

FINANCIAL LITERACY ON RETIREMENT PLANNING AMONG WORKING SINGLE WOMEN IN PRIVATE SECTOR, SELANGOR

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Abstract

The aim of this paper is to comprehend the behavior of financial literacy on retirement planning among working single women in the private sector in Shah Alam Selangor, Malaysia by using snowball sampling as a purposeful method of data collection in qualitative research. The research is based on a qualitative study in which data was collected from 3 single women working in the private sector in Shah Alam, Selangor, Malaysia using the OECD framework. The data for this study was acquired through in-depth interviews, and the data was interpreted by thematic analysis. The preliminary results of this study indicated that financial literacy education along with demographic factors, financial attitude and financial behavior factors play a crucial role in retirement planning. Preliminary data was collected from 3 single women working in two private sectors in Shah Alam, Selangor, Malaysia, aged 35 to 40, about their perceptions of financial literacy in relation to their financial retirement planning. As this study is still gathering data, it may not reflect the complete population of single working women in Malaysia. This research should help the government, policymakers, private sector, and related financial agencies come up with a viable solution to assist Malaysians, particularly women, in planning and preparing for their retirement future, as well as encourage Malaysians to start saving early so that they can be prepared in their later years. To alleviate poverty among Malaysia's older women once they retire, policymakers must build a social security system in collaboration with other connected authorities or the private sector. To improve retirement financial planning, governments and policymakers must focus on appropriate education components in financial planning beginning at a young age as a form of retirement planning. The findings of this study take a step forward from previous research on working women's financial literacy in terms of retirement planning. To the best of the author's knowledge, this is the first attempt in Malaysia to undertake a research on single women working in the private sector, a topic that has received little attention in the literature.

Keywords: financial literacy, working single women, the private sector, retirement planning

1. INTRODUCTION

Financial retirement planning continues to be a source of concern around the world. Since 2001, this topic has acquired significance in the United States, Australia, the United Kingdom, and all industrialized countries. Malaysia, on the

other hand, is only now realizing the need of retirement savings. Like other nations, Malaysia is experiencing a demographic change, with United Nations projecting Malaysia to become a greying nation by 2030. With the current trend of innovations and transformations in global technology and industry, consumers tend to face complicated decisions in managing their financial health through the accessibility of a wider

variety and complexity of financial tools and products. The expansion in social media and new marketing methods has stemmed from the availability of advanced and attractive financing alternatives, persuading families to take on a significantly more significant amount of obligation never-before-experienced by preceding generations. Countries worldwide, both developed and emerging, have developed initiatives to strengthen the financial literacy of their customers and the potential to prevent crises triggered by debt and asset bubbles. Besides, the faster-paced increment of the aging population renders it crucial for one's sustainability of financial wealth to cover their expenses for a more extended period after retirement (Courbe & Lyons, 2016).

There has been increasing interest among policymakers to concentrate on financial capability as many individuals find themselves in critical financial environments, particularly during an economic weakening. It can also reflect one's understanding of financial matters and their capacity to deal with and assume their finances' responsibilities. Commonly, low-income individuals are exclusively associated with low economic power; financially disadvantaged groups have lower earnings in most cases. In comparison, those with higher incomes benefit from higher living standards; however, the higher-income individual cannot control their wealth and financial capacity inherently. Financial capability is thus the capability to make choices on appropriate financial decisions, manage the right level of credit and debt, and be aware of suitable and dependable products and services (Mason & Wilson, 2000).

Several factors concerning retirement planning are (1) attitudes and discipline, (2) awareness of financial literacy education, and (3) demographic and socio-economic factors that are discussed further in this paper. There is a necessity to raise financial literacy awareness to enhance their retirement planning to ensure that Malaysian seniors manage retirement effectively. The government intends to promote public knowledge of financial preparation with the new Malaysia National Financial Literacy Strategy 2019-2023, with public retirees are best equipped to achieve financial security. The financial security training is in keeping with Professor Koh's research, which found that the more financially educated a community is, the more likely its citizens are to save for a comfortable retirement (The Business Times, 2020). Consequently, when one's elderly are ill-prepared for retirement, communities with low financial literacy will suffer.

Low financial literacy emphasizes the importance of having a comprehensive retirement plan in place to ensure that retirees have sufficient retirement resources once they reach retirement age. A complete examination of one's existing and prospective financial situation is required for financial planning. Financial planning is a multifaceted task in and of itself. Cash flow management, savings, investments, tax preparation, real estate management, insurance planning, and retirement planning are all part of it. Furthermore, financial matters are regarded as a man's domain. Men are primarily responsible for money management and frequently deal with financial planning, particularly retirement

planning.

Women, on the other hand, are not immune to the same issues when it comes to retirement financial planning. Women make up nearly half of the population in Malaysia, however they only account for 46% of the labour force. This statistic seems to be amongst the lowest in Asian countries as compared to Singapore (60%), Thailand (52%), and Indonesia (52%). In 1995, the workforce's proportion slashed from 2.8 to 2.6 percent in 1996. Women also make up 43.4 percent of the hands in the manufacturing industry (Ahmad, 1998). Malaysia has achieved tremendous success in the previous six years in expanding the number of women in the workforce and in decision-making roles in the business sector, as many government initiatives aimed at enhancing women's contribution to the economy and promoting broader participation. According to statistics, 54 percent of Malaysian women work and earn their own money, and according to UOB Malaysia data, women are increasingly utilizing their Mastercard to pay for basics like insurance, groceries, and utilities, as well as travel, lifestyle, and shopping (Khan, 2017).

While women's economic status has improved over time, women in the labour market are still in lower-paying jobs, and women own only 15% of Malaysian businesses. Working women and women's incomes have increased dramatically as a result of this increase in education. Furthermore, financial education has an important role in improving financial behavior and so fostering better financial health. Women's decision-making for investment purposes is becoming more important as their position in economic activities expands, and women are inherently better savers than males. Despite the fact that savings are linked to financial well-being, the level of savings among Malaysian working women leaves a lot to be desired. Previous research has shown that women have a lower rate of involvement in retirement plans than males and are more likely to live in poverty during retirement, owing to their reliance on their spouse to prepare for their savings, as well as a lower level of wealth and much lower incomes. Women, particularly single women, are now more accountable for their financial savings after retirement. Because single women have no one to rely on for financial support, they must plan ahead for their retirement. As a result, it is critical for single women to have adequate financial literacy education in order to properly plan their retirement.

Although it is heartening to see that women are now on par with men in all sectors, when it comes to financial decisions, they are still reliant on their male family members. In India, for example, where poverty and unemployment are big issues, financial literacy among women is critical to fueling the growth engine by offering chances for women to contribute to economic growth (Arora, A. 2016). Lusardi & Mitchell (2008) found that a lack of financial literacy had a greater impact on women than on males, which appears to be the case today. Research suggests that women tend to be more apprehensive about their future but are more uneducated about securing it and usually face more monetary challenges than men while making financial decisions (Anthes & Most, 2000). Furthermore, women have special requirements when it comes to their financial attitudes, since they have distinct learning preferences when it comes to investing options and different views when it comes to money (Hira & Loibl, 2007).

In order to address the research gap, this study discussed the factors that triggered the financial literacy on retirement planning, the financial literacy behavior and the strategies that impact working single women on their financial

literacy for retirement planning.

2. LITERATURE REVIEW

2.1 Financial Literacy

Financial literacy is the combination of financial, credit, and debt management abilities, as well as the ability to make sound financial decisions. Financial literacy is not only a problem in developing economies; people in developed and advanced economies also struggle to demonstrate a good understanding of financial concepts in order to understand and negotiate financial matters, effectively manage financial risks, and avoid financial difficulties. (Xu L & Zia B, 2012). Financial literacy refers to a set of skills that includes financial knowledge, education, attitudes, and actions. These four elements are essential for making informed financial decisions and resolving financial challenges (Adriana BVA & Valenzuela JR, 2017). In terms of gender, women are more likely than men to indicate a lack of financial literacy (Lusardi Annamaria & Olivia S. Mitchell, 2007). A study by Sabri & Juen (2014) shows that the economic well-being condition among women in Malaysia is not at a high level and had resulted in the inability to provide adequate funds in meeting their living needs consistently.

Malaysia's financial literacy rate, according to RAM Credit Information Sdn. Bhd. (RAMCI), is still below average when compared to other countries. Malaysia was ranked 26th out of 30 countries for financial literacy in the 2016 Organization for Economic Cooperation and Development Report, according to the Credit Counselling and Debt Management Agency (AKPK). The 2018 Malaysian Financial Literacy Survey, conducted by RinggitPlus in 2018, found that 59 percent of Malaysians do not have enough savings to last more than three months, and that 34% admit to spending equal to or more than their monthly salary. It demonstrates that Malaysians are mismanaging their resources, leaving them vulnerable to financial shocks. As mentioned earlier, financial literacy education is one of the contributing factors for successful retirement planning. Women are no longer limited to domestic duties; they now work in almost every aspect of society. However, discrimination still exists. To ease this situation, women are increasingly attempting to overcome different negative stereotypes regarding the feminine gender.

Women are gaining momentum in the work sector and are becoming more involved in household financial management, and often becoming head of household. It demonstrates that women's financial management has become more important. Because of their financial duties, knowing these women's profiles and financial literacy levels becomes quite important. As a result, financial literacy education is required to assist women in making financial decisions during the global monetary crisis (Fernandes, Lynch & Netemeyer, 2014) and ensure a promising economic future, especially towards preparation for retirement planning (Mottola, 2013). Financial literacy is a set of skills and information that women need to protect their finances and engage effectively in financial products and services. Women who are financially literate are knowledgeable about money and prices and can effectively manage their finances. Finances are an important aspect of everyday life, and financial literacy is the most effective strategy to protect women from becoming overly indebted when it comes to making financial decisions.

2.2 Financial attitude

The ability to understand numbers and having an emotional attitude toward numbers that does not interfere with an individual's everyday engagement in activities involving mathematics and financial decisions is a driving force behind becoming financially literate. Thus, by focusing on numeracy as an educational intervention, we can, not only improve numeracy in the general population, which is a desirable goal in and of itself, but we can also improve financial literacy in society (K. Skagerlund et al., 2018).

The most important element impacting retirement planning behavior is people's financial views regarding retirement, and they tend to plan well for their retirement (Hassan et al., 2016; Moorthy et al., 2012). Employees who were more active in their retirement planning had more positive attitudes toward retirement, according to Mutran, Reitzes, and Fernandez (1997). When it comes to retirement planning, individuals may believe they have some power over designing a happy retirement experience. Significantly, persons with good attitudes toward retirement were more likely to save enough for retirement and were more likely to relax (Moorthy et al., 2012). Financial attitude is a critical component that influences one's financial well-being. Financial literacy generates a financial attitude, and a positive financial attitude leads to financial well-being. Financial literacy can be defined as one's capacity to manage one's finances, including the discipline of saving behavior toward retirement planning in order to retire gracefully.

2.3 Financial Behavior

In order to measure the financial literacy level of women, several researchers have surveyed financial planning behavior, investment behavior, bill payment activity, saving behavior, credit card conduct, and budget behavior. Human behavior that is relevant to financial decision-making and money management, such as creating and controlling an adequate budget program, timely bill payment, and regular saving nature, is called economic behavior (Bhushan & Medury, 2014; Kalekye & Memba, 2015). Financial conduct is crucial and a fundamental component of financial literacy, according to the OECD (2013). Individuals' financial literacy is increased, according to Atkinson and Messy (2012), when they engage in positive economic behavior such as proper budgeting and financial stability. Negative economic behavior, on the other hand, such as relying heavily on credit and loans, is a sign of weakness of their financial well-being. Individuals with a lower level of financial risk tolerance have difficulties making financial decisions, and they are dissatisfied with their financial management ability, according to Sages and Grable (2009).

From a psychological standpoint, the purpose of economic behavior is to comprehend and forecast the systematic implications of the financial market. According to several academics, financial conduct has an impact on financial contentment (Joo & Grable 2004, Coskuner 2016). Meanwhile, Banerjee, Kumar, and Philip (2017) found that the favorable influence of financial literacy on financial awareness improves financial inclusion behavior. The way a woman treats, drives, and uses her financial resources is referred to as financial conduct. Women who practice responsible economic conduct are more adept at managing and controlling their spending, investing, and repaying and consuming loans or fees on time.

2.4 Socio-demographic

Age, level of education, marital status, position held in an organization, socialization factors, income group, family back-ground, race and ethnicity, assets and products are the determinant factors towards working single women preparation on retirement planning. As for age, the older a person is, the more active his involvement in financial planning is in comparison to the younger generation. At an older age, women often indulge activity in planning for retirement. Prentis (1980) also discovered, through a study, that women, on average, look forward to retiring when they are between the ages of 40 and 49, as opposed to any other age group.

Financial literacy is influenced by one's level of education, which has a favorable impact on one's behavior, attitude, and retirement planning. Women's educational attainment will make it easier for them to acquire and assimilate financial knowledge and apply it to their daily planning and life style. Only through education can one accept new experiences and adjustments. Because there is a positive relationship between financial literacy and education level, a greater level of education will affect financial literacy and credit-taking behavior (Agnew & Harrison, 2015). Margaretha and Sari (2015) concurred, indicating that education level is important in predicting financial literacy. As for marital status, single women can manage their finances as single women can determine and have complete control over their expenses compared to married women. Despite the fact that Agarwalla et al. (2012) believe that women are better at managing and making financial decisions than males, married women have distinct household duties and must make decisions alongside their husbands (Brown and Graf, 2013).

Position held in an organization, socialization factors, and income group also positively impact financial literacy. During working, knowledge and experience make women more efficient in managing and making personal financial decisions towards saving and preparation towards retirement planning. Scheresberg's (2013) finding concurs that financial literacy increases when income increases.

2.5 Retirement Planning

For more than 40 years, scholarly research has focused on retirement and retirement-related topics. Retirement, according to Tibbits (1954), is a "relatively new phenomenon," with changes in family life, jobs, and society's position. Although retirement issues mostly affect men, their importance to women is becoming more widely recognized (Weaver, 1994). Retirement planning becomes a crucial concern as life expectancy has increased and the rise of health care costs. A scenario in which an individual is compelled or allowed to depart the work market is referred to as retirement. It is strongly linked to an individual's life cycle, with the move to retirement requiring early planning, particularly in terms of finances.

In Malaysia, there are two types of retirement plans: (1) a defined benefit (DB) plan, which is known as a government pension system for civil officials; and

(2) a defined contribution (DC) plan, which is known as Employees Provident Fund (EPF) for private-sector employees. Employees working in the private sector have to contribute to the EPF account some percentage of their monthly salary. Usually, the percentage contributed is according to the minimum rate set by the government of 11 percent (for employee) and 12 percent (for the employer), respectively. When employees reach the age of 55, they can take a lump-sum or partial withdrawal from their EPF account.

According to the Minimum Retirement Age Act 2021, a person who enters the Malaysian employment at the age of 25 will work for a maximum of 35 years before reaching the required retirement age of 60 years. As a result, during the usual 30-35 years of employment, a person must save for retirement, especially for women who are predicted to live for another 22.1 years after reaching the statutory retirement age. It is an incontrovertible truth that private-sector women retirees will rely on withdrawals from their EPF and other retirement resources to guarantee their post-retirement lives. However, when people express concerns about insufficient retirement resources to pay rising living costs and expensive health care services in old age, incorrect retirement planning is frequently brought to the fore. Despite all of the governmental and commercial pension systems available to protect the post-retirement time, research reveal that many do not save enough for retirement (Le Grand & Robinson, 2017). It demonstrates that retirement planning necessitates determining the appropriate time and amount to save, the appropriate time to leave the workforce, and the appropriate time to begin spending the resources after leaving the labour force (Topa, Moriano, and Moreno 2012).

3. RESEARCH METHOD

In examining the financial literacy levels towards retirement planning, this study uses a qualitative research method because of the findings from the qualitative research method on the real-life experiences of people with knowledge of a phenomenon (Bhat, 2020). Qualitative research is concerned with data in the form of words, such as interview notes, focus group transcripts, open-ended responses, video transcriptions, data gathered from online sources, articles, and books, and so on. Through the qualitative method, researchers can obtain primary data or secondary data. Therefore, this research method can assist the researcher to derive and achieve the purpose of this study, whereby to understand the financial literacy knowledge of working single towards their preparation for retirement planning.

As for data collection, in-depth interviews are a means of communication and interaction between the researcher and the informants to understand financial literacy and their perspective towards retirement planning. In addition, an in-depth interview can explore the participant's perspectives on a particular topic, knowledge, or situation (Steber, 2017). Because in-depth interviews are an open-ended or discovery-oriented method to obtain detailed information from informants regarding the research topic, it is easier to gather more information on financial literacy, financial attitude, and behaviour of women, as retirement planning is life-cycle planning for the duration when a person is out of the workforce. (Showkat & Parveen, 2018).

4. RESULTS AND DISCUSSION

The author evaluates financial literacy using the OECD framework, which consists of three primary critical elements: (i) financial knowledge and abilities; (ii) behavior; and (iii) attitude, based on the literature study. It is necessary to study the various opportunities and odds faced by a woman to understand single women's financial literacy towards retirement planning. There were three preliminary main themes derived from the preliminary data gathering of such analysis with sub themes; age and education level, financial products analysis and financial wellbeing.

4.1 Age and Education level

The informants in this study came from different ages and backgrounds. All 3 informant are single and age between 37 to 42 years, respectively and came from various background. However, their view of financial literacy concurred with each other. Furthermore, their education level indicated their knowledge of financial literacy and retirement planning. Several studies conducted in developed countries proved that women in 40 to 49 years look forward to retirement. However, as more educated women are entering the work force and their networking are wider each day, their knowledge on retirement planning and experience dealing in financial planning elaborated on the importance to start preparing for retirement at an early age.

4.2 Financial Products

Financial product analysis can help someone improve their financial literacy. Financial literacy is influenced by marital status and income, according to several research. Married women are more motivated to try to accumulate wealth, such as through investments, pension funds, and long-term goals. However, this study proves that working single women are more attracted and motivated towards investment. Besides having regular savings, they contributed to investment as they want to be free from debts once they retired.

Women with higher income and higher levels in the occupation can understand and be interested in financial markets such as unit trust, bonds, and stocks. Besides that, socialization agents such as family, peers, and social networks contributed to their financial literacy knowledge. Several studies have proved that family influenced one's understanding of financial literacy, especially when exposed to save money at an early age. These factors contribute to the basic knowledge on financial literacy and attitude towards savings for rainy days and planning for retirement.

Informant 1 when asked about investment for retirement planning informed, *"Investment in Public Mutual & CIMB Wealth Management"*. Informant 2 added, *"Public Mutual & ASB"*. As for Informant 3, she planned her investment for retirement planning by investing in Public Mutual and PRUBSN. She informed,

"Currently I have an investment in Public Mutual and PruBSN".

All 3 informants mentioned that they realized the importance of financial retirement planning during their early 30s and started to set aside their savings for retirement fund. Informant 3 informed:

"If I rely on current financial, for sure not enough if there is no fixed savings commitment".

As for Informant 1, she informed:

“Yes, because before my retirement period start, my plan is to be free from debts”.

4.3 Financial wellbeing

In response to interview questions on financial wellbeing on the preparation for retirement planning, all informant elaborated that their current financial wellbeing will help them to be prepared for their retirement. Informant 1 claimed:

“Yes. This is because we are aware about the needs of saving but we are lack of education in order to take the necessary action”.

Meanwhile Informant 2 informed:

“Yes. I need to be ready to take charge and start thinking more proactively about my finances and my future by creating cash flow and debt management plans”.

As for Informant 3, she claimed:

“Yes, because we have preparation on how much to spend, and how much to save. All our expenditures have an effect on our financial for example buy a house, and car. Therefore, financial security must be strong in order to better future”.

This shows that the financial literacy of women has a noteworthy influence on financial wellbeing on their retirement planning. It implies that financial wellbeing is a state of been financially healthy, happy and free from worry upon reaching retirement age.

This study has preliminarily identified the factors contributing to financial literacy and how they may impact working single women in financial planning for retirement. Despite many variables that may predict financial well-being, this study has explored the influences of financial literacy and financial attitude among working single women in Malaysia based on their perceptions of retirement planning. These elements are deemed essential for working single women who want to retire financially secure. Women who work in the private sector in many countries, including Malaysia, must begin saving early in order to acquire sufficient wealth by the time they reach retirement age. Women working in the private sector should start saving early because they do not receive a regular pension after retirement but have to depend solely on their EPF savings.

Previous research has shown that women are less likely than males to participate in retirement plans and are more likely to live in poverty during retirement, owing to their reliance on their spouse to prepare for their savings, as well as a lower level of wealth and much lower incomes. Women, particularly single women, are now more accountable for their financial savings after retirement. Because single women have no one to rely on for financial support, they must plan ahead for their retirement. As a result, it is critical for single women to have adequate financial literacy education in order to properly plan their retirement.

It is important to consider that adequate financial literacy education should start at an early age. Female students should be exposed and must be introduced to financial product and services at an early age. The more they understand about financial product and services, the better their financial literacy will be. The second indicator to be considered in terms of financial understanding is financial education. Time value of money, inflation, interest, risk classification, the risk and return principle is the basic knowledge of financial literacy. Furthermore, knowledge of savings and investment, as well as money management, is essential to affect how well women understand financial literacy.

A lack of financial literacy is linked to a lack of financial awareness, according to several research. As a result, various countries around the world place a focus on how to enhance their financial literacy by teaching financial literacy in schools. Different financial knowledge, on the other hand, is linked to financial conduct and attitude. Therefore, in Malaysia, government agencies like EPF and PERKESO conducted awareness programs to attract more people to learn about financial literacy, especially on savings. Financial literacy can link to one's behavior. Women's financial behaviors can be measured by managing virtual money, such as saving patterns and their expenses besides investment behavior. Financial attitude and retirement planning are the principal applied financial things. Without sufficient financial literacy and understanding at a young age, the appearance of numerous unanticipated problems would make it more difficult to face old age as time goes on. As a result, one of the characteristics that determine financial literacy is knowledge. Aside from that, financial socialization aids in the improvement of financial literacy.

The findings of this study will benefit the government and the policymaker to come up with a viable solution to help Malaysians, especially women, prepare and plan well for their retirement future besides attracting Malaysians to start saving early to enable them to be prepared during their older days. Therefore, it is the right time for the policymaker to develop a social security system and other related agencies or private sectors to overcome poverty among the women elderly in Malaysia once they retire.

5. CONCLUSION

In conclusion, this study looked into the financial literacy of single working women in Malaysia, as well as their impact on financial retirement planning. In this study, interview protocols were used to gather preliminary data from three single women from Shah Alam, aged 37 to 42, on their views on financial literacy, attitude, and behavior related to their financial retirement planning. Informants prioritized financial planning for their future retirement and planned for a graceful retirement, according to the findings. This demonstrates the importance of maintaining financial capabilities, as people cannot rely entirely on their EPF funds. Given that women can live to be 77 years old, it is more important than ever to raise knowledge about financial planning among the younger generation, particularly women, as saving and investing for retirement cannot be done overnight. It necessitates long-term planning and commitment. As a result, spreading financial planning for retirement knowledge to the younger generation is helpful because they can begin saving at a younger age and, if they effectively create the habit of saving from a young age, they will be able to prepare for retirement well.

Women in the private sector should diversify and acquire various sources

of income, including as unit trusts, insurance plans, gold, equities, bonds, and so on, rather than depending entirely on their EPF assets to help them prepare for retirement. As a result, policymakers should communicate the findings of this study to the working population, encouraging them to improve their financial literacy, particularly in controlling their monthly expenses. The main focus of the National Financial Literacy Plan 2019-2023 should be on raising awareness about the impact of financial literacy education on retirement planning for all working people, regardless of their socioeconomic status. By implication, policymakers should consider the findings of this study in order to prepare for the world's rapidly growing grey population, particularly in Malaysia, as many of them will need to be aware of their financial situation and receive relevant financial literacy education in order to plan for their retirement. In addition, the emergence of the gig economy has altered the working scene in Malaysia. The present pandemic crisis has created a worrisome situation since many people are unprepared to deal with such a drastic shift in the economy. As a result, policymakers and other relevant authorities should give the required training and exposure on the necessity of financial literacy in successfully and efficiently managing spending. In comparing the findings with the current study, future research should be undertaken with working single women in the public sector aged 45 and under as a sample. Comparing the data will be difficult since working single women in the public sector and working single women in the private sector, both aged 45, may have differing views on financial literacy and its impact on financial retirement planning.

REFERENCES

- Adam, A. M., Boadu, M. O., & Frimpong, S. (2018). Does gender disparity in financial literacy still persist after retirement? Evidence from Ghana. *International Journal of Social Economics*, 45(1), 18–28. <https://doi.org/10.1108/IJSE-06-2016-0159>
- Adriana BVA, Valenzuela JR. Financial literacy: Gaps found between mexican public and private, middle, and high-school student; 2017.
- Agarwal, S., Driscoll, J. C., Gabaix, X., & Laibson, D. (2009). The age of reason: Financial decisions over the life cycle and implications for regulation. *Brookings Papers on Economic Activity*, 2009(2), 51-117.
- Ana, A. S., & Wan Ahmad, W. M. (2020). Financial literacy among Malaysian Muslim undergraduates. *Journal of Islamic Accounting and Business Research*, 11(8), 1515–1529. <https://doi.org/10.1108/JIABR-10-2017-0149>
- Antara, P. M., Musa, R., & Hassan, F. (2016). Bridging Islamic financial literacy and halal literacy: the way forward in halal ecosystem. *Procedia Economics and Finance*, 37, 196-202.
- Anthes, W. L., & Most, B. W. (2000). Frozen in the headlights: The dynamics of women and money. *Journal of Financial Planning*, 13(9), 130.
- Arora, A. (2016). Assessment of financial literacy among working Indian women. *Business Analyst*, 36(2), 219-237.

- Atkinson, A., & Messy, F. A. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study.
- Banerjee, A., Kumar, K., & Philip, D. (2017). Financial literacy, awareness and inclusion. *ISI Working Paper*, <https://www.isid.ac.in/~epu/acegd2017/papers/KamleshKumar.pdf>.
- Bhushan, P., & Medury, Y. (2014). An empirical analysis of inter linkages between financial attitudes, financial behaviour and financial knowledge of salaried individuals. *Biernacki_Lect4.Pdf*. (1981).
- Blue, L. E., & Grootenboer, P. (2019). A praxis approach to financial literacy education. *Journal of Curriculum Studies*, 51(5), 755–770. <https://doi.org/10.1080/00220272.2019.1650115>
- Brown, M., & Graf, R. (2013). Financial literacy and retirement planning in Switzerland. *Numeracy*, 6(2), 2-23.
- Change, C., On, I., By, I., Baltic, D., & Region, S. E. A. (2018). *JOURNAL OF SECURITY AND SUSTAINABILITY ISSUES ISSN 2029-7017 print / ISSN 2029-7025 online 2018 June Volume 7 Number 4*. 6(2015), 627–636.
- Courbe, J., & Lyons, J. (2016). Financial services technology 2020 and beyond: embracing disruption. In *PWC* (Vol. 48).
- de Bassa Scheresberg, C. (2013). Financial literacy and financial behavior among young adults: Evidence and implications. *Numeracy*, 6(2), 5.
- Dewanty, N., & Isbanah, Y. (2018). Determinant of The Financial Literacy: Case Study on Career Woman in Indonesia. *Etikonomi*, 17(2), 285–296. <https://doi.org/10.15408/etk.v17i2.6681>
- Fernandes, D., Lynch Jr, J. G., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8), 1861-1883.
- Ha, N. T. T., & Hoa, L. B. (2020). The relationship between population ageing and private savings in Vietnam. *Malaysian Journal of Consumer and Family Economics*, 24(October), 1–32.
- Haron, H., Nadiah Salihah Mat Razali, N., & Mohamad, F. (2019). Factors Influencing Financial Planning Retirement amongst Employees in The Private Sector in East Coast Malaysia: Literature Review and Research Agenda. *KnE Social Sciences*, 2019, 1115–1129. <https://doi.org/10.18502/kss.v3i22.5115>
- Hasler, A., & Lusardi, A. (2017). The Gender Gap in Financial Literacy: A Global Perspective. *Global Financial Literacy Excellence Centre*, 91(5), 287.
- Heok, K. E., & Psychiatrist, S. C. (n.d.). *Towards Ageing Well: Planning a Future- Ready Singapore TOWARDS AGEING WELL*
- Huston, S. J. (2010). Measuring Financial Literacy. *Journal of Consumer Affairs*, 44(2), 296–316. <https://doi.org/10.1111/j.1745->

- Janor, H., Yakob, R., Hashim, N. A., Aniza, C., & Wel, C. (2016). Financial literacy and investment decision in Malaysia and UK - Comparative Study. *Malaysian Journal of Society and Space*, 2(2), 106–118.
- Kadoya, Y., & Khan, M. (2017). Explaining financial literacy in Japan: New evidence using financial knowledge, behavior, and attitude. *Behavior, and Attitude* (November 8, 2017).
- Kalekye, P., & Memba, F. (2015). The role of financial literacy on the profitability of women owned enterprises in Kitui town, Kitui County, Kenya. *International Journal of Science and Research*, 4(6), 2360-2365.
- Kimiyaghalam, F., & Yap, S. (2017). Level of Financial Literacy in Malaysia.
- Le Grand, J., & Robinson, R. (2017). *The economics of social problems*. Macmillan.
- Loibl, C., & Hira, T. K. (2007). New Insights into Advising Female Clients on Investment Decisions. *Journal of Financial Planning*, 20(3).
- Lusardi, A., & Mitchell, O. S. (2007). Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth. *Journal of monetary Economics*, 54(1), 205-224.
- Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare?. *American economic review*, 98(2), 413-17.
- Mahdzan, N. S., Mohd-Any, A. A., & Chan, M. K. (2017). The influence of financial literacy, risk aversion and expectations on retirement planning and portfolio allocation in Malaysia. *Gadjah Mada International Journal of Business*, 19(3), 267–289. <https://doi.org/10.22146/gamaijb.24441>
- Mahdzan, N. S., Zainudin, R., Sukor, M. E. A., Zainir, F., & Wan Ahmad, W. M. (2019). Determinants of Subjective Financial Well-Being Across Three Different Household Income Groups in Malaysia. *Social Indicators Research*, 146(3), 699–726. <https://doi.org/10.1007/s11205-019-02138-4>
- Margaretha, F., & Sari, S. M. (2015). Faktor Penentu Tingkat Literasi Keuangan Para Pengguna Kartu Kredit di Indonesia. *Journal of Accounting and Investment*, 16(2), 132-144.
- Mason, C. L. J., & Wilson, R. M. S. (2000). Conceptualising financial literacy. *Occasional paper*, 7.
- Md, A. S., & Ahmad, W. M. W. (2020). Financial literacy among Malaysian Muslim undergraduates. *Journal of Islamic Accounting and Business Research*.
- Mohd Syukri, M. N., Norazmi, A., Shahril Nizam, Z., Amran, A. H., Ahmad Sanusi, A., Syed Najihuddin, S. H. (2018). The 5th World Conference on Islamic Thought & Civilization. In *The 5th WCIT2018 World*

Conference on Islamic Thought & Civilization SECURING THE
FUTURE Text.

- Mokhtar, N., Thinagaran, M. D., Sabri, M. F., & Ho, C. S. F. (2018). A Preliminary Evaluation of Financial Literacy in Malaysia. *Journal of Wealth Management & Financial Planning*, 5(6), 3–16.
- Mottola, G. R. (2013). In our best interest: Women, financial literacy, and credit card behavior. *Numeracy*, 6(2), 4.
- Mustapha, M. (2015). Financial Literacy and Demographic Factors. *Journal of Technology Management and Business*, 2(1), 0–0.
- Mutran, E. J., Reitzes, D. C., & Fernandez, M. E. (1997). Factors that influence attitudes toward retirement. *Research on aging*, 19(3), 251-273.
- Naderifar, M., Goli, H., & Ghaljaie, F. (2017). Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research. *Strides in Development of Medical Education*, 14(3).
<https://doi.org/10.5812/sdme.67670>
- National Population and Family Development Board Malaysia. (2017). Ageing Phenomenon: Malaysia Towards 2030. *PopInfo Malaysia*, 2. [http://familyrepository.lppkn.gov.my/708/1/POP INFO JUN-DEC2017_Final.pdf](http://familyrepository.lppkn.gov.my/708/1/POP_INFO_JUN-DEC2017_Final.pdf)
- Nga, K. H., & Yeoh, K. K. (2018). An exploratory model on retirement savings behaviour: A Malaysian study. *International Journal of Business and Society*, 19(3), 637–659.
- Osman, Z., Madzlan, E. M., & Ing, P. (2020). In Pursuit of Financial Well-being: The Effects of Financial Literacy, Financial Behaviour and Financial Stress on Employees in Labuan. *International Journal of Service Management and Sustainability*, 3(1), 55. <https://doi.org/10.24191/ijSMS.v3i1.8041>
- Prentis, R. S. (1980). White-collar working women's perception of retirement. *The Gerontologist*, 20(1), 90-95.
- Sabri*, M. F., Juen, T. T., Othman, M. A., & Rahim, H. A. (2015). Financial literacy, financial Management practices, and retirement confidence among Women working in government Agencies: A mediation model. *The Journal of Developing Areas*, 49(6), 405–412. <https://doi.org/10.1353/jda.2015.0092>
- Sabri, M. F., & Juen, T. T. (2014). The influence of financial literacy, saving behaviour, and financial management on retirement confidence among women working in the Malaysian public sector. *Asian Social Science*, 10(14), 40.
- Sabri, M. F., Mokhtar, N., Ho, C. S. F., Anthony, M., & Wijekoon, R. (2020). Effects of gender and income on Malaysian's financial capability. *Malaysian Journal of Consumer and Family Economics*, 24, 124–152.

- Sages, R. A., & Grable, J. E. (2010). Financial Numeracy, Net Worth, and Financial Management Skills: Client Characteristics That Differ Based on Financial Risk Tolerance. *Journal of financial service professionals*, 64(6).
- Selvadurai, V., Kenayathulla, H. B., & Siraj, S. (2018). Financial literacy education and retirement planning in Malaysia. *Malaysian Online Journal of Educational Management*, 6(2), 41–66. <https://doi.org/10.22452/mojem.vol6no2.3>
- Showkat, N., & Parveen, H. (2017). In-depth interview. *Quadrant-I (e-Text)*.
- Skagerlund, K., Lind, T., Strömbäck, C., Tinghög, G., & Västfjäll, D. (2018). Financial literacy and the role of numeracy—How individuals' attitude and affinity with numbers influence financial literacy. *Journal of behavioral and experimental economics*, 74, 18-25.
- Topa, G., Moriano, J. A., & Moreno, A. (2012). Psychosocial determinants of financial planning for retirement among immigrants in Europe. *Journal of Economic Psychology*, 33(3), 527-537.
- Wahab, N. N., & Yaacob, Z. (2018). Strategy For Financial Wellbeing Among Public Servants In Malaysia. *Journal of Techno Social*, 10(2), 50–59. <https://doi.org/10.30880/jts.2018.10.02.008>
- Xu, L., & Zia, B. (2012). Financial literacy around the world: an overview of the evidence with practical suggestions for the way forward. *World Bank Policy Research Working Paper*, (6107).