

Bibliometric Analysis and Visualisation of Research on Financial Readiness

Nawi, H M, Ahmad, M Y, Yahaya, M N, Ariffin, Z Z, Abdullah, M N, Ismail, A, Sabri, M F

To Link this Article: <http://dx.doi.org/10.6007/IJARAFMS/v13-i2/16788> DOI:10.6007/IJARAFMS /v13-i2/16788

Received: 12 February 2023, **Revised:** 15 March 2023, **Accepted:** 30 March 2023

Published Online: 10 April 2023

In-Text Citation: (Nawi et al., 2023)

To Cite this Article: Nawi, H. M., Ahmad, M. Y., Yahaya, M. N., Ariffin, Z. Z., Abdullah, M. N., Ismail, A., & Sabri, M. F. (2023). Bibliometric Analysis and Visualisation of Research on Financial Readiness. *International Journal of Academic Research in Accounting Finance and Management Sciences*, 13(2), 111–128.

Copyright: © 2023 The Author(s)

Published by Human Resource Management Academic Research Society (www.hrmars.com)

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licences/by/4.0/legalcode>

Vol. 13, No. 2, 2023, Pg. 111 - 128

<http://hrmars.com/index.php/pages/detail/IJARAFMS>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at
<http://hrmars.com/index.php/pages/detail/publication-ethics>



Bibliometric Analysis and Visualisation of Research on Financial Readiness

¹Nawi, H M, ²Ahmad, M Y, ³Yahaya, M N, ⁴Ariffin, Z Z,
⁵Abdullah, M N, ⁶Ismail, A, ⁷Sabri, M F

^{1,2,3,4,5,6}National Defence University of Malaysia, Malaysia, ⁷Universiti Putra Malaysia,
Malaysia

Email: hafizah.matnawi@upnm.edu.my, mej_yusof@hotmail.com

(Corresponding author)

Abstract

Financial readiness has become a global concern that undermines individuals' financial security. This study focuses on examining the research progress on 'financial readiness', identifying the research significant areas, and recognizing the major players in the research. 222 documents were retrieved from the Scopus Core Collection database. Using VOSviewer 1.6.15 and Harzing Publish or Perish, respectively, this study created visuals and integrated data. Results indicated that research on financial readiness began as early as 1972. Early development was drawing the interest of only Western scholars, particularly those from the U.S. and the U.K. Between 2019 and 2020, the number of financial readiness-related research papers published continuously rose. The U.S. was the country undertaking the most research in this area, besides being home to the majority of schools researching the topic. It is anticipated that the findings will encourage future research and guide the progress of the field of study.

Keywords: Financial Readiness, Bibliometric Analysis, SCOPUS, VOSviewer, Harzing's Publish or Perish Software.

Introduction

Financial readiness denotes financial preparedness for retirement. It signals a significant life transition and causes a significant disruption to an individual's life and social networks (Ekerdt, 2010). According to Diener et al (2018), the preparation will result in physical, financial, and emotional changes, ultimately affecting well-being. Thus, planning for this transition is essential, as individuals' perceptions of their well-being following retirement vary greatly based on their experiences or traits (Radó & Boissonneault, 2018).

Conventional economic models suggest that consumers save a portion of their earnings during their working years in order to maintain their chosen level of consumption after retirement (Massenot, 2021). However, most workers do not prepare for retirement or save for it (Hershey et al., 2010). As a result of this lack of retirement readiness, global economies are put under considerable stress. This makes it worthwhile to investigate the characteristics

associated with financial readiness for retirement. In fact, research on the predictors of retirement readiness in emerging nations remains scant (Kumar et al., 2019). Retirement preferences may vary based on social security systems.

Furthermore, a comprehensive literature review revealed that there have not been any bibliometric analysis studies on 'financial readiness'. Thus, this study prepared a bibliometric analysis of published papers on a topic related to 'financial readiness' given the significance of this issue for both individuals and society and the adaptability of theory applications.

This paper primarily addresses three research issues

1. “how has the research on financial readiness evolved?”,
2. “what are the key areas in financial readiness research?”, and
3. “who are the major players in financial readiness?”.

To answer the first question, this study looked into sources and document types, the number of published studies per year, and the language of documents. The second question focused on the subject areas, title analysis, and keyword frequency. In answering the third question, this article also examined countries with the most contributions, citation analysis, and authorship analysis.

Following a description of the study's methodology comes the results of bibliometric analysis, their interpretations, and a discussion. In the conclusion, the findings are summarised together with limitations and suggestions for future research on financial readiness.

Materials and Methods

Data Source and Search Strategies

The Scopus scientific database served as the source for the study's data collection since it is the most comprehensive research tool available in the social sciences (Nawi et al., 2022). Positional operators, such as double quotation marks, were used in conjunction with logical operators, such as brackets, and the word "OR", in order to generate more precise and pertinent results. The following inquiry was carried out throughout this study: TITLE-ABS-KEY ("financial readiness" OR "retirement readiness" OR "financial adequacy" OR "financial preparedness" OR "retirement preparedness").

There were no limitations placed on the database in terms of the “year of publication”, “document type”, “topic”, or “language”. The Scopus database retrieved 222 documents. The search work was completed on November 15, 2022. The information was retrieved with complete records and appropriate references. Following the process of data cleaning, there were no instances of duplicate documents being discovered; hence, a total of 222 documents were taken into consideration for the Bibliometric Analysis. Figure 1 provides a concise summary of the detailed data retrieval procedures and inclusion criteria that were used for this study.

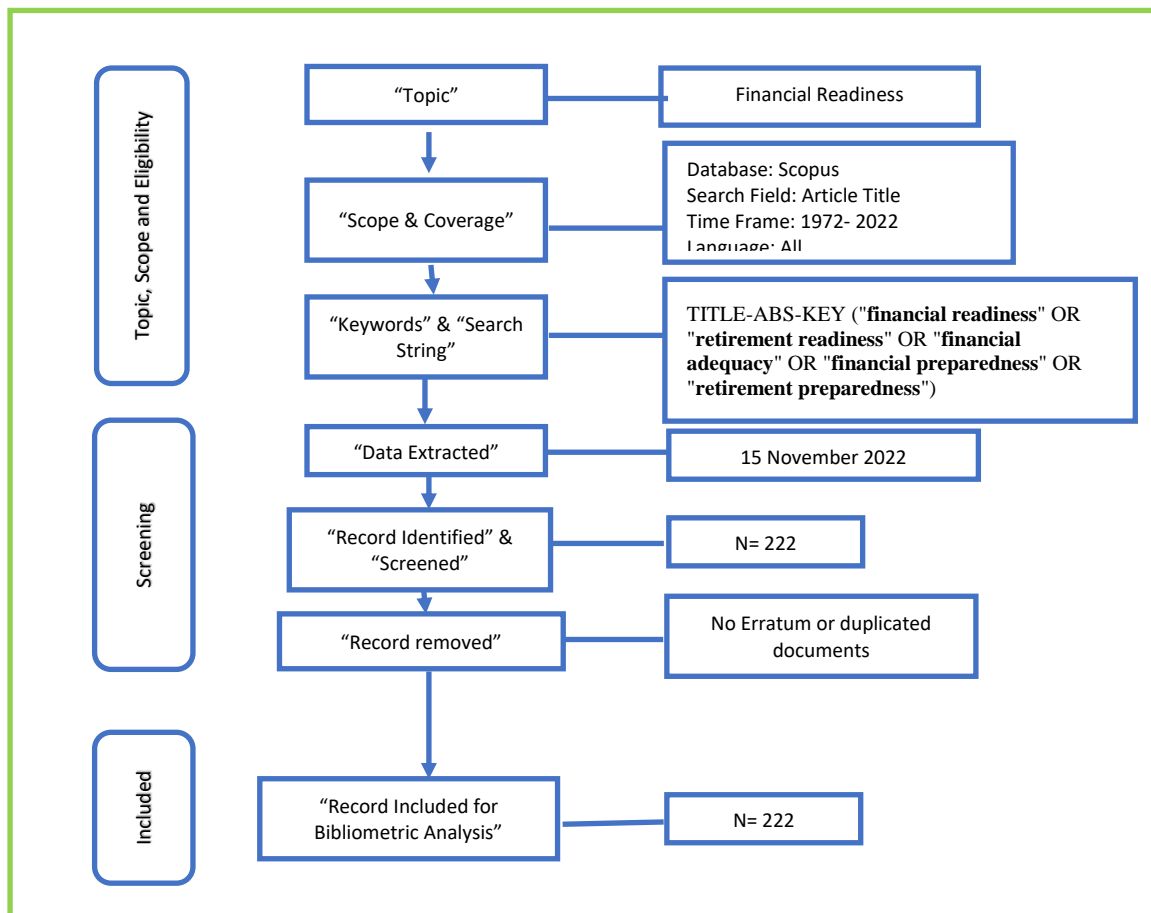


Figure 1: A Flow Diagram of the search strategy for this study

Analytical Methods

This study utilised data retrieved from the Scopus database in plotting graphs of publication growth and total citations of scholarly publications published on the topic of 'financial readiness' from 1972 to 2022. Some analyses were quickly obtained from Scopus via the 'analyse search results' feature on the Scopus website.

This study used VOSviewer software to further visualise the data as network visualisation maps. The software has distinct advantages, particularly in clustering analysis (Yang et al., 2023). The visualisation on maps were examined in two parts: "keyword analysis" and "title analysis".

VOSviewer was used to create and visualise bibliometric networks. This software visualises the authors' keywords and displays their links by using varying font sizes, colours, and connecting line thicknesses. In parallel, the study employed Harzing's Publish or Perish software to incorporate data and search for citation metrics in the data. The data were also analysed using Microsoft Excel.

The following factors were assessed in the current study: "yearly publications", "publication type", "publication language", "research category", "most used keywords", "country/region", "affiliation", "founding sources", "authorship and co-authorship", and "most cited papers". The protocol for the current bibliometric study is depicted in Figure 2.

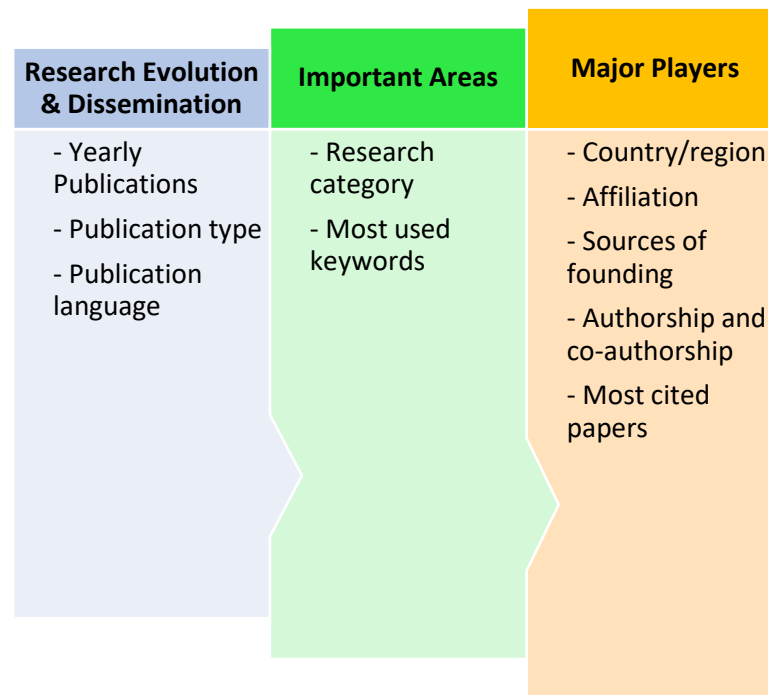


Figure 2: The protocol for the bibliometric analysis study

Results

The bibliometric analysis results are presented in this section. The results are presented in three subsections in accordance with the aforementioned research questions:

1. The evolution and dissemination of 'financial readiness' research;
2. Important areas for 'financial readiness' research; and
3. Major players in 'financial readiness' research.

1. Evolution and dissemination of research

This study looked into the following to answer the first research question: (i) yearly publications, (ii) document and source types, (iii) languages of documents, and (iv) journal distribution.

(i) Yearly Publications

An analytical search of the Scopus database yielded 222 publications. The "Gerontologist" published the first study on 'financial readiness' in 1972 by Peterson, with a paper titled, "Financial adequacy in retirement: Perceptions of older Americans". The research on 'financial readiness' has increased since the first publications were published. The trend (i.e., the number of publications relating to financial readiness) was first relatively slow, but it began to rise in 2007 and evolved steadily after 2017. Figure 3 shows that the year 2021 is expected to have the largest number of publications since 1972. The maximum number of publications appeared between 2019 to 2022 (111 documents), which contributed up to 50% of the total documents. For the year 2022, the Scopus database has already listed or is planning to include a sizable number of papers on 'financial readiness'. This analysis showed a keen interest in the subject, underscoring the significance of studies on 'financial readiness'.

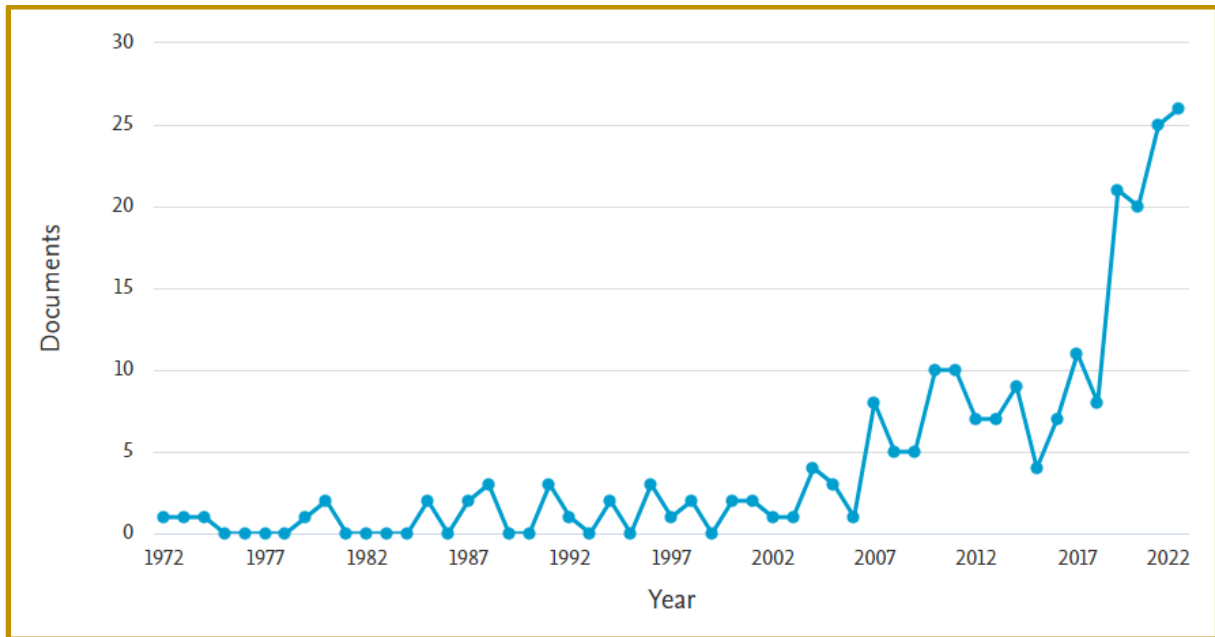


Figure 3: Publications by year

(ii) Document and Source Types

Figure 4 illustrates the eight different types of documents that have been used to classify the documents on ‘financial readiness’. The data shows that article is the most prevalent document type, accounting for 181 documents (81.5%), followed by conference paper with 20 documents (i.e. 9%). Other types of papers, such as book chapters, reviews, books, erratum, and notes, accounted for less than 10% of the total number of documents.

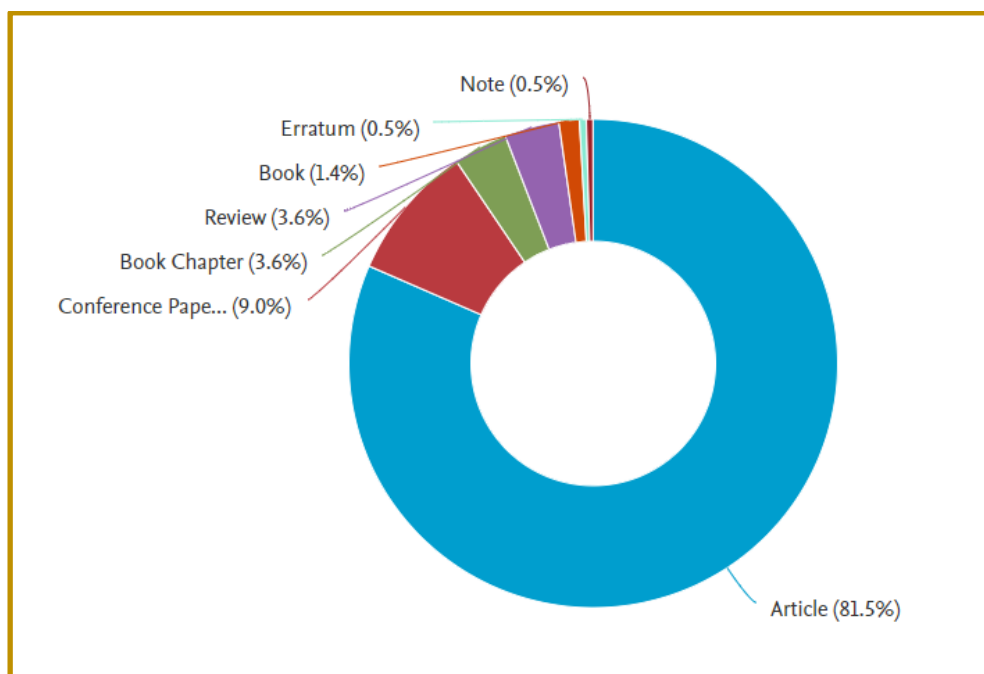


Figure 4: Document type

Alternatively, Table 1 lists the four types of sources. Journals represented 86.4% of all sources, followed by conference proceedings (6.6%). The remaining publications were published in book and book series, with a total document of 9 and 2, respectively. Remarkably, the

document type of conference paper may differ from the one in the source type (Sweileh et al., 2017). The same materials could be classified as journal article, book chapter, or conference proceeding, depending on their publication status

Table 1

Source type

Source type	Frequency	Percentage (%)
Journal	192	86.4
Conference Proceeding	19	8.6
Book	9	4.1
Book Series	2	0.9
Total	222	100

(iii) Languages of Documents

The overwhelming majority of the research documents for ‘financial readiness’ were written in English, which made up 98% of them (218 documents). Table 2 displays the remaining document languages. It is important to note that, the research on ‘financial readiness’ started to be written in other languages starting from the year 2011 (i.e. in Persian). All published documents, even those authored in languages other than English, have English-language abstracts.

Table 2

Languages of documents

Languages	Frequency	Percentage (%)
English	218	98.2
French	1	0.45
German	1	0.45
Persian	1	0.45
Turkish	1	0.45
Total	222	100

(iv) Journal Distributions

Additionally, the data were examined in light of the Source Title. The journals were ranked by the number of documents. The top ten journal lists for research on ‘financial readiness’ which made up nearly 15% of all documents are shown in Table 3. The list showed that the “*Journal of Financial Counseling and Planning*” had the greatest influence and published the most papers on ‘financial readiness’. This journal has been covered by Scopus under Springer Publishing Company as the publisher since 1990. “*Journal of Family and Economic Issues*”, which has been published under the Springer Nature imprint since 1992. It is interesting to note that both journals published the same total number of documents, i.e. 6. However, one ranked above the other mainly based on the ‘total link strength’. Noteworthy, “*Journal of Gerontology*” was recorded to have the highest number of citations despite being ranked number five. The table also includes information on the journal quartile, **SCImago Journal Rank** (SJR) indicator, and cite score.

Table 3

Top 10 journals publishing research on 'Financial Readiness', 1972-2022.

Rank	Source Title	No of documents	Citations	Category zone	SJR (2021)	Cite score
1	"Journal of Financial Counseling and Planning"	6	93	Q2	0.44	3.3
2	"Journal of Family and Economic Issues"	6	100	Q2	0.55	3.1
3	"The Gerontologist"	3	196	Q1	1.58	8.0
4	"Journal of Retirement"	3	1	Q3	0.22	0.8
5	"Journal of Gerontology"	3	221	Q1	1.56	7.6
6	"Journal of Pension Economics and Finance"	3	18	Q2	0.62	2.2
7	"Proceedings of the Annual Hawaii International Conference on System Sciences"	3	71	-	-	-
8	"International Journal of Aging and Human Development"	2	54	Q2	0.6	3.2
9	"Research on Aging"	2	68	Q1	0.88	4.4
10	"Malaysian Journal of Economic Studies"	2	2	Q4	0.15	1.0

Important areas for 'financial readiness' research

This part presents analyses on (i) "subject area" and (ii) "keyword analysis."

(i) Subject Area

Figure 5 depicts the subject areas covered in "financial readiness' research. The majority of retrieved documents were under the categories of "Social Sciences", "Medicine", and "Economics, Econometrics and Finance" is basically above 10% from each area, giving a total percentage of 50.3%. The following three domains were "Business, Management and Accounting", "Psychology", and "Engineering". The remaining fields made up less than 30% of the documents.

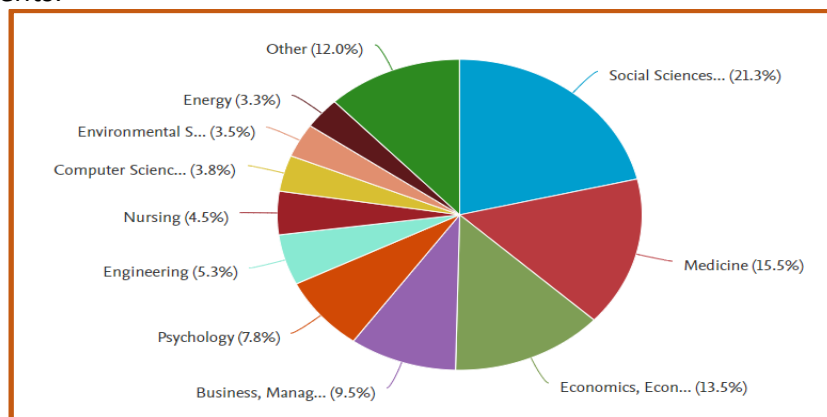


Figure 5: Documents by subject area

(ii) Keywords Analysis

Keywords allow the concentration and refinement of the key substance and relevance of the research field's literature. Figures 6 and 7 depict the VOSviewer-created maps visualisation of the keyword, illustrating the strength of the association between keywords. Similar keywords are typically displayed in the same colour (Sweileh et al., 2017). Based on the co-occurrence of “all keywords,” Figure 6 displays a visualisation of the keyword map. This study set the minimum number of keyword occurrences to three by default. According to statistics from VOSviewer, the authors used 1,365 keywords across 222 publications. After the cleaning process, 96 out of 1365 keywords satisfied the minimum criterion.

Based on the different colours of keywords nodes in Figure 6, indicates that the keywords can be divided into 8 different topics (eight clusters). Cluster 1 (**red colour network**) includes 26 keywords. This cluster consists of keywords such as financial preparedness, financial well-being, life satisfaction, caregiver burden, lifestyle, older adults, etc. the most frequent keyword in the red cluster is “middle-aged”, followed by “life satisfaction”. Cluster 2 (**green colour network**) includes 13 items, which are mainly around the keyword “income”, whose frequency is the first among all other keywords. The other main keywords in the green cluster refer to economic recession, socioeconomic, attitude to health, etc. Cluster 3 (**blue colour network**) and Cluster 4 (**gold colour network**) include 12 items each; centre on “disaster preparedness” and “savings/investments”, respectively. In addition, Cluster 5 (**purple colour network**) consists of 11 keywords, focusing on financial literacy, financial management, financial knowledge, retirement confidence, retirement readiness, retirement preparedness, etc. Moreover, Cluster 6 (**cyan colour network**) concentrates mainly on the keyword “economics”. The remaining clusters, Cluster 7 (and Cluster 8 consist of eight and 5 keywords, respectively). The most collaborative keywords in Cluster 7 (**orange colour network**) are aged, aging, subjective well-being and ethnicity. Alternatively, the keywords for Cluster 8 (**brown colour network**) are innovation, organization readiness, and societies and institution.

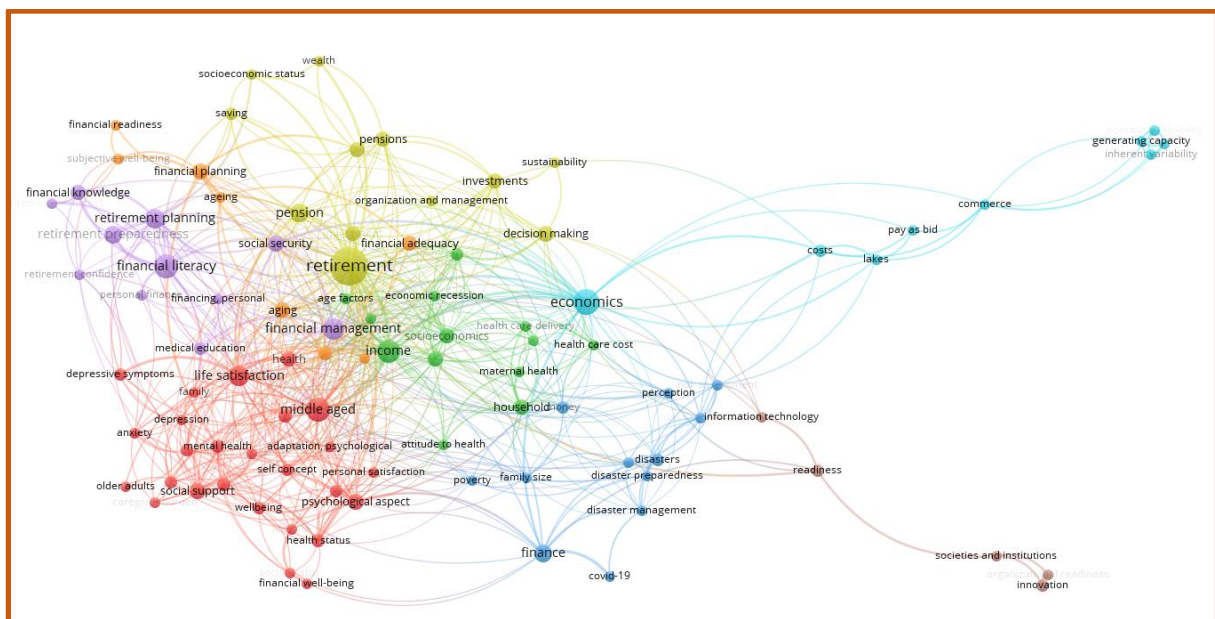


Figure 6: Keyword map for the study on ‘Financial readiness’ (based on co-occurrence of all keyword

ds)

Table 4 summarizes the top 10 high-frequency keywords in ‘financial readiness’ research.

Table 4

Top Ten (10) Keywords in ‘Financial readiness’ Research

No	Keywords	No. of Documents
1	Retirement	38
2	Economics	17
3	Middle aged	15
4	Financial literacy	15
5	Income	14
6	Financial management	12
7	Life satisfaction	11
8	Retiment planning	10
9	Pension	9
10	Retirement preparedness	8

Further analysis used “index keywords” as the unit of analysis and expanded it into the overlay visualisation to demonstrate the evolution of ‘financial readiness’ research through time. This was done to make the visualisation more appealing (refer to Figure 7). According to VOSviewer data, 222 publications contain the use of 917 keywords. This study set a threshold for the minimum number of occurrences of a keyword at 3. The analysis resulted in 75 out of 917 keywords meeting the threshold. The most often used index terms in this field of study were "retirement" and "financial management". The keywords in this map with a blue-to-green colour range indicate research activities with a publication year between 2010 to 2010, whereas the keywords with green-to-yellow colour ranges indicate phrases used in a more recent publication year (2010-2020).

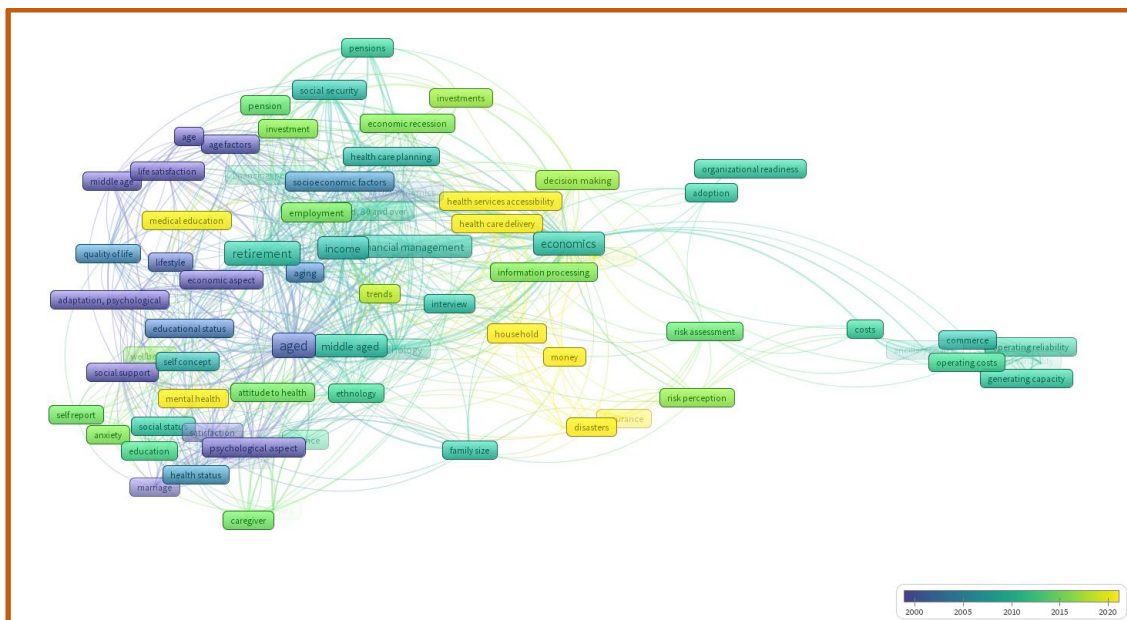


Figure 7: Keywords analysis of ‘financial readiness’ publications with time information (based on co-occurrence index keyword)

2. Major Players in 'Financial Readiness' Research

This study looked at the following in addressing the research question related to the major players.

- (i) "geographical distribution",
- (ii) "institutions involved",
- (iii) "authorship analysis", and
- (iv) "citation analysis".

(i) Geographical Distribution

According to the search results, a total number of 57 countries have contributed publications related to 'financial readiness'. Table 5 displays information on the top 10 countries in relation to the study which was analysed using the VOSviewer software. The Table shows that the United States is far ahead of other countries in terms of publications and citations, reaching 44% of the total number of documents (98 documents with 2366 citations). Malaysia, Canada, Australia and the United Kingdom ranked second, third, fourth, and fifth. Referring to the table, it can be found that although Malaysia ranked second place of most publications related to the 'financial readiness' field, the total number of citations is the least (8 citations) among the Top Ten listed countries; with zero total link strength.

Table 5

Ranked contributing countries in the number of 'financial readiness' publications

Rank	Country	No. of documents	Citations
1	United States	98	2366
2	Malaysia	14	8
3	Canada	11	98
4	Australia	10	139
5	United Kingdom	10	116
6	India	9	30
7	China	6	79
8	Indonesia	6	15
9	Turkey	6	43
10	Brazil	6	66

(ii) Distribution and co-authorship of institutions

The findings revealed that there were 438 institutes affiliated with 'financial readiness' research between the years 1972 and 2022. Table 6 presents the top ten most productive institutions in 'financial readiness' research. Notably, the most publications per institution only two documents for the top seven institutions, while only 1 document was affiliated with the remaining 3 institutions. The VOSviewer software categorised the output based on the total number of documents, total citations, and total link strength. There was no correlation between the number of papers and the overall number of citations for any institution, according to the data. Even though *Inst. Gerontol., Wayne State University* published the most, and the number of citations is still moderate. In contrast, an article from *Wharton School, University of Pennsylvania* and the *Department of Economics, Dartmouth University*, which is not one of the top 5 institutions, received the most citations (654 citations).

Table 6

Top 10 institutions contributing to the publications on 'financial readiness'

Rank	Institution	Country	No. of documents	Citations
1	Inst. Gerontol., Wayne State University	United States	2	58
2	Faculty of Social Work, University of Calgary	Canada	2	44
3	Cornell University	United States	2	21
4	Department of National Defence, Ottawa	Canada	2	11
5	Southeastern Oklahoma State University	United States	2	8
6	Dept. of Psychology, University of Michigan	United States	2	3
7	Faculty Human Ecology, Universiti Putra Malaysia	Malaysia	2	3
8	Department of Economics, Dartmouth University	United States	1	654
9	Wharton School, University of Pennsylvania	United States	1	654
10	Neurology, Epidemiology and Biostatistics, University of California	United States	1	189

(iii) Authorship analysis

The top ten most prolific authors out of 571 total authors on 'financial readiness' are shown in Table 7. Regarding the authorship productivity and total citation counts, the most frequently published corresponding authors were: Mitchell O.S. (n= 4, 121 citations), Lai D.W.L. (n= 4, 65 citations), Cuervo P. (n= 4, 37 citations), and Stacke F. (n= 4, 37 citations). Remarkably, even though Lusarsi A. ranked 9th of the top ten, it was reported to be the most frequently referred to (762 citations). The co-authorship network not only identifies the most productive authors in the field of 'financial readiness' research but also illustrates, in a way that is both clear and visually appealing, the co-authorship link among those authors (see Figure 8).

Table 7

Top 10 most productive authors in 'financial readiness' research

Rank	Authors	No of Documents	Citations
1	Mitchell O.S.	4	121
2	Lai D.W.L.	4	65
3	Cuervo P.	4	37
4	Stacke F.	4	37
5	Chiboola N.M.	3	3
6	Lori J.R.	3	3
7	Veliz P.T.	3	3
8	Lusardi A.	2	762
9	Hershey D.A.	2	221
10	Katz R.	2	95

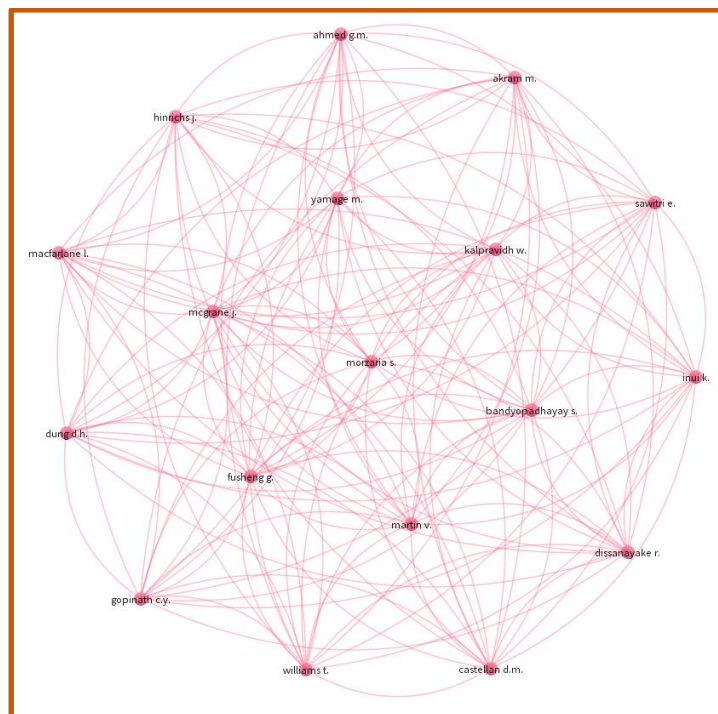


Figure 8: The co-occurrence knowledge map of 'financial readiness' research authors

(iv) Citation Analysis

In light of the fact that the number of citations a scientific paper receives is a significant factor in determining its overall quality (Mukherjee et al. 2021), this study carried out a citation analysis on prominent and high-quality publications. The scientific field's research trends can be understood, at least in part, by looking at the works that have received many citations (Gao et al., 2022). The software known as Publish or Perish by Harzing was utilised in order to calculate the citation metric for the collected data. Table 8 displays, as of the 15th of November 2022, the citation metric for all retrieved documents. The table containing citation metrics indicates that a total of 3294 citations were used to reference 222 published works during a period of 50 years (1972-2022), with an annual average of 65.88 citations.

Table 8

Citation metrics

<i>Reference date</i>	15 November 2022
<i>Publication years</i>	1972-2022
<i>Citation years</i>	50
<i>Total number of papers</i>	222
<i>Total citations</i>	3294
<i>Cites/year</i>	65.88
<i>Cites/paper</i>	14.84
<i>Authors/paper</i>	2.88
<i>Papers/author</i>	0.35
<i>Hirsch h-index</i>	28
<i>Egghe g-index</i>	53
<i>PoP hl,norm</i>	0.36
<i>PoP hl,annual</i>	8

Further, Table 9 presents the top 10 most cited publications. The table summarises the frequency with which each document was cited in the Scopus and Google Scholar databases, as well as the number of citations per year. According to the findings, Lusardi and Mitchell (2007) hold the top position for the most cited article. Specifically, this study offers evidence on the field for the theory and practice of personal finance, specifically on retirement planning. Lusardi and Mitchell (2007) found that many households are illiterate even in the most fundamental economic knowledge needed to make prudent saving and investment decisions. According to the Scopus database, the article has been cited 654 times, with an average of 43.6 citations per year. Alternatively, based on the computation of Google Scholar as of 15 November 2022, the articles had been cited triple times compared with the total citations in the Scopus database (2246 times; 149.73 citations per year).

Following this is Yaffe et al. (2013), which has been cited 189 times. In this study, the authors examined the association between dementia rates and socioeconomic status. It is worth reporting that, another paper written by Lusardi and Mitchell in 2017, titled "How Ordinary Consumers Make Complex Economic Decisions: Financial Literacy and Retirement Readiness", was cited less than Yaffe et al.'s paper if referring to the record in the Scopus database (n=109). However, if referring to the computation of Google Scholar, the citation number is quadrupled. Further, looking into the year of publication of the most cited documents, the table shows that articles were published as early as 1974 from different sources.

Table 9

Top 10 cited articles on 'Financial Readiness'

No	Authors	Year	Document Title	Source	Cited by	Cites per year	GS cites	GS cites per year
1	Lusardi & Mitchell	2007	"Financial literacy and retirement preparedness: Evidence and implications for financial education"	"Business Economics"	654	43.6	2246	149.73
2	Yaffe et al	2013	"Effect of socioeconomic disparities on incidence of dementia among biracial older adults: Prospective study"	"BMJ (Online)"	189	21	263	29.22
3	Hershey & Mowen	2000	"Psychological determinants of financial preparedness for retirement"	"Gerontologist"	164	7.45	419	19.05
4	Spreitzer & Snyder	1974	"Correlates of life satisfaction among the aged"	"Journals of Gerontology"	163	3.4	635	13.22
5	Ingram et al	2002	"Comprehensive assessment of the elderly cancer patient: The feasibility of self-report methodology"	"Journal of Clinical Oncology"	138	6.9	176	8.8
6	Lusardi & Mitchell	2017	"How Ordinary Consumers Make Complex Economic Decisions: Financial Literacy and Retirement Readiness"	"Quarterly Journal of Finance"	108	21.6	1058	211.6
7	Fox & Chancey	1998	"Sources of economic distress: Individual and family outcomes"	"Journal of Family Issues"	84	3.5	197	8.21
8	Noone et al	2010	"Do men and women differ in their retirement planning? testing a theoretical model of gendered pathways to retirement preparation"	"Research on Aging"	68	5.67	165	13.75

9	Hershey et al	2007	"Mapping the minds of retirement planners: A cross-cultural perspective"	"Journal of Cross-Cultural Psychology"	57	3.8	141	9.4
10	Lou	2010	"Life satisfaction of older adults in Hong Kong: The role of social support from grandchildren"	"Social Indicators Research"	56	4.67	104	8.67

Discussion, Recommendation and Conclusion

A bibliometric analysis was used in this study to get an overview of the literature on 'financial readiness'. The first research question gave a clear picture of how research on the topic has grown and been shared. In the Scopus database, 222 documents were found related to the topic. The first paper was written by Peterson and published in 1972. It was titled "Financial adequacy in retirement: Perceptions of older Americans".

The results show that the first research on "financial readiness" was accomplished by western scholars. After the millennium year, it began to draw scholars from the East or Asia. Boey wrote the first study, which was done in China in the year 2001. In the first few decades of the 20th century, the number of studies on "financial readiness" remained around the same. Beginning in 2007, the number of studies started to increase. Statistics from Scopus show that 98% of the documents were written in English and that more than 85% of the articles were from "journals".

In addition, subject areas and keywords analysis may be done to determine the key research area (i.e., the second research question). In answering the second research question, this study analysed all keywords, author keywords, and index keywords. The majority of study on 'financial readiness' has been undertaken in "Social Sciences", "Medicine", and "Economics, Econometrics, and Finance". Even if the topic (i.e. financial readiness) pertains to management or finance, a significant number of studies falls under the "Medicine" subject heading. The majority of studies in the field of medicine tie financial preparedness to age, Medicare, or pregnancy.

The final inquiry pertains to the investigation of major players and their collaboration. The citation metrics could be used to explain the significance of 'financial readiness' research papers (refer to Table 8). The Scopus database reveals that 'financial readiness' was mentioned in an average of 65.88 cites per year, or 14.84 cites per paper. On average, 2.88 authors per article cooperated on publications concerning 'financial readiness'.

Several shortcomings were identified in the study. First, relying solely on the Scopus database may result in inconclusive publications on 'financial readiness' studies. In addition, the article's title, abstract, and keywords lead researchers to focus exclusively on the topic of 'financial readiness' for this study. Therefore, all other material that was partially connected to 'financial readiness' but was not utilised within these subject areas was omitted. Second, it is possible that authors registered multiple names or submitted alternative spellings for their works in Scopus, resulting in erroneous information. Thirdly, this study's analyses were restricted to the top publications in 'financial readiness'. Thus, any papers that appeared in

specialised journals with lower rankings were disregarded. The readers should consider these limitations when determining whether the findings of this study may be generalised generally.

Nonetheless, this study contributes to knowledge by identifying current research trends in 'financial readiness' and by extending the 'financial readiness' literature through the application of the bibliometric technique. Since interest in 'financial readiness' research is growing year after year, this subject should be thoroughly investigated. Future research in this field could centre on a comprehensive content analysis of relevant scholarly articles. This bibliometric study can be utilised as a stepping stone with meta-analysis and systematic literature reviews. Reviews will provide further information into the origins and outcomes of the domain. This research can also serve as a platform for future studies that are predicted to contribute to the expanding body of knowledge on 'financial readiness'.

In a nutshell, financial readiness research is a promising subject of study with the potential to significantly enhance human wealth and quality of life. Further, by comparing the overall number of publications, the total number of citations, and various counting methods, it was proposed that a combination of several counting methods be used, as each counting method produces distinct results. By completely analysing and summarising financial readiness research trends, it is anticipated that the findings will encourage future research and guide the progress of the field of study. This bibliometric analysis can be used as a starting point for conducting systematic literature reviews and meta-analyses.

References

- Boey, K. W. (2001). Contribution of chronic life strain to mental health status of Chinese older adults. *Journal of Gerontological Social Work, 35*(1), 39-52.
- Diener, E., Oishi, S., & Tay, L. (2018). Advances in subjective well-being research. *Nature Human Behaviour, 2*(4), 253-260.
- Ekerdt, D. J. (2010). Frontiers of research on work and retirement. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 65*(1), 69-80.
- Fox, G. L., & Chancey, D. (1998). Sources of economic distress: Individual and family outcomes. *Journal of family issues, 19*(6), 725-749.
- Gao, Y., Fan, K., Lai, Z., Wang, C., Li, H., & Liu, Q. (2022). A comprehensive review of the circulation of microplastics in aquatic ecosystem using scientometric method. *Environmental Science and Pollution Research, 1*-19.
- Hershey, D. A., & Mowen, J. C. (2000). Psychological determinants of financial preparedness for retirement. *The Gerontologist, 40*(6), 687-697.
- Hershey, D. A., Henkens, K., & Van Dalen, H. P. (2007). Mapping the minds of retirement planners: A cross-cultural perspective. *Journal of Cross-Cultural Psychology, 38*(3), 361-382.
- Hershey, D. A., Henkens, K., & Van Dalen, H. P. (2010). Aging and financial planning for retirement: Interdisciplinary influences viewed through a cross-cultural lens. *The International Journal of Aging and Human Development, 70*(1), 1-38.
- Ingram, S. S., Seo, P. H., Martell, R. E., Clipp, E. C., Doyle, M. E., Montana, G. S., & Cohen, H. J. (2002). Comprehensive assessment of the elderly cancer patient: the feasibility of self-report methodology. *Journal of clinical oncology, 20*(3), 770-775.

- Kumar, S., Shukla, G. P., & Sharma, R. (2019). Analysis of key barriers in retirement planning: An approach based on interpretive structural modeling. *Journal of Modelling in Management*, 14(4), 972-986.
- Lou, V. W. (2010). Life satisfaction of older adults in Hong Kong: The role of social support from grandchildren. *Social indicators research*, 95(3), 377-391.
- Lusardi, A., & Mitchell, O. S. (2017). How ordinary consumers make complex economic decisions: Financial literacy and retirement readiness. *Quarterly Journal of Finance*, 7(03), 1750008.
- Lusardi, A., & Mitchell, O. S. (2007). Financial literacy and retirement preparedness: Evidence and implications for financial education. *Business economics*, 42(1), 35-44.
- Massenot, Baptiste, Pain of Paying in Consumption-Saving Decisions. (2022). Available at SRN: <https://ssrn.com/abstract=3820097> or <http://dx.doi.org/10.2139/ssrn.3820097>
- Mukherjee, D., Kumar, S., Donthu, N., & Pandey, N. (2021). Research published in management international review from 2006 to 2020: A bibliometric analysis and future directions. *Management International Review*, 1-44.
- Nawi, H. M., Zulkefle, W. N. S. A., Tanaraj, K., Sapiai, N. S., Ishak, F. M., Mustapha, W. M. W., & Arifin, N. (2022). The Capital Structure of Small and Medium Enterprises: A Bibliometric Analysis. *International Journal of Academic Research in Accounting Finance and Management Sciences*, 12(3), 786– 803.
- Noone, J., Alpass, F., & Stephens, C. (2010). Do men and women differ in their retirement planning? Testing a theoretical model of gendered pathways to retirement preparation. *Research on aging*, 32(6), 715-738.
- Peterson, D. A. (1972). Financial adequacy in retirement: Perceptions of older Americans. *The Gerontologist*, 12(4), 379-383.
- Rado, M., & Boissonneault, M. (2020). Short and long-term change in subjective well-being among voluntary and involuntary retirees. *The Journal of the Economics of Ageing*, 17, 100178.
- Spreitzer, E., & Snyder, E. E. (1974). Correlates of life satisfaction among the aged. *Journal of gerontology*, 29(4), 454-458.
- Sweileh, W. M., Al-Jabi, S. W., AbuTaha, A. S., Zyoud, S. H., Anayah, F. M. A., & Sawalha, A. F. (2017). Bibliometric analysis of worldwide scientific literature in mobile - health: 2006-2016. *BMC Medical Informatics and Decision Making*, 17(1), 1–13.
- Yaffe, K., Falvey, C., Harris, T. B., Newman, A., Satterfield, S., Koster, A., ... & Simonsick, E. (2013). Effect of socioeconomic disparities on incidence of dementia among biracial older adults: prospective study. *Bmj*, 347.
- Yang, F., Huang, Y., Tao, J., Reniers, G., & Chen, C. (2023). Visualized analysis of safety climate research: A bibliometric data mining approach. *Safety Science*, 158, 105973.