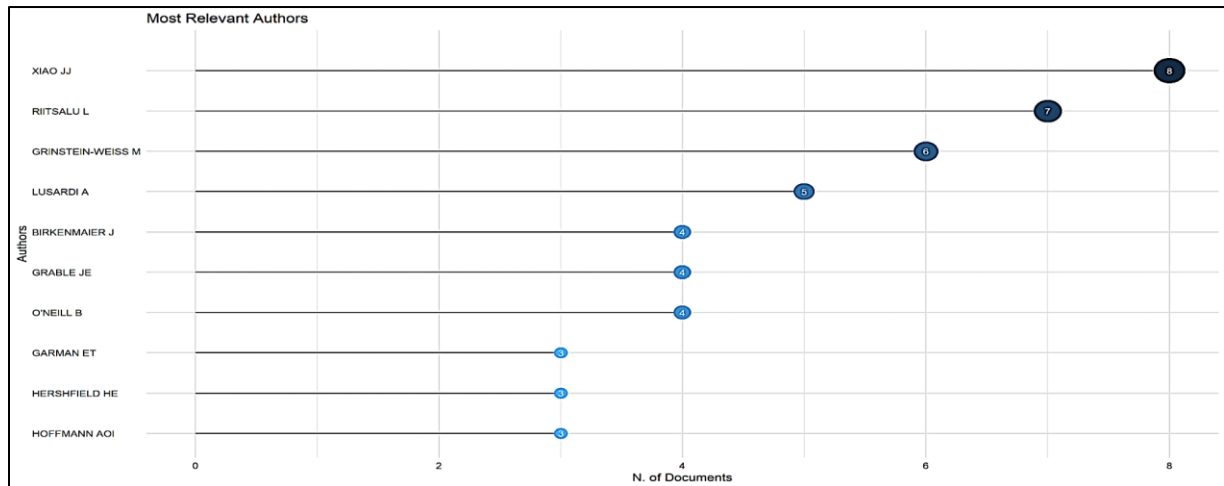


Figure 9: Most Relevant Authors

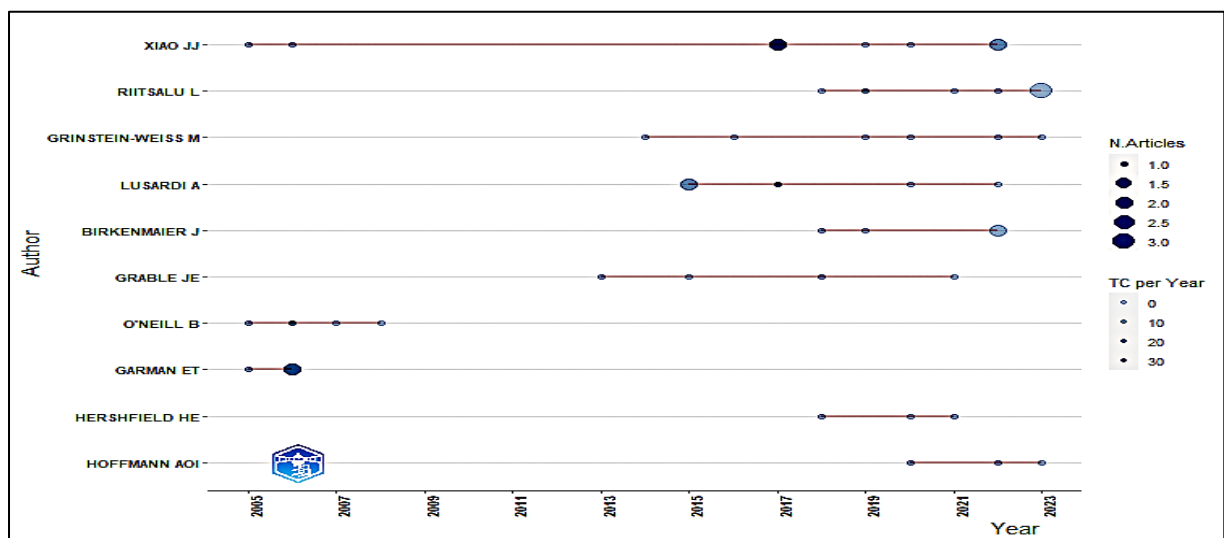


Figure 10: Authors' Production Over Time

Table 5: Impact Metrics of Top Authors

Element	h_index	g_index	m_index	TC	NP	PY_start
XIAO JJ	7	8	0.35	591	8	2005
GRINSTEIN-WEISS M	5	6	0.455	50	6	2014
LUSARDI A	4	5	0.4	314	5	2015
O'NEILL B	4	4	0.2	517	4	2005
BIRKENMAIER J	3	4	0.429	38	4	2018
GARMAN ET	3	3	0.15	599	3	2005
GRABLE JE	3	4	0.25	102	4	2013
HERSHFIELD HE	3	3	0.429	40	3	2018
KIM KT	3	3	0.333	21	3	2016
MATHUR A	3	3	0.5	13	3	2019

Impact of Authors' Contribution: To highlight the most influential author and evaluate their performance 5 metrics were used for analysing and interpreting the result. Here the metrics that were used are h index, g-index, m-index, total citation, and total publications. Among this group, the h-

index, g-index, and m-index can be grouped under author-level metrics which will help us in measuring the authors' productivity and scholarly work (37), Top citation and publication count can show the extent of research work and its popularity in the research domain.

Table 5 lists the most influential authors (based on impact factor) in this field, ranked by their h-index. By analysing Table 5, it is found that out of all the author's Jing Jang Xiao has published eight articles in this field with a total citation of 591, and his h-index is 7 which shows he is a highly performing author in this domain. Next in the line is Michal Grinstein-Weiss who got the next highest h-index with 5 as the impact factor. Table 5, when analysed further in light of the citation, tells us that out of these top h-indexed authors E. Thomas Garman was highly cited 599 times.

Lotka's Law: Lotka's Law (38) describes the distribution of scientific productivity, where a small number of authors produce a large volume of publications, while most authors publish a smaller number of papers. This pattern can be used to

analyze scientific output. Figure 11 demonstrates that in the area of research related to personal finance and financial well-being, 1187 authors published 1 paper out of 1281 total authors which is proportion to 92.7% (rounding) and 79 authors published 2 papers, which accounted for 6.2% and 8 authors published 3 documents which are in proportion to 0.6%. Through Lotka's law, analyses infer that out of the number of authors who published 2 papers, it's just one-fifteenth of the number of authors who published 1 paper and the authors who published 3 are just one-ninth of the number of authors who published 2 papers. This shows that most of the authors have published 1 document related to the current study which portrays a gap pointing to more extended studies in the field at an advanced level.

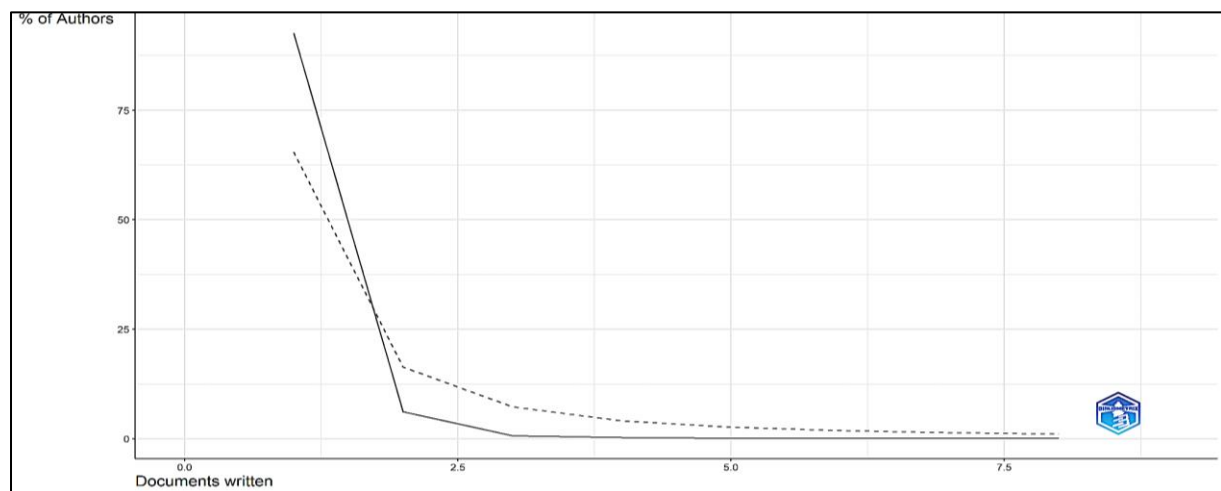


Figure 11: Distribution Curve Using Lotka's Law

Three-field Plot: Sankey diagrams visually illustrate the interrelationships of three different components towards each other, the width of the flow will show the proportion of the value of the nodes (39). Three field plots in Figure 12 are depicted using Sankey plots, where the three components taken in the field for explaining the interrelationships are authors, keywords, and sources. Authors are shown in the left field, keywords in the middle field, and publication sources in the right field. For the analysis top 20 items were taken, each of these items has been

directed towards the most profound keywords in this field such as financial well-being, financial literacy, personal finance, and financial satisfaction along with the authors and sources of the study.

Through the three-field analysis, it is found that financial well-being studies are the highest, and then comes financial literacy followed by personal finance. Most of the studies in this field were conducted by Jing Jang Xiao and Leonore Riitsalu with 10 outflows toward various articles related to personal financial well-being. Followed by John E Grable who has flow with 9 articles.

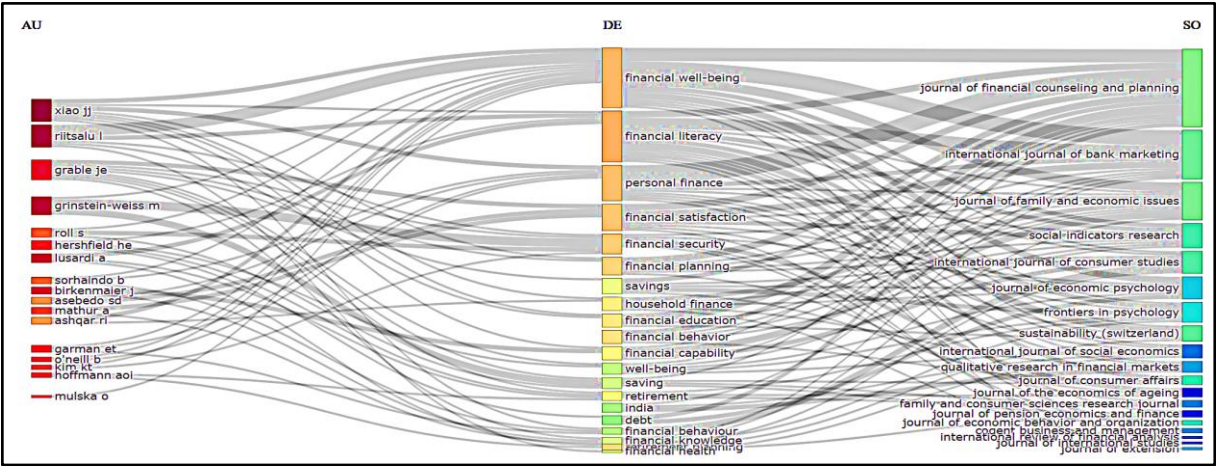


Figure 12: Three-field Plot Diagram

RQ3: Intellectual structure

Shafique, 2013 (40) has explained the intellectual structure of a research field as the dominant research traditions, disciplinary constituents, themes covered in the field, and the interrelationships. In the current research area, researchers will be addressing the RQ3 where the

analysis of citations, keywords, and thematic mapping is configured under this study.

Citation Distribution Metrics: Data were retrieved through Harzing’s publish and perish software, referring to the introduction of publish and perish stated by Adams, 2023 (41), the tabularised Table 6 demonstrates the citation distribution metrics.

Table 6: Data on Citation Metrics (41)

Publication Years	1995-2023
Citation years:	29 (1995-2024)
Papers:	497
Citations:	7385
Citations/year:	254.66 (acc1=262, acc2=170, acc5=64, acc10=24, acc20=6)
Citations/paper:	14.86
Citations/author:	3168.17
Papers/author:	234.7
Authors/paper:	2.81/3.0/2 (mean/median/mode)
Age-weighted citation rate:	1212.18 (sqrt=34.82), 487.26/author
Hirsch h-index:	40 (a=4.62, m=1.38, 4250 cites=57.5% coverage)
Egghe g-index:	72 (g/h=1.80, 5198 cites=70.4% coverage)
PoP hI,norm:	27
PoP hI,annual:	0.93
Fassin hA-index:	13

Table 6 portrays a refined dataset with 497 documents exported to the software. From the exported raw data set the software examines and produces the academic citations. Through analysis of data from 1995-2023 (since in the year 1994 data related to personal financial well-being were absent) which is 29 citation years the total citations were 7385 and the average per paper comes to 14.86, per year 254.66, per author citation 3168.17 and per author paper average is 234.7. The mean, median, and mode values for the number of authors per paper come to 2.81, 3.0, and 2 respectively. An

age-weighted citation rate of 1212.18 indicates that more recent citations hold greater weight and influence compared to older ones. The notion behind this idea is more recent citations have more impact and value than the older ones. The number of papers that got an h-index is 40, the g-index is 72 and the hA-index is 13 it considers both citations, and the number of authors per paper is given. These metrics mainly focus on giving details on the productivity, impact, and influence of research articles based on the citation and publication of the whole dataset taken for the study.

Citation Analysis: The mapping of intellectual connections and structural interactions of research elements are studied using different analysis techniques. Citation analysis is one among them where the analysis of the frequency of citations given for an article will be scrutinised, the more the citation, the popularity of the study is also considered high (42). Table 7 illustrates the top locally cited, globally cited, and top-page-ranked articles. The local citation refers to nominal reliance on the full Scopus database data, instead, it relies on the dataset of the research field (43) but in global measure, the weighted impact of citations received globally from the cited articles will be considered which denotes the analysis of complete

network structure where the worthiness of the article will be portrayed (44).

Page Rank Analysis: When one publication cites another publication, it shows the popularity of the other article but the prestige of a paper is determined based on the occurrence of citations from highly cited papers and this can be measured using Page Rank Analysis (45). When the citation counts treat all the citations equally irrespective of the source from where the articles were cited, then this work cannot be considered as pioneering research (46, 47). Hence to overcome this, the Google Page Rank algorithm gave the assumption that limited reference of an influential paper should be given more significance than the citation from a vague article with numerous references (43).

Table 7: Citation and Page Rank Analysis

Article	LC	GC	%	Article	LC	GC	%	Article	PR	TC
Netemeyer <i>et al.</i> , (2018) (1)	31	328	9.45	Prawitz <i>et al.</i> , (2006) (48)	12	370	3.24	Marley-Payne <i>et al.</i> , (2022) (61)	0.35	1
Xiao and Porto (2017) (6)	17	179	9.5	Netemeyer <i>et al.</i> , (2018) (1)	31	328	9.45	Miečinskienė <i>et al.</i> , (2023) (62)	0.32	0
Prawitz <i>et al.</i> , (2006) (48)	12	370	3.24	Wang and Shi (2014) (56)	0	257	0	Kumar <i>et al.</i> , (2023) (63)	0.29	7
Donnelly <i>et al.</i> , (2012) (49)	11	143	7.69	Bucher-Koenen <i>et al.</i> , (2017) (52)	10	204	4.9	Abramova <i>et al.</i> , (2023) (64)	0.28	0
Riitsalu and Murakas (2019) (50)	10	68	14.7	Gutter and Çopur (2011) (57)	8	184	4.35	Khan and Pandey (2023) (65)	0.28	0
Ponchio <i>et al.</i> , (2019) (51)	10	62	16.1	Xiao and Porto (2017) (6)	17	179	9.5	Chavali <i>et al.</i> , (2021) (66)	0.28	17
Bucher-Koenen <i>et al.</i> , (2017) (52)	10	204	4.9	Garðarsdóttir and Dittmar (2012) (58)	0	178	0	Lučić <i>et al.</i> , (2022) (67)	0.28	3
Xiao <i>et al.</i> , (2006) (53)	9	105	8.57	Banks and Oldfield (2007) (59)	1	160	0.63	Chu <i>et al.</i> , (2016) (68)	0.26	138
O'Neill <i>et al.</i> , (2005) (54)	9	124	7.26	Talwar <i>et al.</i> , (2021) (60)	0	151	0	Zaimović <i>et al.</i> , (2023) (69)	0.26	0
Eunyoung and DeVaney (2004) (55)	9	50	18	Donnelly <i>et al.</i> , (2012) (49)	11	143	7.69	Cwynar (2020) (70)	0.25	13

Table 7 illustrates the citation and page rank analysis and it interprets the top articles with the help of Local citation (LC), Global citation (GC), and Page rank (PR) of those articles. Here it is identified that the top locally cited article is given by Netemeyer *et al.*, (2018) (1) which is also second in

the global citation index though based on page rank it is not coming under the top 10 still it is highly relevant within the study dataset and global Scopus database. Articles by Prawitz *et al.*, (2006) (48), have a significant global citation impact with a citation of 370, which shows their relevance in the

entire Scopus database other than just confining to the current study realm. Moving to the analysis of articles based on page rank, Marley-Payne *et al.*, (2022, 61) has the highest page rank which shows

its prestige in this arena of study. Subsequently, Miečinskienė *et al.*, (2023) (62), though the total number of citations of that article is less. However, its status in the study domain remains higher since the page rank value is 0.32.

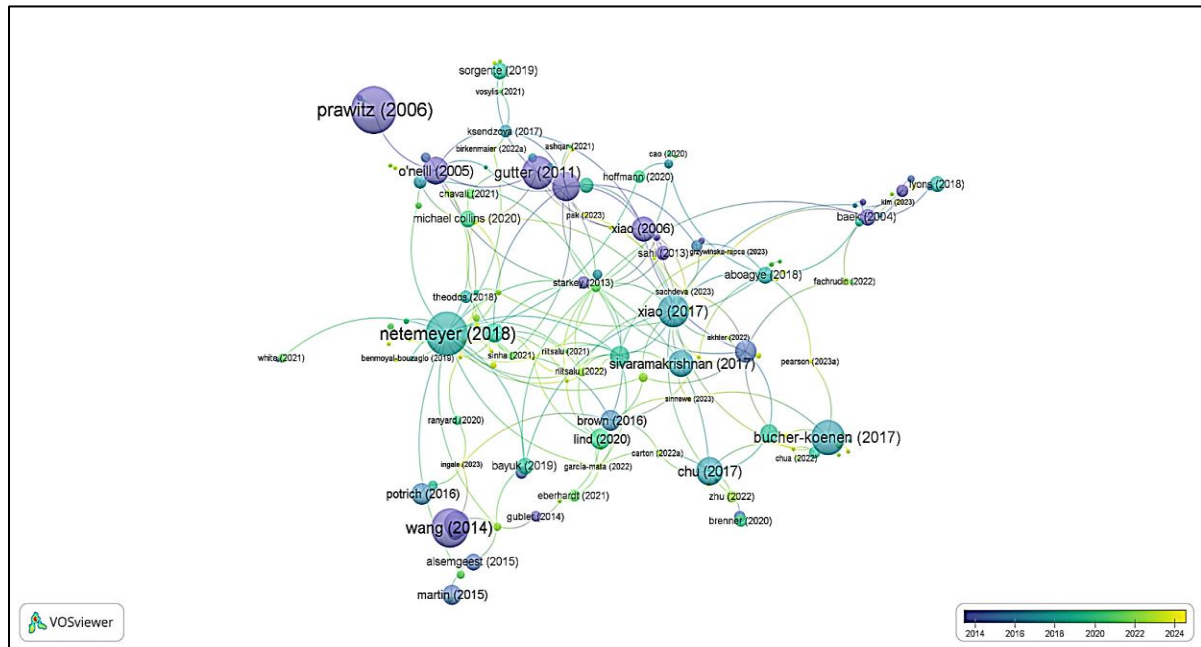


Figure 13: Citation Analysis

Figure 13 shows the overlay visualisation of cited articles that are connected. The largest set of connected items is 144 out of 497 documents. Overlay visualisation validates the recent trends in the research field (71) by cataloging items based on the time scale. The period is colour-coded and is given in the corner explaining the colours and the period which it indicates. The figure is visualised using VOS viewer which is considered as the tool for visualising keywords, which will give an analytical insight into the interconnections among key terms within the research sphere (72). Recent studies are denoted in yellow, whereas highly cited papers are illustrated with bigger dots. Demonstration in Figure 13 shows that articles by Prawitz *et al.* (2006) (48), Netemeyer *et al.*, (2018) (1), and Wang and Shi (2014) (56) are the top 3 highly globally cited articles. Further analysis of articles based on the stages shows that the articles of Prawitz *et al.*, (2006) (48) and Wang and Shi (2014) (56) were published in the infancy stage of this area of study which is why it is depicted in violet colour. And the article by Netemeyer *et al.*,

(2018) (1) was published in the middle age and is dotted with green colour.

Keyword Analysis: The key study theme of the article is represented using the author's keywords (73). VOS viewer is used to extract keywords and their occurrences along with the total link strength. Some variations are done to merge similar keywords. Reviewing Table 8 it portrays that the top 3 keywords used for the study are financial well-being which has occurred 67 times, financial literacy 66 times, and personal finance 47 times. It shows that all three terms are crucial and are used in research significantly. Other keywords that play a vital role in the study are savings -27, financial behaviour-25, financial security-17, financial planning-16, retirement planning-16, and financial education-15. Using a VOS viewer, researchers visualised keywords. They filtered the data to include only keywords that appeared at least twice. This process reduced the number of keywords from 1429 to 224. Of these 224 keywords, 222 are connected to a total of 497 research papers.

Table 8: Prominent Keywords

Keyword	Occurrences	Total Link Strength
Financial Wellbeing	67	167
Financial Literacy	66	163
Personal Finance	47	109
Financial Satisfaction	28	58
Savings	27	56
Financial Behaviour	25	81
Financial Security	17	35
Financial Planning	16	45
Retirement Planning	16	40
Financial Education	15	47

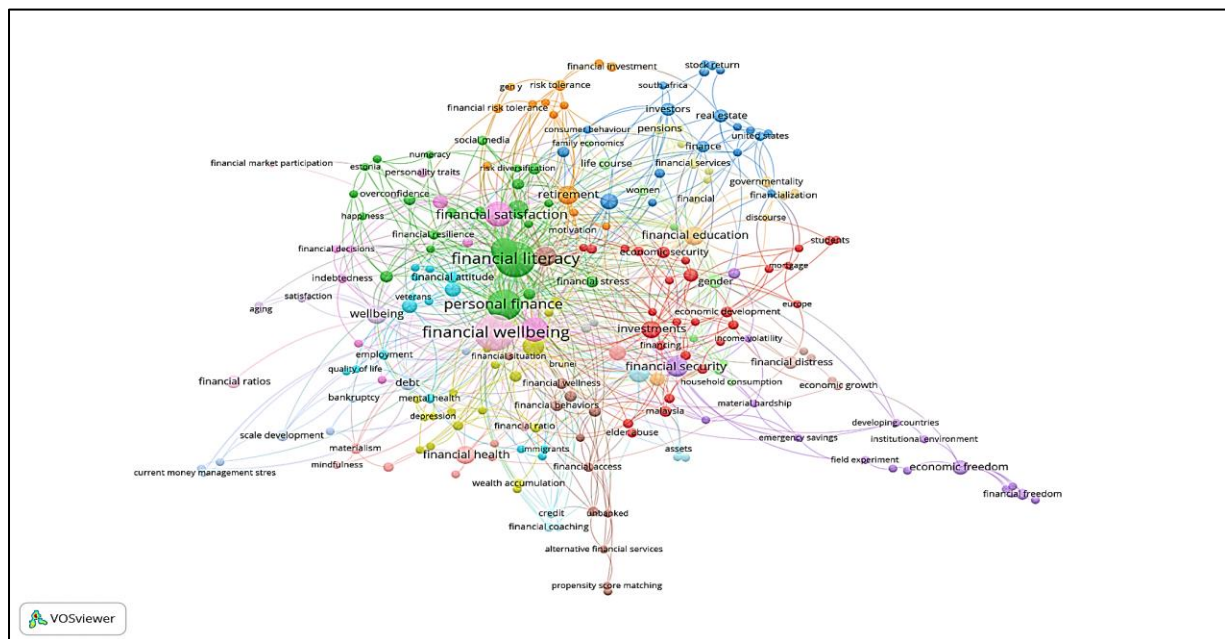


Figure 14: Illustrating the Links of Interconnected 222 Keywords Related to the Personal Financial Well-Being Study

Co-occurrence Analysis: The demonstration of Figure 14 shows the co-occurrence of keywords and how they are inter-connected with other nodes. The size of the node shows the occurrences. The bigger the node the occurrence will be also higher. The nodes reveal that the highest co-occurrence of studies is done between financial well-being, financial literacy, and personal finance. The emerging node in this field is portrayed as financial satisfaction which shows a future direction for further studies.

Thematic Mapping: Study outcomes of bibliometric analysis are enriched through the demonstration of outcomes for finding meaning within the network clusters (74). Biblioshiny- R programming is generally used for Thematic

Mapping analysis. Themes are grouped into four categories under *biblioshiny*- R programming based on their centrality and density. The four segments of themes are Niche themes, Motor themes, Emerging or declining themes, and Basic themes. Niche themes are explored relatively less, motor themes act as the foundation pillar within the study and they are crucial for further exploration and understanding of the research area, Emerging or declining themes can be the topics that are relatively less connected and which are not core for the study, and the last theme is basic theme they are the highly significant themes but are not yet well developed it illustrates the gap that can be further explored.

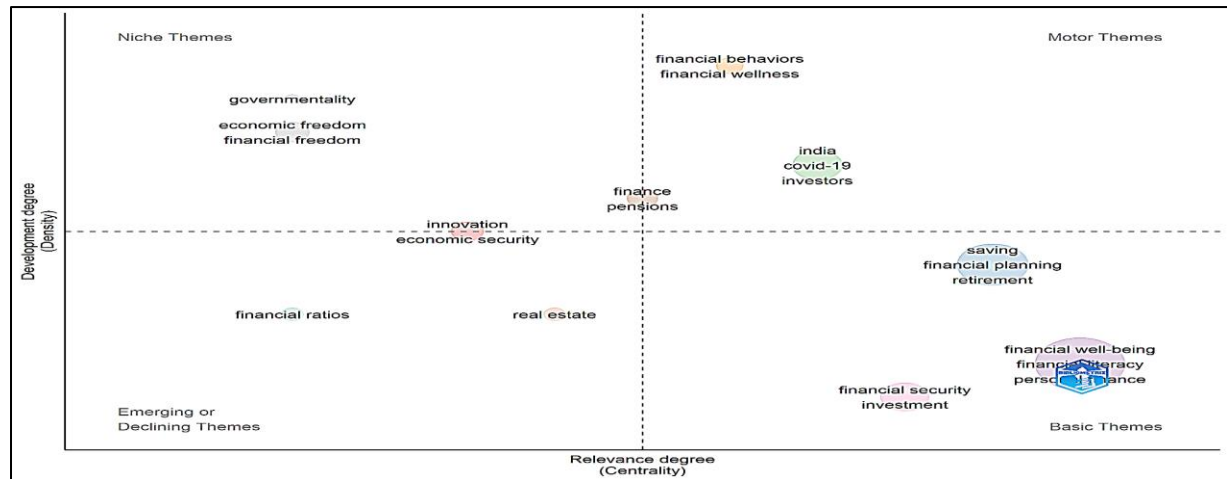


Figure 15: Thematic Mapping

Figure 15 demonstrates the research study in thematic mapping segments using Biblioshiny. Mapping will help us to identify and explain different theoretical zones within the research area. Based on the algorithm it has generated eleven clusters which are visualised through the thematic map. These eleven clusters were extracted by limiting the study to the top 50 keywords so that major themes could be given importance, with a minimum cluster frequency of ten with a limit of 3 keywords for separate clusters.

Niche themes

It is located at the upper leftward segment. This field shows the research areas which are marginal topics. Here though the topics will have an impact but they won't have any centrality or relevance. Based on the study governmentality, innovation, and economic freedom clusters are coming in the niche theme segment. This shows that these themes are less explored and their importance is not felt in this context. Among these clusters, the innovation cluster is positioned between the niche theme and emerging or declining theme axis line which shows that the impact and the centrality both are in the neutral position. Based on further research conducted in this area in the future this cluster may move towards less focused study or might be explored and become an emerging or declining theme and perish.

Emerging or declining themes

It is placed at the lower leftward segment. Clusters in the emerging and declining themes category are financial ratios and real estate which demonstrates that these themes are relevant but their impact is currently very less.

Motor theme

It is the upper rightward segment that demonstrates the well-developed and significant themes for the current study which are coming within the clusters of financial behaviour, Finance, and India. In financial behaviour cluster has another theme financial wellness, and these are considered as the main driving themes. In the cluster of India, sub-themes depicted are COVID-19, investors, financial services, and investor behaviour. This shows the rise in the study because of the pandemic and still, the study is considered significant and rising. The next major cluster in the motor theme is finance. For the overall personal well-being finance plays a crucial role. Finance is considered a major theme that is studied along with pensions. Its significance is rising among the people who are planning for retirement life.

Basic theme

These are at the lower rightward side. These are the basic but most relevant themes of the field but still, it has to be studied which shows the gap in the current research avenue. Based on the thematic mapping for the current study the highly relevant cluster themes are financial well-being, saving, and financial security. The cluster of financial well-being includes financial literacy, personal finance, financial satisfaction, financial behaviour, retirement planning, financial education, financial capability, financial health, financial knowledge, financial inclusion, behavioural finance, gender, financial distress, financial attitude, financial stress, life course, financial self-efficacy, and financial socialization. This cluster shows the centrality focus of the review paper. Since these constructs are placed at the segment of basic theme it shows

the research gap and the importance of doing further studies in this field in various other dimensions which are kept unexplored. Other clusters of basic themes are saving which has other subsets of studies as far as now are financial planning, retirement, well-being, debt, income, poverty, life satisfaction, stock market participation, financial decision-making, financial management, and Malaysia.

RQ4: Trend Areas, Knowledge Gaps, and Future Directions

Trend Areas: This section gives us an idea of the trending topics over the years. Analysis of Figure 16 imported from biblioshiny shows a paradigm upward slopping of trending topics. The analysis focused on author-identified keywords to understand the content, by restricting the minimum frequency of repetition of terms as 5,

and the number of words per year is taken as 3. The period of articles that are included in the study is taken from 1994-2023. Here, in the base year, the trend was on investors, particularly for the year 2014. Then each year the trends were moving towards different study domains. Concentrating more on the last 3 years, In the demonstration, Figure 16 highlights that personal finance, financial satisfaction, and retirement were of high significance in 2020, and moving to 2021 importance was on financial literacy, financial knowledge, and financial behaviour and for the recent years, particularly from 2022 financial well-being, retirement planning, and financial education, were considered as the predominant important trending topics to conduct research related to personal finance and financial well-being.

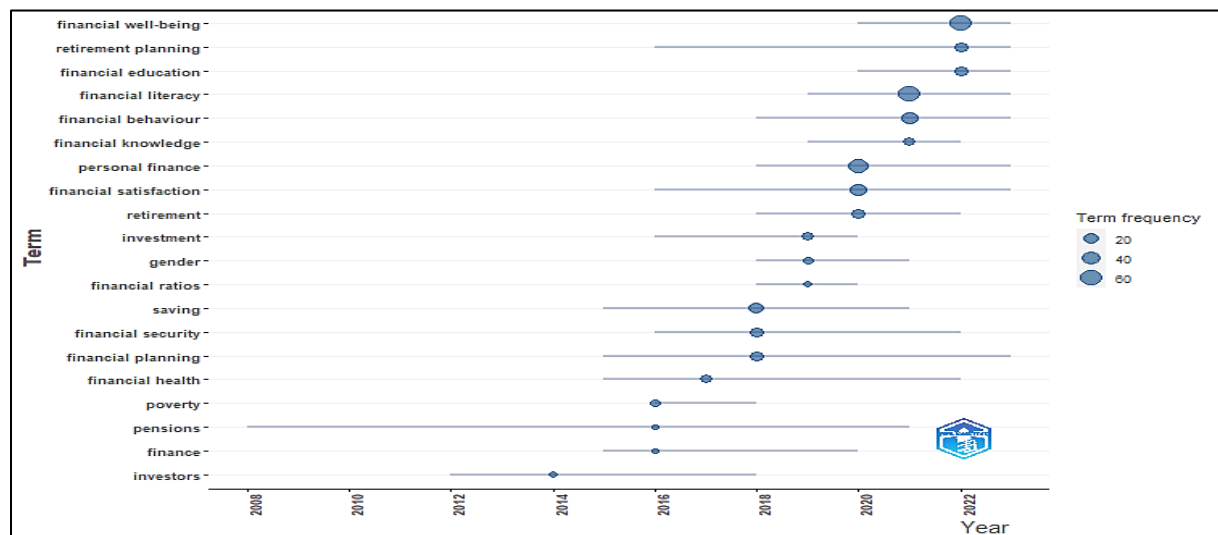


Figure 16: Trends Across the Ages

Knowledge Gaps: Over the years micro-level studies on personal finance and financial well-being were comparatively less compared to the macro-level studies of this field. Individual finance management and the distribution of funds through the proper channel are necessary. An examination of personal finance and financial well-being has revealed gaps in knowledge, prompting further research

Future directions: Studies on the personal management of funds and their well-being can be elaborated to explore various other subject domains. It is an emerging topic that has attracted the attention of researchers in the recent spectrum of era. Research at the intersection of personal finance, financial well-being, and behavioural

finance is in its nascent stage. Applying various behavioural finance theories to analyze the mental health of individuals managing finances holds significant promise.

Studies can also use multifaceted measures to analyse the antecedents and consequences of this research domain. Studies can also explore the scales that can be used to measure personal finance and financial well-being. Further studies can be also done to explore the financial satisfaction of individuals.

Discussion

Humans are societal creatures affected by all the extremities that revolve around them. To face these monetary downturns, they have to be financially

literate and knowledgeable which can enhance their financial attitude and this will result in the progress of the financial attitude of individuals which can help in the achievement of financial well-being.

Research in this area is robust for the overall development of the country. Stakeholders like financial institutions and educators play a key role in equipping individuals with financial literacy skills, while policymakers can leverage research on financial well-being to create effective regulations and programs. This research contributes by pinpointing central areas for investigation related to the acquisition and maintenance of financial knowledge.

Individual development is crucial since they will play a significant role in the progress of the country. Through the development of individuals, it can bring improvements in life satisfaction, quality, mental health, relationships, and overall well-being. This study has explored over 30 years of research articles that have portrayed different dimensions and changes that have turned over the years. By investigating current research questions, influential authors, and knowledge gaps, this study offers a roadmap for comprehending both enduring trends and recent transformations in the realm of personal finance. This knowledge is crucial to ensure research continues to address the most pressing issues in achieving financial well-being. Strengthening this research requires discussing current concerns and their solutions. Key concerns include the rising cost of living due to inflation, student loan burdens, and retirement insecurity. Predatory lending practices and a lack of financial literacy further complicate individuals' lives. Solutions like proper budgeting tools, debt management strategies, and automatic savings can empower individuals. Additionally, financial wellness programs, stronger consumer protection laws, and widespread financial literacy education can equip individuals and inform policymakers. These efforts will be essential for tackling these challenges and promoting overall financial well-being across various demographic groups.

Conclusion

Incites on the works of personal finance and financial well-being have given an idea of the contributions that have been made so far by the authors, countries, journals, and institutions. Scopus has the broadest coverage of finance-

related peer-reviewed research, a quick update cycle, and the ability to inspect and analyse data (75). By analyzing citations, keywords, and their co-occurrence, the study offered valuable insights into the research domain for further exploration. Research has also given an idea of the trends, themes, and future scope with the gaps that can be explored in further research. Through this research, the stakeholders will get insights into tri-decadal studies that have been done so far which can be used for further and management of personal income.

Abbreviations

GC: Global Citation

GNI: Gross National Income

IS: Inclusion standards

LC: Local Citation

OECD: Organisation for Economic Co-operation and Development

PR: Page Rank

SS: Segregation Standards

TC: Total Citation

VOS: Visualization of Similarities

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Author Contributions

Jisa Babu: Conceptualization, Methodology, Data collection, Analysis, writing, Original draft preparation; G. Velmurugan: Writing, Review, Editing, Supervision.

Conflict of Interest

The authors declare no conflict of interest.

Ethics Approval

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