

ASEAN Financial Literacy Journey: A Bibliometric Analysis

Khoong Tai Wai¹, Wee Chu Kok², Chong Kok Fei³,
Kumara Adji Kusuma⁴ and Lin Kok Leong⁵

¹ Faculty of Accountancy, Finance and Business (FAFB), Tunku Abdul Rahman University of Management and Technology (TARUMT), Kuala Lumpur, Malaysia

² Faculty of Human Ecology, Universiti Putra Malaysia (UPM), Malaysia

³ Faculty of Business, Law, and Social Sciences, Universitas Muhammadiyah Sidoarjo, Indonesia

⁴ Axen Alpha Advisory Sdn. Bhd., Petaling Jaya, Selangor, Malaysia

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Abstract

Enhancing financial literacy is crucial for empowering individuals by equipping them with the knowledge and skills needed to enhance their financial well-being. Proficiency in making prudent financial choices is crucial for daily existence, allowing to meet both immediate and long-term financial requirements. The objective of this study is to compare bibliometric analysis Scopus bibliographic data indexed articles of 'financial literacy' term, for ASEAN countries. This study analysis utilized VOSviewer software to examine the distribution of bibliometric maps. The data filtering process is conducted for "financial literacy" terms contained in the title, keyword, and abstract areas. The papers published from 1989 to 2023 were selected to illustrate the development of financial literacy, and a total of 810 articles attained. Within the thirty decades, the articles showed an increasing trend, which accelerated after 2015. The top five keywords by highest occurrences involved financial literacy, financial behaviour, financial, human, and Indonesia. The dataset of 166 items further categorised into five clusters. The ASEAN countries supported SDG2030 financial inclusion initiative, which is associated with fintech, digital financial literacy, financial services, banking, financial banking, and financial planning terms. The integration of financial literacy within ASEAN countries showed variability patterns. Malaysia illustrated the most diverse study, while Indonesia focused on inclusion, SME, and digitalisation. Singapore, Thailand, Philippines, Cambodia, and Vietnam focus on human aspects. Future study can focus on the integration with adoption of technology. This study serves as a valuable resource for further exploration of financial literacy within ASEAN countries.

Keywords: Financial behaviour, financial literacy, financial inclusion, fintech, health literacy

Introduction

As economy advances, more opportunities occur to pursue individual life objectives and attain financial monetary independence. The financial choices encounter in daily lives empower individual to achieve, whether selecting where to invest savings, preparing for retirement or other financial obligations (Rasiah et al., 2020; Khoong, 2024). The financial decisions make currently can

have permanent consequences for overall welfare. Being in possession of the confidence ability to handle one's financial affairs is essential for achieving and maintaining a quality standard of lifestyle (Ren & Lim, 2023; Riitsalu et al., 2023). Individuals who possess financial literacy are able to make well-informed financial choices at every stage of their lives, resulting in long-lasting developments to their quality of life (Miečinskienė et al., 2023). Households with sufficient financial resources engage interactions

Corresponding author : ¹ khoongtw@tarc.edu.my

with financial institutions, thereby enhancing their financial resilience.

Financial literacy is particularly crucial in an era where a diverse array of sophisticated financial instruments is readily accessible to a broad range of individual (Jali et al., 2023). As an instance, due to the efforts of governments in numerous countries to enhance the availability of financial services, there has been a significant increase in the number of individuals who possess bank accounts and have access to credit products. Furthermore, developments in the pension system shift the burden of decision-making to participants who previously depended on their employers or governments for their post-retirement financial stability (Khoong, 2016; Xu et al., 2022). Lack of financial knowledge incurs significant costs. Consumers without comprehension of interest compounding tend to utilise more on transaction costs, accumulate larger debts, and face higher interest rates loans (Aristei & Gallo, 2021; Khoong, 2024). Subsequently, they tend to accumulate higher levels of debt while reducing their savings. Besides, the potential advantages of financial literacy are possessing robust financial skills with superior proficiency in planning and accumulating funds for future retirement. Investors who are knowledgeable about finance are more likely to mitigate risk by allocating their investment among multiple funds.

In ASEAN countries, numerous studies have been profoundly impacted by financial literacy. Some of the areas have been influenced by financial literacy such as financial management, risk management, taxation, investment, estate and retirement (Rasiah et al., 2020; Murugiah et al., 2023; Khoong, 2024). During the 1980s, it marked by economic fluctuations including recession and recovery, in which financial literacy found cater to high- and medium-level income groups. However, with the occurrence pandemic COVID-19 crisis, the shift of focus group to lower income group is more significant. Besides, the United Nations Sustainable Development Goals 2030 (SDG2030) inclusion concept has seen a significant influence on the financial literacy initiatives, in which to involve underserved and unserved group segments. Thus, it is interesting and important to understand the

development of the concept. Nevertheless, previous researcher's inquiry regarding the utilisation of bibliometric analysis in the field of financial literacy research is limited, with a specific emphasis on journals that have been published and indexed by the Scopus Scholar database. The utilisation of the VOSviewer software instrument to conduct mapping analysis with the purpose of determining the quantity and current state of a specified term (Idris et al., 2023). Hence, the objective of this study was to evaluate a bibliometric study on financial literacy that had been indexed by Scopus Scholar by employing bibliometric mapping analysis. It is expected that this study will assist researchers when deciding on and discerning financial literacy related research themes or topics. The primary objective of this study is to examine financial literacy research through the implementation of mapping visualisation tools in the form of a bibliometric analysis. This study provides researchers an understand on the previous and current research developments in the field of financial literacy, particular in the post pandemic period. In addition, the study establishes connections between the study of financial literacy and various related academic fields, and suggestion for future study.

Literature Review

Researchers are now engaged in continuing discussions regarding the concept and definition of financial literacy. The terms financial literacy, financial education, and financial knowledge are frequently used interchangeably in the previous study (Arrondel, 2021; Baker et al., 2023; Khoong, 2024, Khoong & Ooi, 2024). From human capital view point, financial literacy is utilised in financial activities to enhance an individual's financial welfare. Financial literacy also refers to the fundamental skills and information that individuals require to survive and succeed in the modern world. In addition, financial literacy incorporates the capacity to safeguard personal funds, the ability to make informed judgements regarding expenses (Baker et al., 2023; Pearson & Korankye, 2023), comprehension of the implications of personal decisions on present and future income, and orientation awareness of the labour market. Financial literacy refers to the assessment of an

individual's comprehension and practical application of personal financial skills and information (Arrondel, 2021; Khoong & Ooi, 2024). Financial literacy as the capacity of individuals to comprehend economic information and make well-informed decisions on financial planning, asset accumulation, debt management, and retirement funds (Lin et al., 2023; Riitsalu et al., 2023). Thus, it identifies related to budgeting, saving, borrowing, and investing as the four primary practical criteria of financial literacy. Furthermore, some researchers define financially literate individuals as those who effectively handle debt and make financial choices that align with their personal beliefs.

Even there does not exist a universally accepted definition of financial literacy, however previous studies discussion focus incorporates an understanding of financial literacy, while others assert that individuals must possess the ability to make well-informed financial decisions in order to be considered financially literate (Jali et al., 2023; Xu et al., 2022). Financial literacy, as defined, pertains to an individual's ability to effectively handle and manage money. Financial literacy is not a common convenience or information possessed by everyone, but rather an essential skill for individual survival in today's modern world (Murugiah et al., 2023). Knowledge is a prominent and prevalent element in various conceptual conceptions of financial literacy, refer broadly to the knowledge, skills, confidence, and drive required for good money management. Besides, numerous financial literacy studies have been conducted during covid-19 pandemic. While the majority research focus on the monetary, the covid-19 duration study focusses on the deeper health aspects particularly in mental. During covid-19, the financial literacy application had been related mental health (Fui et al., 2022; Noor & Isa, 2023; Kerschbaumer et al., 2023).

VOSViewer is a specialised software programme designed to create and display bibliometric maps (Garg et al., 2023; Mansour et al., 2023). VOSViewer includes a text-mining function that allows for the creation and visualisation of connections between article citations. The incorporation of browsing

functionality, search capabilities, and mapping systems facilitates the visual depiction of published maps (Bukar et al., 2023). Consequently, it has been able to provide a more comprehensive description of the articles. VOSviewer has the essential capabilities for displaying information as bibliometric network maps (Vlase & Landesmaki, 2023). VOSViewer is a commonly used tool that is applied to evaluate the originality of research efforts. The clear examination and understanding of connections between studies are depicted in bibliometric maps. VOSViewer is capable of doing a wide range of bibliometric analysis due to its support for multiple credible bibliographic databases and its main function of performing text processing operations. VOSviewer can be used to accomplish mapping jobs by implementing model and cluster layout techniques. In addition, it allows for the mapping and display of data using various density and overlay visualisations (Abdul Ghaffar et al., 2023). VOSviewer enables the extraction analysis, a technique used to compress enormous datasets by examining bibliometric data associated with a particular study (Idris et al., 2023; Moral-Monaz, 2020). Bibliometrics offers a comprehensive examination of the theoretical structure and emerging trends within a particular academic discipline or topic domain. The utilisation of bibliometric analysis proves to be an advantageous tool for examining extensive datasets. Bibliometric analysis utilises a combination of quantitative and qualitative methodologies to evaluate and analyse scholarly publications.

Methodology

This study utilized the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) procedure, in which involves the identification, screening, eligibility, and included stages (Moher et al., 2009). The data collected from the Scopus Scholar database due to the reasons that Scopus is the significance target of researchers opting for quality publications and gaining worldwide recognition. Besides, the Scopus is an Elsevier database and global level citation, which is considered the most extensively researched indexed abstract and citation database. All Scopus journals databases are high quality audited annually based on the four types of quality

measurements, consisting of CiteScore, h-index, SJR (SCImago Journal Rank), and SNIP (Source Normalised Impact per Paper). The data was obtained through an inclusive literature review pertaining to the theme by using a reference management application known as RefWorks. All articles indexed by Scopus Scholar and fulfilled the criteria for article type and relevance to the research themes of this study were kept in a file for VOSviewe utilization.

In this study, the scholars selectively chose articles exclusively focusing on financial literacy. The process of data retrieval included the researchers employing the title, keyword, and abstract criteria to search for information pertaining to the field of financial literacy. A total of 810 articles were acquired and subsequently evaluated based on the selected thematic criteria (Figure 1). The articles utilised in this research consisted of publications spanning the period from 1989 to 2023 and from 10 countries within the Association of Southeast Asian Nations (ASEAN) country. A duration of 35 years is sufficient to show the process trends in research yet allowing for the inclusion of academic disciplines that progress at a slower pace. It also reflects the COVID-19 pandemic research related to the financial literacy field. This timeframe also reveals the influence of COVID-19 and related policy changes on research output as how the COVID-19 has influenced research directions and volume quantity

The Final Query For The Dataset Was Title-Abs-Key (Financial And Literacy) And Pubyear > 1988 And Pubyear < 2024 And (Limit-To (Affilcountry , "Brunei Darussalam") Or Limit-To (Affilcountry , "Cambodia") Or Limit-To (Affilcountry , "Indonesia") Or Limit-To (Affilcountry , "Laos") Or Limit-To (Affilcountry , "Malaysia") Or Limit-To (Affilcountry , "Myanmar") Or Limit-To (Affilcountry , "Philippines") Or Limit-To (Affilcountry , "Singapore") Or Limit-To (Affilcountry , "Thailand") Or Limit-To (Affilcountry , "Viet Nam")) And (Limit-To (Language , "English")).

All retrieved articles were stored in the *.csv file format. The researchers then employed the VOSviewer software to visually represent and

Figure 1

Flowchart of the methodology adopted in this study

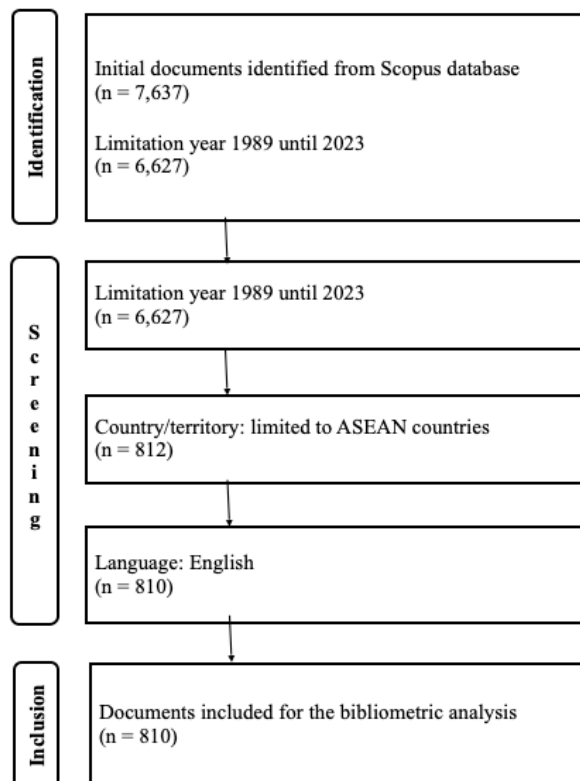


Figure 2

Number of Documents by Year

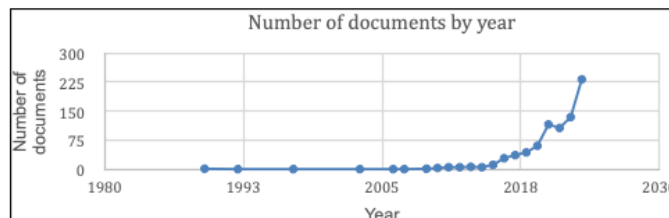
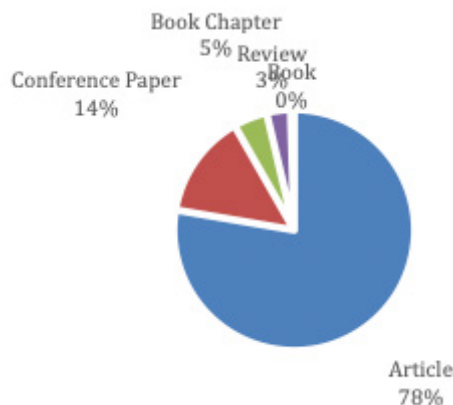


Figure 3

Types of Documents



examine patterns in the form of bibliometric maps. The data mapping process began by extracting articles from database sources that had been appropriately curated. The data mapping includes three distinct types, including of network mapping, density mapping, and visualisation overlay. VOSviewer is a software application designed to create and display bibliometric networks. These networks may involve article journals, researchers, or personal articles, which are often constructed based on citations, bibliographic data, or co-authorship. VOSviewer is highly suitable for analysing huge amount of scientific literature research and for visually representing patterns and trends of the data (Eck & Waltman, 2010; Tomaszewski, 2023). This analysis is primarily done through the utilisation of co-citation and keyword-based approaches, whereby they are subsequently visualised on a network that illustrates the relationships between various terms. VOSviewer employs a multi-step process to visualise bibliometric networks, which usually includes data collection, data import input and preparation, network creation development, and visualisation (Donthu et al., 2021). To create the bibliometric map, the keyword frequency determines a minimum frequency of five occurrences from the prepared database, with 169 keyword items obtained. Additionally, the researchers employed a filtering process to determine the terms that would be incorporated into the VOSviewer network mapping visualisation.

Results and Discussion

The finding showed the number of researches on financial literacy establish an increasing trend (Figure 1). During the year 1989 until 2023, the number of documents can be divided into three stages. The initial stage occurred between 1989 until 2014, with less than 10 documents per year published. The second stage occurred between 2015 until 2019, in which less than 100 documents per year were published. The three stages, from 2020 until 2023, accelerate documents published with more than 100 documents per year. More than two-third of the documents related to articles (Figure 2), followed by conference paper (14%), book chapter (5%), review (3%), book (less than 1%). Majority

of the top five funding sponsor institutions were from Malaysia (Table 1). Table 2 showed the top five authors by documents, leading by Sabri, M. F. (24 documents).

Table 1

Top Five Funding Sponsor

Funding Sponsor	Number of documents
Ministry of Higher Education, Malaysia	20
Universiti Teknologi MARA	9
Universiti Putra Malaysia	7
Ministry of Education	6
National University of Singapore, Thailand Research Fund,	6
Universitas Indonesia, Universiti Kebangsaan Malaysia,	
Universiti Malaya	

Table 2

Top Five Author by Documents

Author Name	Number of documents
Sabri, M.F.	24
Mahdzan, N.S.	12
Loke, Y.J.	9
Mitchell, O.S., Widyastuti, U.	8
Anwar, M., Dewi, V.I., Koh, N.K.	7

Visualization Financial Literacy Field using VOSviewer

Based on the setting five keywords of minimum number of occurrences, there are a total of 169 items pertaining to financial literacy (Figure 4). The top five keywords by occurrences involved of financial literacy with 411 occurrences (889 total link strength), finance with 69 occurrences (289 total link strength), financial behaviour with 67 occurrences (187 total link strength), human with 61 occurrences (689 total link strength), and Indonesia with 59 occurrences (212 total link strength). The dataset of 169 items, further have been categorised into five distinct clusters, based on the colour for visualization. Each cluster is characterised by a primary term, consisting of financial literacy, human, financial behaviour, literacy, and motivation (Table 3 and Table 4).

Figure 4
Network Visualisation of Financial Literacy Keywords

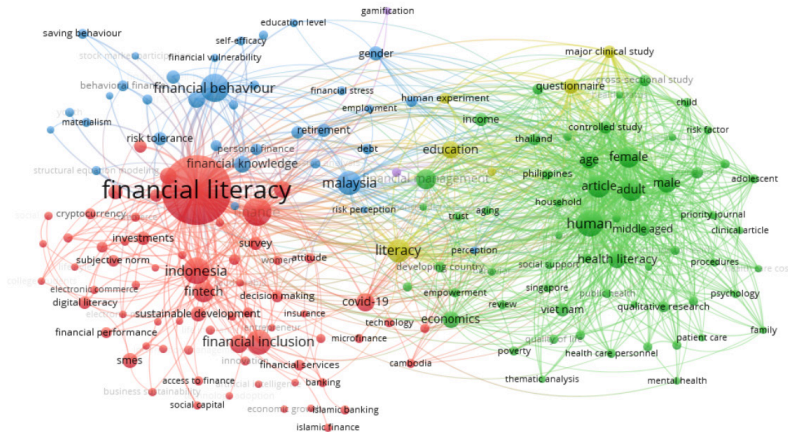


Table 3

Cluster Financial Literacy Terms Group

Cluster	Terms	Total items	Colour	Links	Total links strength	Occurrences
1	Financial Literacy	67	Red	139	889	411
2	Human	60	Green	102	689	61
3	Financial Behaviour	34	Dark blue	64	187	67
4	Literacy	6	Yellow	108	352	48
5	Motivation	2	Purple	43	59	8

Table 4

Cluster Group Associated Terms

Cluster	Terms	Within cluster associated terms	Non-within cluster associated terms
1	Financial Literacy	Commerce, business performance, fintech, investments, digital financial literacy, financial inclusion, sustainable development, cryptocurrency, etc	Financial attitude, financial behaviour, financial well-being, gamification, motivation, financial management, income, empowerment, etc
2	Human	Healthy literacy, rural area, social support, public health, risk factors, health status, awareness, etc	Financial behaviour, attitude, decision making, gender, finance, covid-19, etc
3	Financial Behaviour	Financial vulnerability, self-efficacy, financial attitude, financial knowledge, risk tolerance, financial stress, debt, etc	Fintech, digital financial literacy, theory of planned behaviour (TPB), human, etc
4	Literacy	Human experiment, major clinical study, education, questionnaire, and social media	Empowerment, public health, sustainable development, banking, government, retirement, debt
5	Motivation	Gamification	Empowerment, female, adult, educational status, finance, etc

Most of the term occurred between year 2018 until 2021, in which the latest terms consisting of covid-19, digital literacy, fintech, cryptocurrency, social influence, economics and social effects, behavioural intention, electronic money, locus of control, and among others (Figure 5). Meanwhile, the terms financial literacy, financial inclusion, Indonesia, and human have the highest density during the study period (Figure 6).

Figure 5
Overlay Visualisation of Financial Literacy Keywords

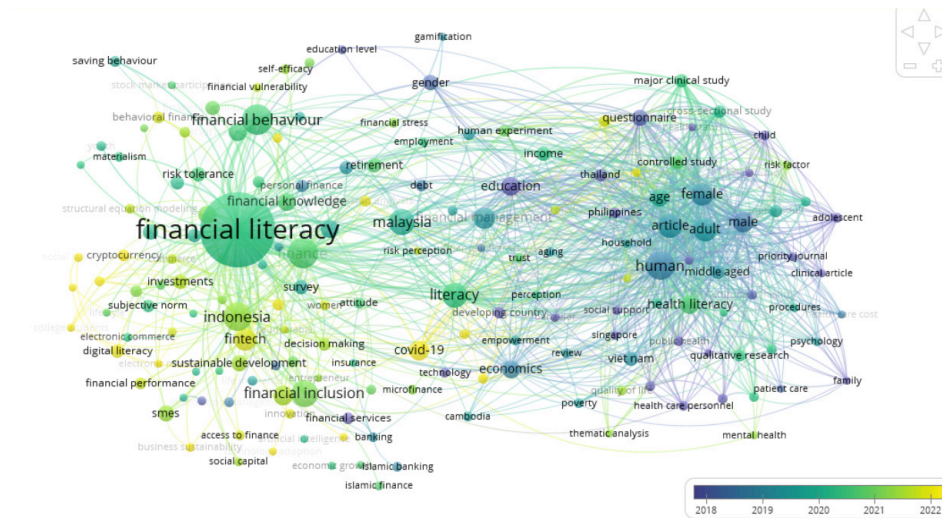
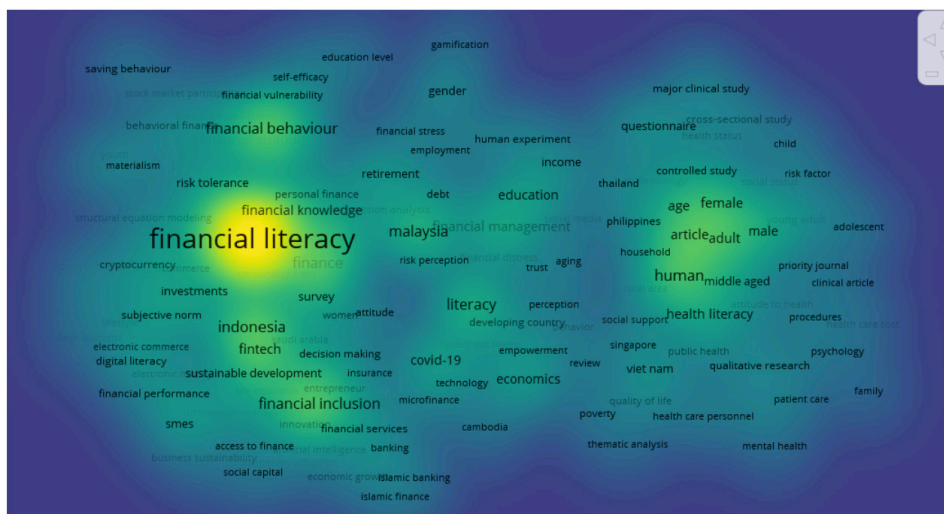


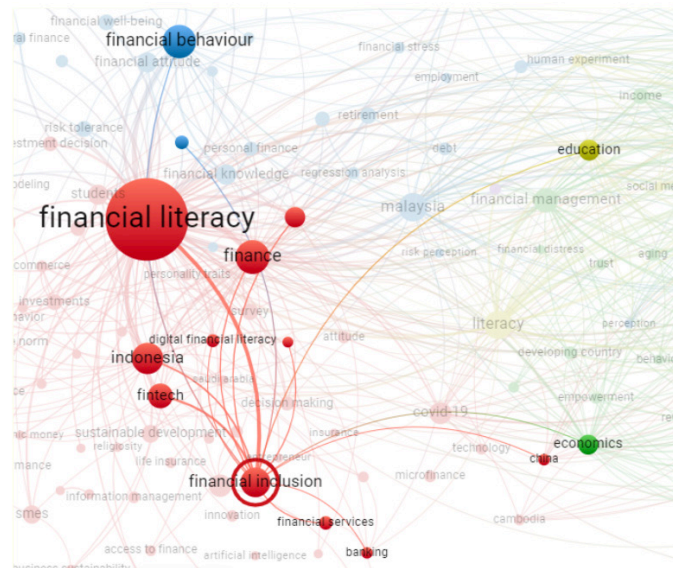
Figure 6
Density Visualisation of Financial Literacy Keywords



ASEAN and Financial Inclusion

Within the ASEAN region, promoting financial inclusion and literacy is paramount, particularly among women, through innovative fintech solutions and comprehensive financial education programs (Figure 7). Through the utilisation of fintech innovations and the improvement of digital financial literacy, ASEAN nations have the potential to narrow the gap in access to financial services and enable women to actively participate in customised

financial planning that caters to their specific requirements. The financial inclusion programmes implemented in ASEAN countries have the objective of broadening the reach of banking and financial services, with a particular focus on populations that have limited access, such as women. Fintech advancements are essential in this undertaking, providing handy and easily available digital solutions that tackle obstacles to conventional banking, such as geographical limitations and documentation prerequisites.

Figure 7**Financial Inclusion and Related Terms**

By implementing focused financial education initiatives, women are provided with the requisite knowledge and competencies essential for proficient financial planning. This include comprehending principles such as budgeting, saving, investing, and debt management, enabling women to make well-informed choices regarding their finances and attain their long-term objectives. Financial education initiatives rely on digital financial literacy to empower women in confidently utilising digital banking platforms and fintech services. ASEAN countries empower women to utilise technology for financial management and improve their financial capacities and inclusion in the digital economy by offering training and resources on digital financial instruments.

ASEAN countries enhance the effectiveness of their efforts to promote financial inclusion and literacy among women by combining fintech solutions with financial education activities, resulting in synergistic outcomes. Mobile banking applications, online financial education classes, and digital budgeting tools provide convenient avenues for women to augment their financial literacy and expertise, enabling them to assert control over their financial prospects. To summarise, ASEAN countries

can unleash the economic potential of women and promote inclusive growth throughout the region by giving priority to financial inclusion, literacy, and fintech innovation. By providing extensive financial education and empowering women digitally, they are provided with the necessary resources to effectively traverse the financial environment, strategize for their future, and make valuable contributions to prosperous economies within the ASEAN region.

Financial Literacy by ASEAN Countries

The finding showed variably concentre patterns of financial literacy studies among ASEAN countries. However, it demonstrated key focus areas (Table 5). Malaysia illustrated the most diverse study consist of behaviour attitude, employment, fintech, empowerment, poverty, healthy literacy, human aspects, and among others. In Indonesia, the discussion centre in inclusion, small and medium-sized companies (SME), digitalisation, behaviour attitude, human aspects, and among others. Singapore, Thailand, Philippines, Cambodia, and Vietnam focus in human aspects. In addition, Thailand also included adolescent, while Vietnam consisted of family, and Philippines as well as Cambodia related to health element.

Table 5

Financial Literacy by ASEAN Countries

Countries	Links/Total Link Strength/ Occurrences/ Cluster	Within cluster associated terms	Non-within cluster associated terms
Malaysia	99/251/49/3	Financial behaviour, financial attitude, investment, employment, debt, knowledge,	Fintech, banking, empowerment, poverty, financial management, education, major clinical study, awareness, healthy, literacy, etc
Indonesia	88/212/59/1	Financial inclusion, SME, business sustainability, social capital, digital literacy, electronic money, cryptocurrency, etc	Risk tolerance, financial behaviour, financial attitude, financial management, trust, economics, etc
Vietnam	55/97/15/2	Health literacy, family, adult, age, controlled study, cross-sectional study, financial management, economics, etc	Financial behaviour, financial literacy
Philippines	52/78/9/2	Developing country, behaviour, health literacy, attitude health, cross-sectional study, adults, human, etc	Education, literacy
Thailand	48/76/12/2	Health literacy, economics, adult, child, adolescent, etc	Education, financial literacy, finance
Cambodia	33/42/71	Financial literacy	Questionnaire, human, adults, female, male, middle aged, attitude health, surveys and questionnaires
Singapore	32/54/6/2	Cross sectional study, controlled study, age, human, adult, female, etc	-

Malaysia

The interconnection between financial literacy, financial behaviour, and attitudes in Malaysia significantly effects individual economic choices such as investments, employment decisions, debt handling, and financial welfare. Financial literacy initiatives are important in equipping individuals with the knowledge and skills needed to manage complex financial environments. By understanding of financial concepts and instruments, such as investments and debt management approaches, these to provide public with the confidence and competence to make financial decisions. Nonetheless, the influence of financial literacy goes beyond the simple acquisition of knowledge, but covering individuals' financial behaviours and attitudes. By adopting positive financial attitudes, through education and awareness campaigns, its support

cautious investment practices and responsible debt management, subsequent reducing financial risks and achieve long-term economic stability.

In the employment context, acquiring financial literacy enables individuals to make well-informed decisions relating to career advancement, salary, and retirement planning. Besides, by comprehend the association between income levels, job stability, and financial objectives empowers individual to synchronise their career ambitions with financial objectives, enhanced financial security and resilience. Furthermore, the ability to manage debt is a critical for credit management. By educating effective debt management techniques and promoting responsible borrowing habits, financial literacy aims to decrease the debt burden and avoid financial distress among households. Investment decisions are crucial for wealth accumulation, in

which shaped by both their financial knowledge and attitudes. The investment decisions, such as equities, real estate, or retirement funds, are influenced by their financial literacy, risk tolerance, and long-term financial goals.

Indonesia

Indonesia nation acknowledges that promoting financial inclusion and ensuring the growth and sustainability of SME relies heavily on the advancement of financial literacy. The diversified economy and an increasing digital trend, addressing gaps in between financial literacy and digital literacy is essential for encouraging equitable economic growth and empowering entrepreneurs. Financial inclusion programmes aim to enhance access to financial services and resources for niche group, particularly SME. These efforts aim to strengthen the durability and long-term viability of enterprises by enhancing their financial literacy such as budgeting, investment, and debt management areas.

Moreover, in acknowledging the significance of social capital in stimulating economic progress, initiatives directed at fostering financial literacy frequently utilise community networks and peer-to-peer learning platforms. By tapping into social capital aspect, financial education initiatives can reach a wider target audience and build collective empowerment among SME, and contributing to the resilience of local economies. Simultaneously, it is critical to improve digital literacy in an economy that is fast transitioning to digital platforms. This is particularly significant in the electronic money and emerging technologies such as cryptocurrency are transforming within financial sector. By integrating digital literacy elements into financial literacy curricula, hence enable SME equipped with the necessary skills and knowledge to effectively utilise digital platforms for financial transactions, acquire loans, and mitigate risks associated with electronic money and cryptocurrencies.

Nevertheless, the promotion of financial literacy and digital inclusion requires collective collaboration

various stakeholders, such as government agencies, financial institutions, and civil society organisations. Collaborative activities directing at generating tailored training tools, organising seminars, and leveraging digital platforms for outreach can support bridge the gap in financial and digital literacy abilities among SME. Additionally, developing knowledge about the opportunities and risks related with electronic money and cryptocurrencies is vital for good financial management. Besides, policymakers may assist informed decision-making and decrease threats to business sustainability by providing SME with detailed information and direction on navigating digital financial ecosystems.

Vietnam

The relationship between financial literacy and health literacy in Vietnam has significant consequences for families and individuals of all age groups, impacting economic decision-making, health outcomes, and well-being. The studies using controlled and cross-sectional method, enable researchers investigate the association between financial literacy, health literacy, and different socio-economic factors. These studies provide valuable insights into effective methods for promoting financial management and improving health outcomes throughout individual life. The initiatives enable to equip households with the important knowledge and skills to effectively manage monetary finances and make better decision-making. Besides, these initiatives provide adults with the necessary knowledge and skills to effectively manage their finances and prepare for future economic uncertainties by improving financial concepts such as budgeting, saving, investing, and debt management. By conducting controlled studies, researchers may evaluate the influence of financial literacy interventions on financial behaviours and outcomes, hence offering significant insights into successful ways for fostering financial resilience and economic well-being in households.

In addition, health literacy enables to shape health behaviours, through the use of healthcare services, and health outcomes throughout an individual's

life. In Vietnam, health literacy programmes aim to enhance individual capacity to get, understand, and utilise health information to make educated choices regarding health and welfare. It enhances health literacy among adults and families, enabling them to embrace healthy habits, access suitable medical treatment, and proficiently handle chronic ailments. This effort eventually improves general health outcomes and reduces healthcare inequities. The effect of age on financial and health literacy is essential due to individual experience different challenges and possibilities across various life phases. By conducting cross-sectional studies, researchers may analyse the variations in financial and health literacy levels among different age groups and uncover specific factors that impact financial decision-making and health behaviours within each age group. Therefore, gaining insight into these processes is important for customising interventions and programmes to address the varied requirements of individuals and families at various life phases.

Furthermore, by acknowledging the association between financial management and health outcomes, it has the potential to create strategies that cater to the overall well-being of individuals and households. Besides, it improves financial literacy and health literacy initiatives enable fostering synergies between them. This method encourages a comprehensive programmes development that empower individuals to make well-informed decisions. Therefore, this will result in improved economic stability, health outcomes, and quality of life. Integrating financial literacy with health literacy activities in the nation is important for enhancing economic empowerment, health outcomes, and cultivating resilience among individuals and household across all age groups.

Philippines

In Philippines, gaining insight into the association between health literacy and behaviour among individuals is crucial, in which foster favourable attitudes towards health and well-being. By conducting cross-sectional studies that focus on distinct demographic groups, researchers investigate the relationship between health literacy, attitudes,

and behaviours among citizens. Hence, this uncover the factors that influence health outcomes. Health literacy refers to the capacity of individuals to understand, and utilise health information to make informed regarding their overall health and wellness choices. Besides, higher levels of health literacy are regularly associated with positive health attitudes and behaviours, due to ability to navigate healthcare systems and engage preventive actions. Through cross-sectional studies, researchers can measure the frequency of health literacy issues among adults and discovery divergences across different socio-economic groups. Gaining insight into these divergences is important for formulating focused interventions that cater to the distinct requirements of vulnerable groups, eventually fostering fair and equal availability of healthcare services and enhancing health outcomes on a national scale.

Moreover, investigating the association between health literacy and attitudes towards health behaviours such as physical activity, nutrition, and preventive healthcare, provides valuable understandings into the central features that effect health-related decision-making among individuals. Through the analysis of these connections, governments and healthcare practitioners can develop interferences that encourage favourable health behaviours and to assume control over their own health. Additionally, it is vital to prioritise the human element of health literacy and behaviour while applying interferences to ensure relevance and effectiveness. Researchers can customise interferences in accordance with public values and preferences, by considering the numerous cultural, social, and economic factors that influence health attitudes and behaviours. This method enhances the acceptability and effectiveness of the interferences.

Besides, integrating findings from cross-sectional studies into public health policies and programmes can lead to significant improvements in health literacy and behavioural. Through the implementation of health education initiatives, it fosters public participation, and enhancing healthcare systems. Hence, stakeholders enable individuals to make well-informed regarding health choices, subsequent

improve a well-being and quality of life. In summary, the cross-sectional studies on health literacy and behaviour provides valuable insights into the intricate relationship between attitudes, behaviours, and health outcomes. By utilising these observations to guide specific interventions and policy choices, stakeholders can promote fairness in health and enable better lifestyles.

Thailand

The convergence of financial literacy and health literacy in Thailand significantly influences the economic growth and general health outcomes of individuals at different life phases. The objective is to provide essential knowledge and skills to make well-informed financial decisions, investments, and economic prospects. These efforts improve individual financial literacy by educating them with skills such as budgeting, saving, and debt management. This promotes financial resilience and economic empowerment, ultimately leading to national economic stability and prosperity.

Health literacy is crucial for ensuring favourable health outcomes and minimising healthcare inequalities throughout individual's life. Health literacy efforts provide individuals with the capacity to successfully acquire, understand, and utilise health information, and empowering to make health and well-being choices. Health literacy enables to understand preventive healthcare practices and effectively navigate healthcare systems, allowing to assume responsibility for their health and access suitable medical treatment when needed. In Thailand, the efforts to increase financial and health literacy reached the children and adolescents group, hence recognising the need of early intervention. The nation objective is to provide youngster with critical life skills that will be beneficial to in the future by including financial education and health literacy into school curricula and public programmes. By providing children and adolescents group with education on financial concepts such as budgeting and saving, cultivates responsible financial behaviours at a young age, forming a path towards future financial autonomy and achievement. Similarly, cultivating health literacy within children and adolescents establishes a basis

for adopting healthy habits and making informed choices, which can positively impact overall physical and mental wellness throughout their lives.

Additionally, it is important to consider the relationship between financial and health literacy to tackle socio-economic inequalities and enhance overall well-being. The nation may improve overall quality of life and foster equitable economic development by acknowledging the association between financial and health outcomes and implementing integrated policies that capitalise on its synergies. Integrating financial literacy with health literacy activities is critical for improving economic empowerment, enhancing health outcomes, and cultivating resilience throughout individual's life. The country can foster a wealthy and healthy society for future generations by providing resident of all ages with the necessary knowledge and skills to make well-informed choices.

Cambodia

The financial literacy in Cambodia is increasingly acknowledged as an important element in the socioeconomic development aspect. Based on the findings, prior studies carry out surveys and questionnaires that focus on a wide range of demographic groups, including both males and females from different age groups, such as middle-aged adults. This is essential to gain a comprehensive understanding of attitudes towards financial health, and to identify specific areas where involvement may be required. The country has made tremendous progress in improving financial literacy initiatives by acknowledging the significant effect of these programmes may have on the financial well-being within households. However, it is vital to evaluate the effectiveness of these programmes by conducting systematic surveys and questionnaires that accurately reflect the particulars financial attitudes behaviours across numerous demographic groups.

Conducting questionnaires customised for certain demographic groups such as middle-aged adults, might produce deep understandings on individual different financial difficulties and objectives. For example, by understanding financial attitudes and

habits of each demographic cohort enable to devise focused programmes that address individual needs, whether it be retirement, investing, or debt planning. Moreover, the existence of gender gaps in financial literacy and attitudes towards monetary emphasises the consequence of conducting surveys that involve the perspective from both males and females. Studies finding suggested that females commonly have unique financial difficulties and may possess divergent feelings in regards to financial decision-making. To enhance the comprehensiveness and effectiveness of interferences, policymakers and institutions can involve gender-sensitive studies into surveys and questionnaires. This method enables to gain a more comprehensive findings of financial attitudes and behaviours among different genders.

During creation and implementation of financial literacy surveys and questionnaires, it is important to guarantee that the cultural are appropriate and easily understandable by all the population groups. By employing appropriate local languages and community leader's involvement, the significance and acceptance of these research instruments can be improved, subsequent more accurate data gathering and well-informed policy development. The ultimate outcome of financial literacy programmes depends on the capacity to accurately evaluate and address the diverse requirements and inclinations of population. By conducting comprehensive surveys and questionnaires that involve the viewpoints of adults, encompassing both genders and all age clusters, policymakers may develop policies that foster financial empowerment and enhance resident welfare.

Singapore

The cross-sectional and controlled study in Singapore allows for an inclusive examination of health-related characteristics such as gender, age, and across adult populations. These studies provide useful understandings into the dynamics development of public health and facilitate of evidence-based involvements that are customised to meet the needs of diverse demographic groups. The cross-sectional studies enable researchers to analyse health-related trends and inequalities among numerous age groups

and genders. Through the examination of elements such as health-related actions, diseases occurrences, and the healthcare resources availability, these investigations assist in identifying aspects of concern and guiding specific public health activities. On contrast, the controlled studies allow researchers to examine cause-and-effect links between certain interferences on health outcomes among individuals. Researchers evaluate the effectiveness of interferences and develop alternatives to improve health outcomes by comparing results among groups to varying settings, while considering variables such as age and gender. The individual age plays an important role in determining health results, whereby older groups frequently encounter different health difficulties and necessities. By conducting cross-sectional and controlled studies, researchers able to examine the differences in chronic disease occurrence, functional status, and healthcare utilisation among diverse age groups. This study can provide useful insights for policies and programmes development that encourage healthy ageing aspect, and address health inequalities related with ageing. Besides, gender has an important role in determining individual's health, which affecting how individuals feel health issues, healthcare access, and health-seeking behaviours engagement. The research methods also allow investigate differences in health outcomes and behaviours between genders. This finding enables the development of interferences that are sensitive to gender differences, which catering to the unique needs and concerns of gender. Therefore, these interventions promote fairness access to healthcare services, and improve health outcomes for all.

In addition, the country also acknowledges the human element is crucial in guaranteeing the relatedness and practicality of discoveries for adults. Through active involvement between communities and stakeholders during the research process, researchers may guarantee that study designs and interventions are culturally harmony and adaptable to the requirements and inclinations of adults and age groups. By integrating results from cross-sectional and controlled studies into public health policies and programmes, policymakers can efficiently allocate resources and effectively tackle health dissimilarities. Therefore, by considering elements such as age,

gender, and human-centred approaches able to enhance the health and well-being in the nation.

Conclusion and Recommendations

The objective of this study is to conduct a bibliometric analysis on the bibliographic data of financial literacy research articles in the Scopus journal. This analysis will involve the utilisation of VOSviewer software to examine the distribution of bibliometric maps. The data obtained is the result of filtering based on the keyword " financial literacy " for ASEAN countries. The bibliographic data used in this study concerns the topic areas, titles, keywords, and abstracts. The study obtained 810 relevant documents, published in the range of 1989 to 2023. The findings indicate that research in the field of financial literacy has exhibited an increasing pattern throughout the study period. The top five keywords by highest occurrences involved financial literacy, financial behaviour, financial, human, and Indonesia. The dataset of 166 items further categorised into five clusters.

The integration of financial literacy within ASEAN countries showed variability patterns. Malaysia illustrated the most diverse study consisting of behaviour, attitude, employment, fintech, empowerment, poverty, healthy literacy, human aspects, and among others. In Indonesia, the focus was financial inclusion, SME, digitalisation, behaviour attitude, human aspects, and among others. Meanwhile, Singapore, Thailand, Philippines, Cambodia, and Vietnam countries focus on human aspects. Particularly, Thailand concentrates on adolescents, Vietnam concentrates on family, and the Philippines as well as Cambodia related to health. Hence, further study should concentrate on how to embed financial literacy within the keywords as highlighted. For example, the study on mechanism to embedded financial literacy through SME among the Indonesian. In addition, study of financial literacy adoption within Thailand youngster groups, Vietnam on family members, and Philippines or Cambodia on social health.

This study serves as a significant resource and a subject for reflection for researchers who are

interested in exploring deeper into research topics, particularly in the field related to financial literacy within the ASEAN region, for future inquiries. It is important to acknowledge that this bibliometric study is restricted to scholarly publications exclusively in academic journals within the Scopus database. In order to expand the possibilities for future academic studies, it is recommended to conduct comprehensive assessments of research data pertaining to the financial literacy aspect. This should entail a comprehensive scrutiny of multiple databases, including the Scopus database such as the Web of Science (WoS), Dimensions, and Lens databases. By broadening the range of data sources, researchers can attain a more comprehensive comprehension of the financial literacy areas.

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