



An Analytical Review and Bibliometric Analysis of Financial Planning for Retirement: Detection and Classification

Wan Noor Hayatie Wan Abdul Aziz, Ezzah Suraya Sarudin, Nurul Hafizah Zainal Abidin, Rusliza Ahmad, Mohd Hafiz Mohammad Hamzah

To Link this Article: <http://dx.doi.org/10.6007/IJARAFMS/v13-i2/17312> DOI:10.6007/IJARAFMS /v13-i2/17312

Received: 10 March 2023, **Revised:** 13 April 2023, **Accepted:** 26 April 2023

Published Online: 18 May 2023

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

To Cite this Article: Aziz, W. N. H. W. A., Sarudin, E. S., Abidin, N. H. Z., Ahmad, R., & Hamzah, M. H. M. (2023). An Analytical Review and Bibliometric Analysis of Financial Planning for Retirement: Detection and Classification. *International Journal of Academic Research in Accounting Finance and Management Sciences*, 13(2), 399–410.

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/licenses/by/4.0/legalcode>

Vol. 13, No. 2, 2023, Pg. 399 - 410

<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>



An Analytical Review and Bibliometric Analysis of Financial Planning for Retirement: Detection and Classification

Wan Noor Hayatie Wan Abdul Aziz, Ezzah Suraya Sarudin,
Nurul Hafizah Zainal Abidin, Rusliza Ahmad, Mohd Hafiz
Mohammad Hamzah

College of Computing, Informatics and Media, Universiti Teknologi MARA, Perak Branch,
Tapah Campus, 35400 Tapah Road, Perak, Malaysia.

Email: wann124@uitm.edu.my

Abstract

In today's society, planning for retirement finances is an essential matter. It involves more than just the simultaneous management of finances. It also involves projecting future income, asset values, and withdrawal schedules. Therefore, to progress the research development towards integrated efforts, it is essential to comprehend the themes of interest and widen collaborative networks. This study aims to provide an extensive bibliometric literature review on financial planning for retirement. All the articles were retrieved from Google Scholar database by using the Publishing or Perish (PoP) software. In this study, 793 papers out of 993 that were located in the Google Scholar database which covered the years 2018 to 2023 were examined. The chosen references were then categorised and visualized using the VOSviewer software. Generally, this analysis offers a useful starting point for future studies on the financial planning for retirement. After conducting research, it can be concluded that financial behaviour, financial knowledge, financial planner, retirement age and health are the priority components of financial planning for retirement.

Keywords: Bibliometric Analysis, Financial Planning, Retirement, Investment, VOSviewer

Introduction

The importance of financial planning for retirement is widely recognized in today's society. A comprehensive financial plan should encompass cash flow, savings, debt, investments, insurance, and other pertinent financial aspects. Financial planning refers to the process of establishing financial guidelines for acquiring, managing, and investing finances. Retirement signifies the permanent termination of compensated work for an individual, with a retirement age of 60 years in Malaysia according to labour laws. Inadequate financial preparation for retirement may lead to difficulties for retirees, particularly in undeveloped countries where the burden on society increases due to insufficient retirement savings.

Bibliometric analysis is a method rarely utilized in financial planning studies. This research paper seeks to establish the potential of bibliometric analysis in the financial

planning for retirement research field. Donthu et al (2021) suggest three primary review methods: bibliometric analysis, meta-analysis, and systematic literature review, depending on the scope and dataset to be reviewed. Bibliometric analysis is recommended for extensive datasets and broad scopes, while systematic literature review is recommended for small datasets and specific scopes. Sudrajat (2022) explains that the bibliometric analysis technique is employed in this research, utilizing software such as VOSviewer and Publish or Perish (PoP) to visualize bibliometric networks and extract publication and citation data from sources such as Google Scholar, Scopus, and Web of Science.

Therefore, this research follows the steps recommended by Sudrajat (2022) to conduct bibliometric analysis in the financial planning area. The articles were extracted from a Google Scholar database using PoP software, categorized into clusters, and presented using VOSviewer. This approach provides an innovative starting point for future research on financial planning for retirement, highlighting the potential impact of financial behavior, financial knowledge, financial planners, retirement age, and health on retirement planning.

Data and Methodology

This study will employ bibliometric analysis as its primary method of analysis. Data related to the chosen keyword will be collected from the Google Scholar (GS) database as of March 8th, 2023. According to Ahmar et al (2018), GS is a valuable tool for researchers, providing access to scientific materials in various formats, including books, journal articles, conference papers, patents, and other publications. As one of the world's major indexers of web papers, its indexation can help researchers present their findings and allow other scholars to cite their work. The collected data will include information such as publication type, year of publication, author names, subject, publisher's name, country, affiliation, source type, and language, as suggested by (Ahmi et al., 2019). The data will be collected using PoP software by entering the chosen keywords.

Subsequently, the collected data will be analyzed using VOSviewer to present the bibliometric analysis of financial planning for retirement. As noted by Yang et al. (2019), VOSviewer is a bibliometric software that can interpret previous studies' data into knowledge maps. Unlike other software, VOSviewer can run clustering analysis, creating three types of knowledge maps, including Network Visualization, Overlays Visualization, and Density Visualization (Van Eck & Waltman, 2023). These maps display relevant nodes that form a cluster and are classified by different colors. The size of each node represents the weight of each item, which can be used to represent the number of documents and citations (Li et al., 2021). The study will follow the five phases of the method suggested by Hudha et al (2020), as shown in Figure 1.

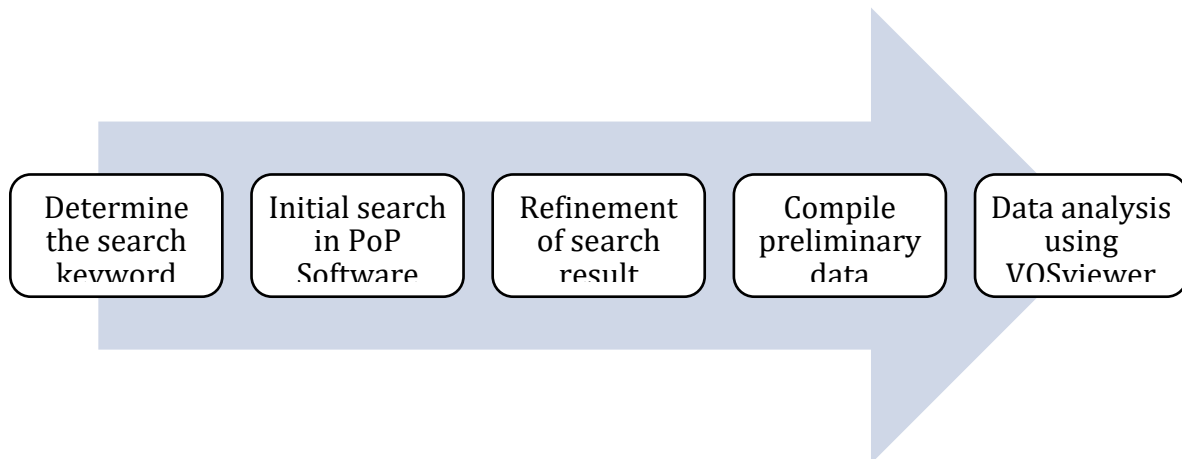


Figure 1: Phases in Bibliometric Analysis

Defining search keywords

The search for literature was done in Mac 2023 by using a keyword of “Retirement & Financial Planning”. In this study, the literature search was through Publish or Perish (PoP) software and only focused the previous research in Google Scholar since Google Scholar is the largest database.

Initial Search Results

The search will include all publications in Google Scholar that have the keyword “Retirement & Financial Planning” from the year of 2018 to 2023. An initial search found that there are 993 publications. The results from this initial search will save in a Research Information System (RIS) format. All the related metrics such as paper title, author’s name, citation index, publication’s name and publisher’s name will be saved.

Refinement Search Results

The publications that were retrieved from Google Scholar database from the initial search were 993 publications. From this record, the selection was carried out. All the publications that have incomplete data about year of publication, publication name and publisher name are removed. Besides that, the publication in books, book chapters, in other languages and patents are also excluded. The results after the selection were 793 publications. Then, these results will be saved in RIS format for further analysis in Microsoft Excel and VOSviewer.

Compiling Data Analysis

The required data that retrieved from PoP software after the refinement search stage will save in RIS format. This necessary data will be processed in VOSviewer software by exporting this RIS file into VOSviewer software. The required information is author, title, publisher name, publication name, year and number of citations.

Data Analysis

The data retrieved from PoP software is analyzed using VOSviewer software to identify the frequent keywords used in previous studies. According to Hudha et al. (2020), VOSviewer software is chosen because it can efficiently process large datasets and also provide a variety of interesting visualizations, analyses, and investigations.

Results and Discussions

Detection

The data retrieved from PoP software is analyzed using VOSviewer software to identify the frequent keywords used in previous studies. The number of keywords that are frequently used changes depending on the requirements of data collecting and analysis. VOSviewer is used to visualise bibliometric maps. This VOSviewer software produces three distinct visualisations for the bibliometric mapping display namely network visualisation, overlay visualisation, and density visualisation. From the initial search by using a keyword "Retirement & Financial Planning" in GS database through PoP software, it found that there are 993 publications from 2018 to 2023 with the number of citations is 89187 citations which is about 17837.40 cites per year. Then, the refinement search has been carried out by excluding certain articles (incomplete resource data, in the form of book and book chapters, in other languages and in the form of patents). This action has excluded about 200 publications. It makes the data of publications now become 793 publications with 40944 citations (8188.8 cites/year). All the comparison of metric data from publications retrieved from both initially and after selection are shown in Table 1.

Table 1

Comparison metrics

Metric Data	Initial Search	Refinement Search
Source	"Retirement & Financial Planning"	"Retirement & Financial Planning"
Publication year	2018-2023	2018-2023
Papers	993	793
Citations	89187	40944
Cites/year	17837.40	8188.80
Cites/paper	89.82	51.63
Author/paper	2.66	2.73
h_index	140	93
g_index	261	139
hI_norm	71	59
hI_annual	14.20	11.80
hA-index	48	40

The most relevant thing in this research is the quantity of citations. After running the refinement search stage, the top 10 total citations from 793 selected publications were presented in Table 2. Based on Table 2, all top 10 selected papers have at least 295 citations with the highest citation paper title "Financial literacy and the need for financial education: evidence and implications" (520 citations) and the lowest number of citation is "Financial literacy among youth" (295 citation).

Besides that, instead of focusing on the total number of citations, this study also investigated the popular publishers that contributed the most publications to the topic of "Retirement and Financial Planning". From the total of 793 articles, the top 10 publishers are listed in Figure 2 where the most popular publisher is Elsevier with 139 articles, followed by Wiley Online Library with 94 articles, and emerald.com 77 articles.

Table 2

Top 10 cited articles

No	Publication Year	Author	Title	Journal	Cite s	Publisher
1	2019	A Lusardi	Financial literacy and the need for financial education: evidence and implications	Swiss Journal of Economics and Statistics	520	Springer
2	2020	J Akkermans, J Richardson, ML Kraimer	The Covid-19 crisis as a career shock: Implications for careers and vocational behavior	Journal of vocational behavior	492	Elsevier
3	2018	RG Netemeyer, D Warmath	How am I doing? Perceived financial well-being, its potential antecedents, and its relation to overall well-being	Journal of Consumer	432	academic.oup.com
4	2020	J Hastings, OS Mitchell	How financial literacy and impatience shape retirement wealth and investment behaviors	Journal of Pension Economics & Finance,	406	cambridge.org
5	2018	S Maqbool, MN Zameer	Corporate social responsibility and financial performance : An empirical analysis of Indian banks	Future Business Journal	377	Elsevier
6	2021	RJ Zwanka, C Buff	COVID-19 generation: A conceptual framework of	Journal of International Consumer Marketing	360	Taylor & Francis

			the consumer behavioral shifts to be caused by the COVID-19 pandemic			
7	2020	MS Shaker, J Oppenheimer , M Grayson	COVID-19: pandemic contingency planning for the allergy and immunology clinic	The Journal of Allergy	352	Elsevier
8	2021	K Goyal, S Kumar	Financial literacy: A systematic review and bibliometric analysis	International Journal of Consumer Studies	350	Wiley Online Library
9	2018	DTAM Kooij, R Kanfer, M Betts	Future time perspective: A systematic review and meta-analysis.	Journal of Applied Psychology	318	psycnet.apa.org
10	2018	N Garg, S Singh	Financial literacy among youth	International journal of social economics	295	emerald.com

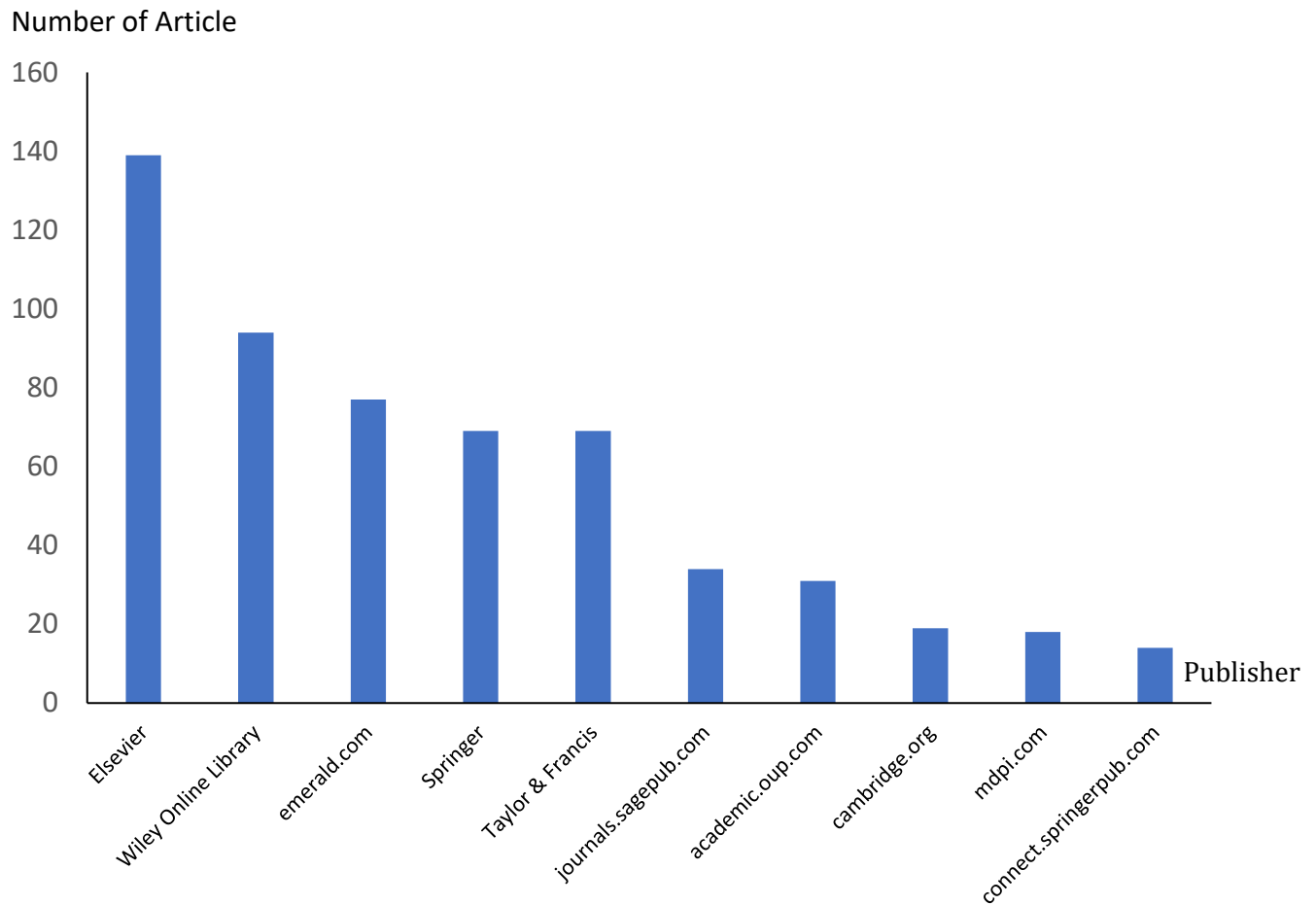


Figure 2: Top 10 Publishers who Publish Retirement and Financial Planning Topic

Table 4 represents the list of top 10 journals that have relevant articles on the topic of retirement and financial planning with the data about the number of articles published, number of citations and the average number of citations. Based on Table 4, the journals that publishes the most articles on the topic of retirement and financial planning is International Journal of Bank Marketing with 23 articles and 836 citations. However, the journal that has the highest number of average citations is The Journal of Finance with 93.50 citations per article.

Table 4

Top 10 journals that have relevant articles on retirement and financial planning topic

No.	Journal Names	Total articles	Citations	Avg Citations
1	International Journal of Bank Marketing	23	836	36.35
2	Journal of Family and Economic Issues	19	841	44.26
3	International Journal of Consumer Studies	16	1071	66.94
4	Journal of Consumer Affairs	13	536	41.23
5	Journal of Pension Economic & Finance	12	881	73.42
6	Journal of Economic Behavior & Organization	10	281	28.10
7	Journal of Public Economics	8	449	56.13
8	Journal of Public Behavioral and Experimental Finance	8	455	56.88
9	The Journal of Finance	8	748	93.50
10	Journal of Financial Economics	7	471	67.29

Classification

After all the data from PoP has been analysed, the related data then will display in terms of three types of maps through VOSviewer software. There are the data network visualization (Figure 3), the overlay visualization (Figure 4) and the density visualization is shown in Figure 5.

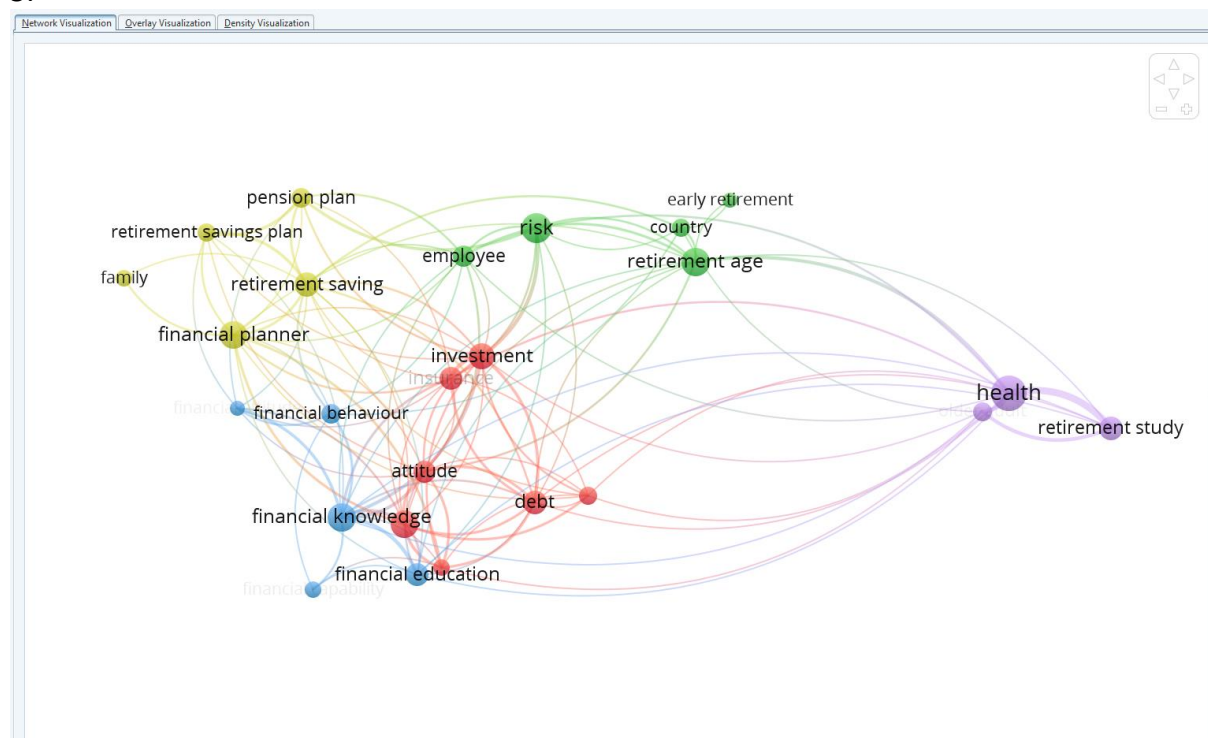


Figure 3: Network Visualization on GS Database that Related to Retirement and Financial Planning Topic

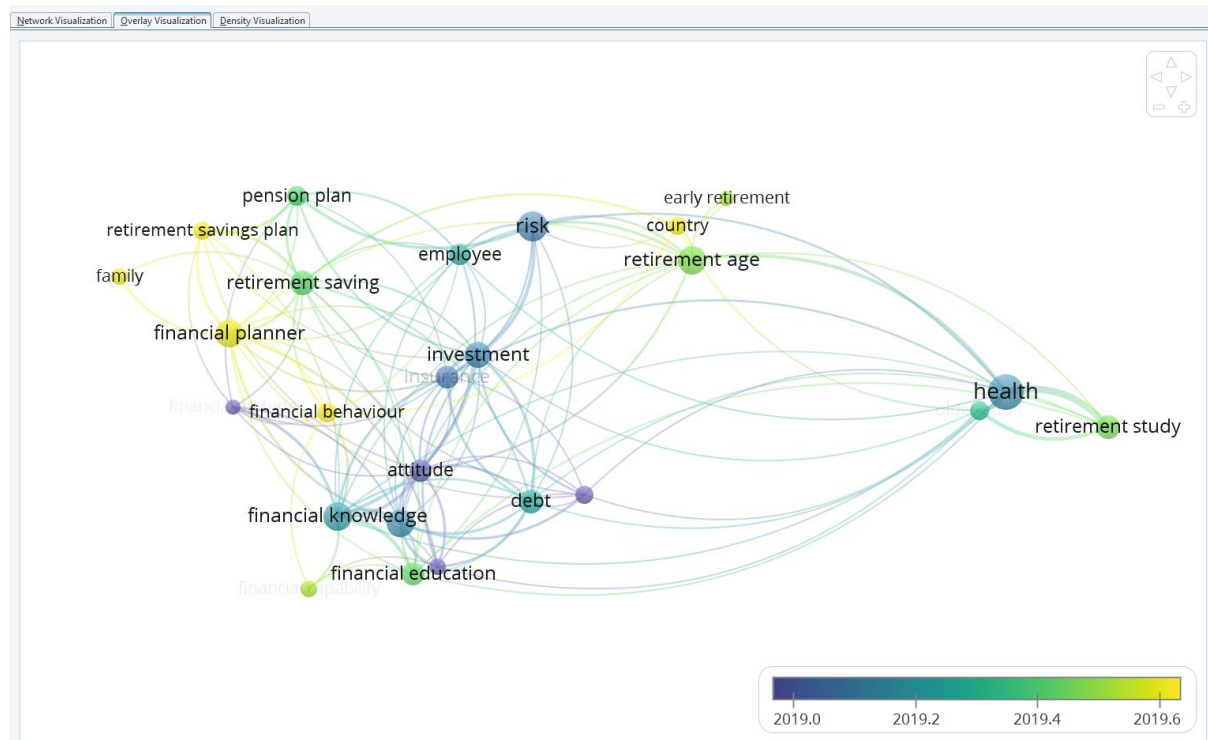


Figure 4: Overlay Visualization on GS Database that Related to Retirement and Financial Planning Topic

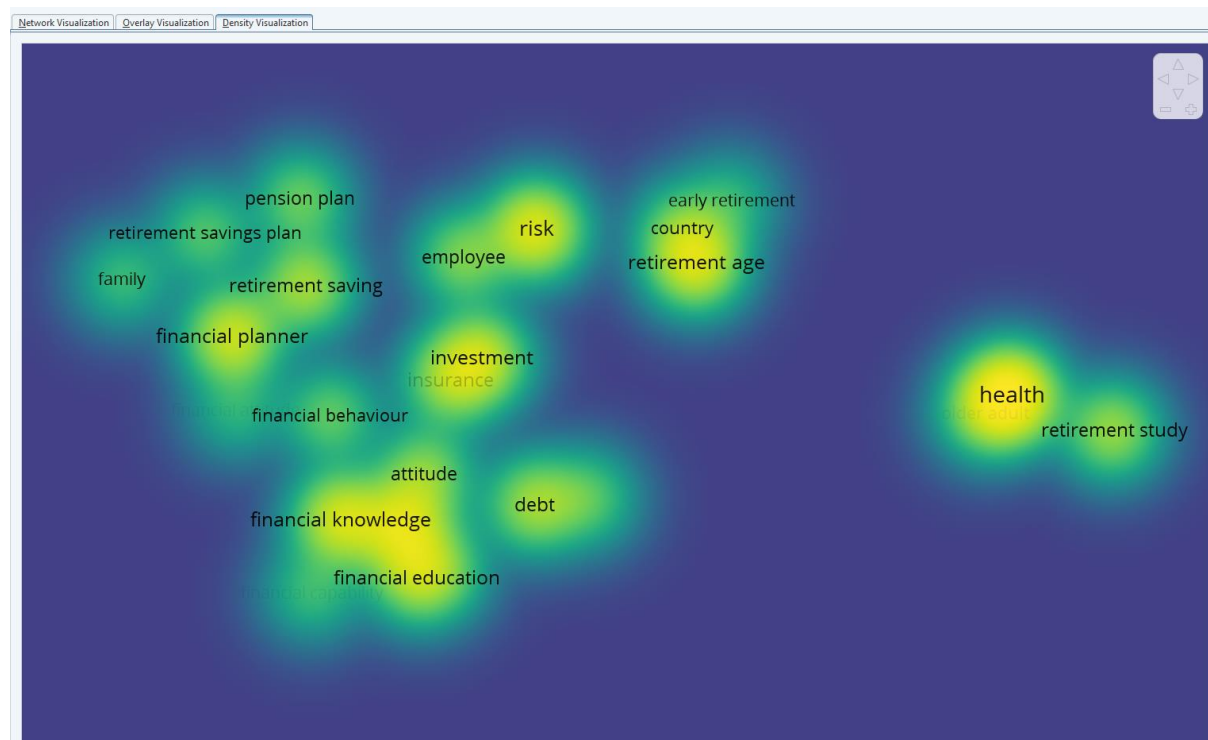


Figure 5: Density Visualization on GS Database that Related to Retirement and Financial Planning Topic

These three maps were extracted from the title and abstract in the PoP database that was uploaded in RIS format into VOSviewer software. These results were obtained after a complete calculation of the minimum number of occurrences which were set to be 10. About

97 items were found that met the threshold of 4097 items. According to the Sudrajat et.al (2022), there are no common words in this item. The size of the node indicates how frequently the terms occur simultaneously. There are five groups of keywords or known as clusters have been found in the results of this VOSviewer. The clusters are listed in Table 4. The five clusters identified in the analysis appear to focus on different aspects of personal finance and retirement planning. The first cluster is related to personal finance attitudes and behaviors, second cluster focuses on retirement-related issues and third on the relationship between financial literacy and behavior. Meanwhile, the fourth cluster on long-term financial planning and savings, and the last cluster on the intersection of health and retirement, particularly for older adults.

Table 4

Keyword representing each cluster determined by VOSviewer

No	Cluster	Elements
1	First cluster (Red)	attitude (22), debt (26), financial behavior (35), financial decision making (15), financial satisfaction (13), insurance (24), investment (31)
2	Second cluster (Green)	country (15), early retirement (10), employee (21), retirement age (37), risk (41)
3	Third cluster (Blue)	financial attitude (10), financial behavior (17), financial education (24), financial knowledge (37)
4	Fourth cluster (Yellow)	family (12), financial planner (35), pension plan (18), retirement saving (27), retirement savings plan (15)
5	Fifth cluster (Purple)	health (57), older adult (16), retirement study (25)

Conclusions

This study employs a bibliometric approach to analyze the high-level research output in the area of financial planning. The research utilizes PoP and VOSviewer software to conduct the analysis. Specifically, the PoP software was used to analyze 793 related journal articles obtained from Google Scholar using the keyword "Retirement & Financial Planning." The retrieved articles were then organized according to various criteria, including the author, year of publication, publisher's journal, citation, and co-authors. These data were then transferred to VOSviewer software to generate maps and identify key themes in the field of research.

The results of the overlay visualization and density visualization in VOSviewer indicate that each cluster is linked to a different keyword, highlighting the significant direction of research on the subject. This research gap can be used as a case study to analyze the importance of conducting additional research on financial planning. To improve the accessibility and accuracy of the database, it is recommended to expand the keyword usage and compare the findings of different bibliometric analyses, such as BibExcel and HistCite. Moreover, given the limited research covering financial planning and retirement, additional related research is necessary to provide a more comprehensive description of the field. Overall, this research provides valuable insights into the current state of financial planning research and offers direction for future research endeavors.

This bibliometric analysis can be utilized alongside meta-analysis and structured literature reviews as a preliminary step. The reviews will offer additional insights into the factors preceding and the outcomes related to the domain. Ultimately, this study can establish a foundation for upcoming researchers who aim to make contributions to the growing body of knowledge on the subject of "Financial Planning and Retirement".

Corresponding Author

Wan Noor Hayatie Wan Abdul Aziz

College of Computing, Informatics, and Media, Universiti Teknologi MARA, Perak Branch, Tapah Campus, 35400 Tapah Road, Perak, Malaysia

Email: wanno124@uitm.edu.my

References

- 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.
- Juneja P. (2015). Financial Planning - Definition, Objectives and Importance. <https://www.managementstudyguide.com/financialplanning.htm>. Accessed 18th April, 2021.
- Husin, N. A., Abdullah, N., Abd Aziz, M. J., Shukri, M. A. S. (2021). RETIREMENT PLANNING AMONG PRIMARY SCHOOL TEACHERS IN SELANGOR. *SELANGOR BUSINESS REVIEW*. Vol. 6, No. 2, p. 58-69
- Sudrajat, U., Ardianto, D., & Permana, I. (2022). Engineering design process: A review and bibliometric analysis. *International Journal of STEM Education for Sustainability*, 2(2), 180-192.
- Van Eck, N. J., & Waltman, L. (2011). VOSviewer manual. *Manual for VOSviewer version, 1(0)*.
- Harzing, A. W. (2007) Publish or Perish, available from <https://harzing.com/resources/publish-or-perish>
- Ahmar, A. S., Kurniasih, N., Irawan, D. E., Sutiksno, D. U., Napitupulu, D., Setiawan, M. I., & Abraham, J. (2018). Lecturers' understanding on indexing databases of SINTA, DOAJ, Google Scholar, SCOPUS, and Web of Science: A study of Indonesians. In *Journal of Physics: Conference Series* (Vol. 954, No. 1, p. 012026). IOP Publishing.
- Ahmi, A., Elbardan, H., & Ali, R. H. R. M. (2019). Bibliometric analysis of published literature on industry 4.0. In *2019 International Conference on Electronics, Information, and Communication (ICEIC)* (pp. 1-6). IEEE.
- Yang, Y., Reniers, G., Chen, G., & Goerlandt, F. (2019). A bibliometric review of laboratory safety in universities. *Safety Science*, 120, 14-24.
- Van Eck, N. J., & Waltman, L. (2023, January 23). Retrieved Mac 07, 2023, from VOSviewer: https://www.vosviewer.com/documentation/Manual_VOSviewer_1.6.19.pdf
- Li, Z., Lu, J., Wang, G., Feng, L., Broo, D. G., & Kiritsis, D. (2021, September). A bibliometric analysis on model-based systems engineering. In *2021 IEEE International Symposium on Systems Engineering (ISSE)* (pp. 1-8). IEEE.
- Hudha, M. N., Hamidah, I., Permanasari, A., Abdullah, A. G., Rachman, I., & Matsumoto, T. (2020). Low Carbon Education: A Review and Bibliometric Analysis. *European Journal of Educational Research*, 9(1), 319-329.