

Understanding Financial Socialisation of Malaysians (Part 1): A Literature Review



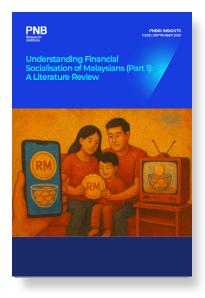
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Our engagement with this topic is both timely and aligned with PNB Group's mission to uplift the financial lives of Malaysians. We aspire for this paper, together with future studies, to generate meaningful insights that will strengthen strategies aimed at enhancing the financial well-being of all Malaysians.

The authors take whole and full responsibility for the contents and findings in this paper.

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Executive Summary

There have been multiple reports on the issue of low savings among Malaysians. Through the Financial Education Network (FEN), several government-related agencies and companies have collaborated to enhance Malaysians' savings and financial behaviour through financial education programmes. Literature findings, however, suggest that increasing financial literacy alone may not be sufficient to improve savings behaviour. While financial literacy is widely acknowledged to affect the savings behaviour, existing studies highlight the importance of considering additional influences, such as financial socialisation, in designing effective interventions.

Meanwhile, the literature on financial socialisation offers an alternative perspective on the factors that shape financial behaviour. Financial socialisation refers to the agents and processes such a s family, peers, education, and media that influence one's views and attitudes toward financial concepts. The currently predominant theory is the family financial socialisation theory, which emphasises the role of parents in instilling lasting financial values in their children. The literature also highlights that financial socialisation differs across communities and is influenced by sociodemographic factors such as gender, age, and ethnicity. Gaining deeper insights into these variations and their effects on saving behaviour can help policymakers design more targeted interventions tailored to specific socioeconomic and demographic groups.

Given the emerging nature of the financial socialisation field, several gaps have been identified. Firstly, there is yet a representative, nationwide study on financial socialisation in Malaysia. Secondly, notable financial socialisation frameworks are mainly based on studies conducted in developed countries that have a different cultural context from Malaysia. Thirdly, there is a scarcity of studies on how sociodemographic factors, particularly race, influence financial socialisation in Malaysia.

This paper, therefore, presents two broad questions that deserve attention.

- Firstly, how do financial socialisation agents influence savings behaviour among different sociodemographic groups in Malaysia?
- Secondly, how do sociodemographic factors influence savings behaviour across the different sociodemographic groups in Malaysia?

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As a preliminary exercise, PNBRI conducted a pilot survey to test the role of selected financial socialisation agents in Malaysia. Two interesting observations stood out. First, the responses varied considerably between different ethnic groups. Second, the role of religion as a financial socialisation agent, which has been underemphasised in the literature, was quite evident among the Bumiputera community.

It is worth noting that the current survey is not nationally representative, and its findings should be interpreted with caution. Nevertheless, the patterns observed point to the need for a more comprehensive investigation into the relationship between financial socialisation and saving behaviour in Malaysia. This is why we plan to conduct a nationwide study using a more statistically robust approach. Such an effort will support the development of culture-specific policy strategies aimed at improving saving behaviour and may also contribute to addressing wealth disparities among the country's different racial groups.

Objective

The objective of this paper is to conduct a literature review on the financial socialisation theory and find existing evidence of its effects on savings behaviour. This review will enable PNBRI to decisively identify meaningful knowledge gaps and develop research questions for an upcoming research project funded by Permodalan Nasional Berhad (PNB).

Since its inception in the late 1970s, PNB has been among the key national institutions at the forefront of the National Economic Policy (NEP) agenda, to mobilise the savings of the Bumiputera community. Since then, the organisation has evolved into becoming a household brand and global investor, with its latest purpose to uplift the financial lives of Malaysians across generations. As part of the FEN and the most recent GEAR-uP programme championed by the Ministry of Finance, PNB is also committed to educating and improving financial literacy among Malaysians, whilst educating the broader public on the importance of adequate savings.

The contribution of literature on the effects of financial literacy on various financial outcomes is abundant in Malaysia. While there have been good insights on issues of financial vulnerability, stress, and insecurity among Malaysians, most causal studies almost always:

- (i) adopt a theory of change based upon financial literacy interventions; or
- (ii) take it as granted that financial literacy is the leading root cause of those issues;

whereas "financial literacy" itself consists of three sub-components namely (i) awareness, (ii) knowledge and skills, and (iii) attitude and behaviour, as recommended by the OECD definition (Organisation for Economic Co-operation and Development, n.d.). While financial literacy is expected to contribute to one's awareness of knowledge and skills, one's attitude and behaviour can either reinforce or moderate the effects of literacy.

Today, significant nationwide initiatives such as the FEN have played an important role in driving the development of national-level interventions to improve financial behaviour. While these efforts are commendable and essential, there remains an opportunity to strengthen them through deeper root cause analysis and more robust impact evaluation. For instance, recent NFLS submissions have focused on themes such as financial vulnerability and digitalisation – important areas that could benefit from a broader understanding of underlying behavioural drivers beyond financial outcomes alone.

As will be discussed in the following sections of this review, there is also a small corner within the body of literature that focuses on savings behaviour as the outcome of interest which is the key driver of PNB's ambitions to be a systemically important component of Malaysians' financial lives.

Since the 2000s, a growing body of literature within the realms of sociology and human ecology has suggested that financial socialisation is a key root cause of financial well-being. However, financial socialisation remains a niche topic with highly contextualised evidence and limited scholarly involvement in the field. Financial socialisation has also never been tested or evaluated alongside other causes, such as income and degree of financial inclusion. ASNB and PNB aim to tackle one of these gaps by understanding the root cause first, with the hopes of later assessing the impact of financial literacy programmes.

Part 1: Introduction

Low savings rate and levels among Malaysians raise concerns regarding their savings behaviour. A survey by RinggitPlus found that 67% (2023: 71%) of Malaysians save less than RM500 per month, while only 39% (2023: 33%) of respondents said they can survive longer than three months if they lose their jobs. This low savings rate not only exposes most Malaysians to financial fragility but also compromises their ability to accumulate savings to support consumption after retirement. In Malaysia, public institutions lack comprehensive data on individual and household savings due to limited tax registration outside the formal sector and the unverifiable nature of household surveys. However, savings data for Malaysians participating in government-linked schemes, such as the Employees Provident Fund (EPF), PNB, and Tabung Haji, can serve as proxy alternatives.

As of FY2023, the average EPF savings of 50– 54-year-old Malaysians is only RM137,903 (Employees Provident Fund 2024b), significantly lower than the recommended minimum retirement savings level of RM390,000, which was only adjusted at the end of 2024 from RM240,000 previously in line with the introduction of its Retirement Income Adequacy (RIA) Framework (Employees Provident Fund 2024a). Prior to this revision, only 36% of active EPF members met the basic savings level according to their respective age groups as of October 2024. Low income is frequently cited as a significant factor for the lack of savings, with more than half (53%) of Malaysians spending exactly or more than what they earn (RinggitPlus 2024).

Although many factors affect the ability and willingness to save, poor savings behaviour among Malaysians has often been attributed to low financial literacy levels. For example, Lusardi and Mitchell examined the Health and Retirement Survey (HRS) data in the United States to note a positive association between financial literacy and economic decisions, including borrowing, savings, and investment decisions (Lusardi, 2008; Lusardi & Mitchell, 2014). Those with higher financial literacy were also found to be more likely to plan for retirement, accumulate wealth, invest in the stock market, and manage their debt (Loke, Chin, and Hamid 2022). Numerous studies in Malaysia have similarly shown a positive relationship between financial literacy and good financial behaviour (Jamal et al., 2016; Ismail et al., 2018; Mohd Isa and Ooi Kim, 2024). In response, FEN was established in 2019 to enhance the financial literacy and behaviour of Malaysians through financial education.

However, findings from some studies have noted the mixed impact of financial literacy on savings behaviour. Literature indicates that the association between the two is sometimes complex, particularly in non-developed countries (Goldberg, 2014). Two randomised controlled trials in Indonesia, for example, found little or no significant effect of financial education programmes on subjects' savings behaviour (Cole, Sampson, and Zia 2011; Carpena et al. 2011).

Aminuddin et al. (2022) in their study of Malaysian youth found that having financial knowledge alone doesn't always lead to saving money. It argues that even if students learn financial management at university, they might not use that knowledge in real life. This observation may be corroborated by a recent finding where an OECD survey showed that Malaysians' financial literacy has improved since 2016, while financial behaviour, which includes savings and debt management, remains a major policy concern. Recently, Bank Negara Malaysia has also begun to emphasise the importance of determining other factors apart from financial literacy that shape financial behaviour (Malay Mail 2024). These observations call for a deeper investigation into the determinants of savings behaviour apart from financial literacy.

Furthermore, many studies overlook the role of sociodemographic factors in shaping savings behaviour. Financial literacy frameworks largely depend on studies done in developed countries. Such studies may overlook the significant influence of cultural and social norms, especially in developing countries, including Malaysia. Several papers have noted that local contexts – mainly socioeconomic background, risk preference, financial attitude, and financial socialisation – may influence financial and savings behaviour. Some studies have also argued that Malaysians tend to develop financial knowledge and behaviour through social norms or financial socialisation agents such as family, peers or even religion (Fazli Sabri et al. 2021). Malaysians, for instance, display more filial piety, religious orientation and collectivist attitude unlike norms observed in Western societies (Fazli Sabri et al., 2012). These findings highlight the importance of developing policies that are sensitive to Malaysia's unique cultural and social context. By accounting for local norms and sociodemographic influences, policymakers can design more effective, targeted interventions that resonate with how Malaysians actually acquire and apply financial knowledge in their daily lives.

These factors guided us to investigate more deeply the connections between financial socialisation and savings behaviour in Malaysia. Much of adults' financial literacy and planning originates from the acquisition of financial capability in the earlier phases of the life stage. Their savings and financial behaviour are shaped by socialising experiences and habits they developed during their teens. While financial education at the school or workplace level may improve financial knowledge and behaviour among adolescents and adults, such programmes alone may be insufficient to bring positive financial outcomes. Some scholars, for example, argue that purposive parental financial education is more effective compared to school-based financial literacy programmes (Robertson-Rose 2020). Studies such as these bring to light the importance of understanding the social determinants of savings behaviour, apart from financial literacy alone.

Part 2: The Case for Financial Socialisation

Financial Knowledge and Savings Behaviour

The relationship between financial knowledge and savings behaviour has been explored comprehensively in the literature (Lusardi, Mitchell, and Washington 2011). For example, strong correlations were found between financial literacy and day-to-day financial management skills, investment participation in stocks and financial markets, and having precautionary savings. Individuals with higher financial literacy tend to plan for their retirement, which is positively correlated with wealth accumulation (van Rooij et al. 2011; Lusardi and Mitchell 2014). Low financial literacy, in contrast, is associated with poor financial practices, such as incurring costly mortgages or high cost of borrowing, which leads to wealth reduction (Lusardi and Tufano 2009).

The findings of several empirical studies in Malaysia also support this hypothesis (refer Mad et al. 2024). Jamal et al. (2016) found that the savings behaviour of higher education students in Sabah is determined mainly by financial literacy. In their study of private sector Malaysian employees, Ismail et al. (2018) showed the existence of a positive relationship between financial knowledge and savings level. Isa and Kim (2024) uncovered that young people aged between 18 and 40 who have higher financial literacy tend to have more positive attitudes towards savings and save effectively.

Apart from academic literature, emphasis on improving Malaysia's financial literacy has strengthened over the past decade following alarming empirical observations in spending and savings behaviours, and debt management. For example, only 33% of Malaysians can save more than RM500 per month (RinggitPlus 2024). Only 36% of active EPF members' savings meet their age-adjusted minimum recommended savings benchmark (Employees Provident Fund 2024a). Meanwhile, AKPK reported that the number of approved cases under its Debt Management Programme had surged by more than 50% as of 2024 (Agensi Kaunseling dan Pengurusan Kredit 2025).

These observations, however, may be more closely linked to the suppressed wage growth and lack of disposable income of Malaysians rather than the lack of financial literacy. 56% of Malaysians cited insufficient income as the top reason they always run short of money (Bank Negara Malaysia 2025). Yet, policy interventions appear to emphasise increasing financial literacy as a solution to improve these concerning financial behaviours.

The FEN – an inter-agency platform co-chaired by Bank Negara Malaysia and the Securities Commission of Malaysia - was established in 2019 to "coordinate, co-operate, and collectively drive efforts to promote effective delivery of financial education initiatives to Malaysians in a sustainable manner". Its National Strategy for Financial Literacy 2019-2023 specifically stated its objective to "elevate financial literacy and promote responsible financial behaviour and rational attitudes of Malaysians". Its programmes include widening access to financial information through multiple media, incorporating financial education in classrooms, and enhancing digital financial literacy (Financial Education Network, n.d.). The programmes include widening access to financial information through multiple media, incorporating financial education in classrooms, and enhancing digital financial literacy.

¹ https://www.fenetwork.my/about/

Several studies have been conducted by industry groups – particularly members of the FEN – relating to the improvement of financial literacy, behaviour and well-being. For example, the *Agensi Kaunseling dan Pengurusan Kredit* has published multiple reports concerning the financial well-being of Malaysian employees and the broader Malaysian population (Agensi Kaunseling dan Pengurusan Kredit 2018). AKPK has also worked with 39 higher learning institutions to incorporate personal finance management modules, with plans to expand the programme nationwide and make it compulsory (Agensi Kaunseling dan Pengurusan Kredit 2023).

Another FEN member, Perbadanan Insurans Deposit Malaysia, published a study together with UK-based Behavioural Insights Team, which investigated behavioural obstacles to savings among Malaysians (Perbadanan Insurans Deposit Malaysia 2021). The most interesting findings from the study included that lower-income individuals tended to exhibit higher levels of 'present bias', which means they prioritise immediate needs over savings for future goals. Another key observation was the high degree of overlap in savings behaviour of low-income earners and that of irregular income-earners. They appeared to lack both savings and confidence levels, which reduced their self-drive for financial planning.

Limitations of Financial Education

There were also studies that have noted the limited and mixed impact of financial literacy education on savings behaviour (Goldberg 2014; Cole and Fernando 2008; LeBaron and Kelley 2021; Lusardi and Mitchell 2014). For many years, educational programmes aimed at boosting financial literacy have focused on improving individual financial knowledge. These initiatives were based on the belief that increased knowledge would naturally lead to better financial behaviours and outcomes. However, recent concerns suggest that simply having cognitive financial knowledge might not be enough to effectively change financial behaviours (Gudmunson and Danes 2011).

Cole & Fernando (2008) argued that most evaluations of financial literacy programmes often fail to decouple between causation and correlation. One major issue is the problem of participant selection. Variations in the outcome between people with high and those with low financial literacy may be attributed to unobserved differences rather than financial literacy. Two randomised controlled trials in Indonesia, for example, found little or no significance effect of financial education programmes on subjects' behaviour. One of the studies introduced a classroom-based module to unbanked households in Java. The programme had a negligible impact on the relevant financial outcomes but at least increased the likelihood of opening a bank account among the subjects (Cole, Sampson, and Zia 2011). The other study offered video lessons and used a more nuanced measurement of financial literacy. It found that financial literacy improved financial knowledge but had no effect on financial behaviour (Carpena et al. 2011). Aminuddin et al.'s study of Malaysian youth (2022) found that having financial knowledge alone doesn't always lead to saving money. It argued that even if students learn financial management at university, they might not use that knowledge in real life.

Significance of Sociodemographic Factors

Furthermore, financial literacy frameworks frequently overlook the instrumental role of cultural and social nuances in shaping financial behaviour (Fazli Sabri et al. 2021; De Beckker, De Witte, and Van Campenhout 2020; Falk et al. 2017). This is particularly important in developing countries, which tend to have distinct economic, social and cultural structures and norms. Such nuances may have an impact on people's financial literacy and behaviour through varying financial socialisation processes, financial attitudes, and socioeconomic background. Meanwhile, some societies exhibit a higher degree of individualism, which also affects general financial behaviour and socialisation. For instance, De Beckker, De Witte, and Van Campenhout (2020) argued that people from an individualistic cultural background displayed higher overconfidence in financial matters. This meant that they may not feel as financially vulnerable as others, despite lacking financial knowledge or not having practised sound financial behaviour. Chui and Kwok's (2008) study showed that individualistic societies display a higher usage of life insurance. In the context of Malaysia, scholars (Fazli Sabri, Cook, and Gudmunson 2012; Pahlevan Sharif, Ahadzadeh, and Turner 2020) uncovered that Malaysians usually develop their financial knowledge and behaviour through social norms and financial socialisation agents, which include family, friends, and even religion.

Financial literacy literature is abundant with evidence of sociodemographic factors - such as gender, age, education and income – acting as moderating variables (Loke, Chin, and Hamid 2022; LeBaron and Kelley 2021; Fazli Sabri et al. 2021). Studies showed that women, young adults, and older adults generally have lower financial knowledge. There were notable gender gaps, with men typically having higher financial literacy. Age also impacted financial literacy, with younger and older individuals often found to be less knowledgeable financially. Higher levels of education correlated with better financial literacy, as educated individuals had more opportunities to learn about financial issues. Additionally, financial literacy tended to increase with income (Lusardi and Mitchell 2014).

Variations in financial literacy due to sociodemographic variables can similarly be observed within the Malaysian context. In her analysis of the 2015 and 2018 OECD/INFE data, Loke, Chin and Hamid (2022) found that ethnically Chinese Malaysians were more likely to be financially literate than ethnic Malay Malaysians. Contrary to previous studies, they found that gender gaps in financial literacy were not significant in the OECD/INFE data. Age, education, and income showed consistent results with past studies: older individuals and those with university education were more likely to be financially literate. The impact of the level of income on financial literacy was significant in 2015 but not in 2018. Geographical differences existed, with individuals in East Malaysia having lower financial literacy than those in the central region. In 2015, those in the northern region, including Perlis, Kedah and Penang, had higher odds of being financially literate than those in the central region, but this was not as significant as in 2018, where individuals in the southern region - namely Johor - had lower odds of being financially literate compared to those in the central region.

Why Financial Socialisation?

The existing studies discussed earlier often stopped short of explaining the deeper processes of why and how these variables influence different financial outcomes (Gudmunson and Danes 2011; De Beckker, De Witte, and Van Campenhout 2020). Research that employed demographic characteristics as predictors aimed to understand the reasons behind the presence or absence of certain outcomes , with the best studies having demonstrated such outcomes through empirical evidence. Conversely, when demographic variables were used as control factors, they were merely considered as indicators of the existence of unexplained or "unknown factors" that helped minimise potential inaccuracies in scientific models. Enhancing our collective understanding of personal financial literacy, however, involves focusing more on understanding why these variables influence financial outcomes - which may not be fully explained by empirics.

Gudmunson & Danes (2011) found that many studies, even those that did use demographic variables as predictors, often overlooked socialising variables or other intermediate and moderating factors that could clarify the processes leading to financial outcomes. This oversight creates a significant gap in our understanding of how variables like gender, age, and socioeconomic status serve as significant predictors of financial outcomes. Including variables that measure socialisation processes could help explain these connections. Employing a financial socialisation framework would also allow us to understand why variations in financial literacy exist according to sociodemographic variables.

While cognitive financial knowledge can be gained through financial education programmes and workshops, financial values cannot be effectively taught in a single formal setting (Loke 2024). These values and attitudes need to be nurtured from a young age and must be consistently demonstrated to reinforce them. The significant role of parents in financial socialisation often emerges naturally but is frequently overlooked in broader financial literacy frameworks, despite its well-established importance in children's education, including financial education.

Thus, this paper argues that a deeper understanding of financial socialisation processes is needed, aside from cognitive and behavioural processes, to improve the efficacy of financial literacy interventions. Such a deeper understanding would entail both empirical and qualitative methods of inquiry - potentially using theoretical frameworks borrowed from the fields of sociology - to explain drivers of financial behaviour and its patterns across time and across sociodemographic groups. It is hoped that such renewed understanding, particularly with the advent of artificial intelligence and threats such as cyber insecurity, will shape better policy interventions around educating and protecting individuals.

The financial socialisation literature, though not novel, was arguably developed in response to the outdated assumptions that financial literacy strongly determines financial outcomes. It recognises that financial decision-making is driven by deeply rooted characteristics which are influenced by social or psychological factors (Gudmunson and Danes 2011). Moreover, financial literacy research has mainly focused on the individual, often neglecting the crucial role of family as the initial and alternative socialisation unit. This realisation has motivated greater attention towards culturally relevant factors, which include attitudes, beliefs, norms, and values. Currently, the financial socialisation literature has identified several key agents, namely family, friends, school, workplace, and media (LeBaron and Kelley 2021), while newer socialisation agents may include financial gurus, influencers, as well as religio-cultural personalities. The next part of this paper will elaborate on these traditional socialisation agents as found in existing literature.



Part 3: Agents of Financial Socialisation

Family Financial Socialisation

Globally, the financial socialisation theory is well established, with a strong focus on the role of family members as key agents (Gudmunson and Danes 2011; LeBaron and Kelley 2021). For example, a study by Wu et al. (2017) found that adolescents who visited a bank with a family member had greater financial knowledge and more positive perceptions of banks. Similarly, a longitudinal study by Kim and Chatterjee (2013) showed that having a savings account during adolescence was linked to increased financial asset ownership and independence in emerging adulthood. Zhao and Zhang (2020) highlighted that parental financial socialisation has a more significant impact on financial skills and self-efficacy compared to financial knowledge. This finding aligns with Shim and Serido (2011), who discovered that parental influence is 1.5 times more effective than financial education and twice as influential as that of peers.

Most studies on financial socialisation have primarily focused on childhood experiences, with parents consistently identified as the primary agents of financial socialisation (Grohmann, Kouwenberg, and Menkhoff 2015). Gudmunson and Danes' (2011) notable theory emphasises the role of family socialisation as a process in the shaping of financial literacy. It focused on parent-child relationships - particularly during a person's childhood and adolescence - and how they impacted their financial outcome throughout the life cycle. As depicted in Figure 1, empirical studies on financial socialisation have consistently demonstrated its significant influence on various financial outcomes, including financial literacy, attitudes, knowledge, capabilities, behaviours, and overall financial well-being.

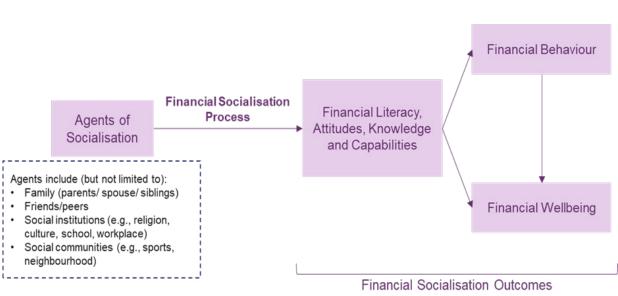


Figure 1: The conceptual framework of the financial socialisation process

Source: PNBRI (author's illustration)

According to the theory, family financial socialisation can occur either explicitly or implicitly. Explicit, or purposive, financial socialisation occurs when parents intentionally communicate or educate their children on financial skills and knowledge. This can be in the form of a parent teaching their children how to save or invest the latter's money . Implicit financial socialisation, meanwhile, is akin to a role-model socialisation process which involves the unintentional passing down of financial values, attitudes, or behaviour by parents to their offspring. This may take place through daily interactions or conversations that have some relation to spending, saving, or investing practices.

The theory acknowledges that family financial socialisation activities can be influenced by family characteristics and sociodemographic factors. Parents' education, for instance, appeared to be positively correlated with their financial capability based on Zhao and Zhang's (2020) study on 6,311 United States respondents from the 2016 National Financial Well-Being Survey. Serido et al. (2020) indicated that the likelihood of not having a bank account is higher for households who were less educated and in the lower income bracket. This association led to such households lacking the ability and the propensity to save, to utilise various financial services and products, and to conduct a wide range of financial activities. This is supported by Luhr (2018), who posited that parents from higher social classes will have higher levels of confidence and proactiveness in socialising their children financially.

The quality of relationships between family members is another crucial factor in the successful development of family financial socialisation (Gudmunson and Danes 2011). A warm parentchild relationship has been shown to enhance children's receptiveness to parental financial guidance. Young adults who grew up in families with a strong conversation culture also tend to develop higher financial knowledge.

Some empirical studies on financial socialisation have been conducted in Malaysia. Sabri and Falahati (2012) discovered that parents who demonstrate good financial habits at home can improve their children's financial skills through modelling and observation. Nawi, Siong, emphasised that the family's financial attitude is the most significant factor in shaping tertiary students' financial attitudes. Very recently, Loke's (2024) study in Penang among parents with school-going children found that parents' socioeconomic status, demographic status, and financial sophistication significantly impacted family financial socialisation. Most empirical studies on financial socialisation in Malaysia, however, were done on small sample groups such as university students and thus have findings that are not generalisable. This presents a sample gap that further supports the proposal for a nationwide study of financial socialisation in Malaysia.

Other Agents of Financial Socialisation

There are other identified agents of financial socialisation in literature besides family. Gudmunson & Danes (2011) acknowledged that family socialisation does not provide a complete explanation, nor is the family the most prominent sociodemographic factor. They noted that the relative effect of family socialisation and interaction varies up and down as a person navigates through their life cycle.

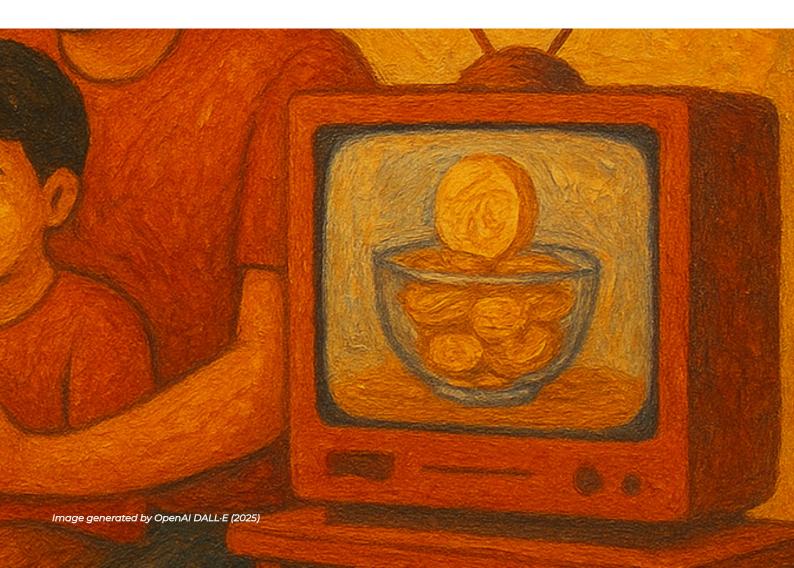
Apart from family, peers are another regularly studied agent in financial socialisation literature. As individuals grow older, the influence of parents on financial attitudes, knowledge, and behaviours diminishes, while peer influence increases. This shift is especially notable among college-going young adults, who often start living independently or with peers for the first time (Moschis and Churchill 1978; Lebaron-Black et al. 2022). A study by Loibl and Hira (2006) uncovered gender differences in financial socialisation, where more men considered co-workers as sources of financial planning information among 7,500 US respondents with annual household incomes of more than \$75,000. Using 2000-01 MacroMonitor data, Lin and Lee (2004) earlier documented that younger respondents who self-evaluated as being less informed relied on their friends for advice in investment decisions.

Media is another identified financial socialisation agent, usually informing the public on purchase and investment choices (Hira, Sabri, and Loibl 2013). This is useful for those who wish to maximise their utility or profitability before deciding on which product or service to buy. Lin and Lee's (2004) study portrayed a significant association between consumers who used the media as an information source and their risk tolerance, subjective knowledge, age, and income levels. Another older study, for instance, found that lowerincome and less-educated investors preferred to rely on newspapers and magazines for financial information (Rhine and Toussaint-Comeau 2002). While reliance on media for information on financial matters was not as prevalent as other agents among young adults, it appeared that one-third of college students do so, as found in more recent studies after the advent of social media (Lebaron-Black et al. 2022). Those who used the media for financial information, such as financial planning sites on the internet, tended to have better financial practices and financial satisfaction. The influence of the media was not always positive. Studies show that time spent watching television, especially among adolescents, was directly associated with a higher tendency to spend and increased materialism levels.

Limited research also suggests that work experience may act as another key socialising agent. Some studies show that employment is positively correlated with financial knowledge and healthy spending behaviours (Lebaron-Black et al. 2022). Shim et al. (2010) surveyed 2,098 first-year college students to find that their experiences working during high school are associated with higher financial knowledge in the first year of college. On the other hand, some youths who have work experience may also develop poor spending habits due to a sense of "premature affluence". The results were far from conclusive, due to limited research on employment as an agent of socialisation. However, it seemed possible that employment may encourage financial learning and consequently, positive spending behaviours (Lebaron-Black et al. 2022).

Formal education (i.e. schooling) has also been identified as an agent of financial socialisation. This is because children spend increasingly more time at educational institutions with teachers or friends rather than family as they grow up. In an earlier study, Varcoe et al. (2001) highlighted that economics curriculum in schools has a significant effect on the development of behaviours and skills related to consumption among children. More recently, however, LeBaron & Kelley (2021) noted that the effects of school-based financial education programmes have been very limited. Fernandes et al., (2014), for instance, found that school-based financial education programmes explained only 0.1% of the variance in financial behaviours between school-going children in their study.

Due to a re-emergence of financial socialisation literature in the early 2020s, scholars have noted the potential of other financial socialisation agents apart from the ones elaborated above, though they are still underexplored (LeBaron and Kelley 2021). The next part of this paper shall describe how local cultural variations may help the exploration of other agents that have not been thoroughly analysed in the literature.



Part 4: Does Demography Matter?

Sociodemographic Influences

Empirical studies on family financial socialisation have already noted that personal and family socioeconomic and demographic factors influence the differing financial outcomes of a person (Gudmunson and Danes 2011). Some of the variations found in the current literature are detailed henceforth.

In terms of gender, literature often found variations in the financial socialisation between males and females. While studies analysing the relationship between gender and financial socialisation have produced mixed results (LeBaron and Kelley 2021), they usually found that men have higher financial knowledge and better financial behaviour compared to women (Pahlevan Sharif, Ahadzadeh, and Turner 2020). Males are more likely to participate in financial matters and receive greater exposure to financial decisions and discussions. One particular study found that male children tended to have their first financial discussion at an earlier age, even after accounting for socioeconomic status (Agnew and Cameron-Agnew 2015) . In other words, the authors highlighted the significant impact of gender bias in financial socialisation and its effects on adulthood financial literacy. The authors added that more studies were needed to investigate the prevalence of gender bias across different cultural norms.

In terms of age group, many empirical studies were conducted on students or young adults. This is because literature considers childhood and adolescence as the most critical period of family financial socialisation, despite financial socialisation continuing to occur during adulthood onwards (Gudmunson and Danes 2011). Ghafoor and Akhtar, for example, studied the impact of explicit and implicit parental financial socialisation on Gen Z in Pakistan. One of their findings is that parents tend to teach their daughters more about financial matters, and female children are expected to be responsible for household finance decisions. There are debates regarding when parental financial socialisation ends. Some argue that the significance of parental influence drops as their children age (Danes 1994) while that of peers grows (John 1999). Curiously, Cho (2024) found that among ethnic minority young adults in Hong Kong, there was still a strong reliance on parents for financial guidance even in mature adulthood. Simultaneously, the Hong Kong Baptist University's The Centre for Youth Research and Practice (2020) also found that parental advice in career decisions and education was of higher importance among ethnic minority young adults in Hong Kong.

Some studies have indicated that race/ethnicity impacts a community's financial socialisation (Lusardi and Mitchell 2007; Lusardi, Mitchell, and Curto 2009; Sabri et al. 2010). One example is Fulk and White's (2018) study on how black and white college students gained financial knowledge and skills. The study found that a higher percentage of black students compared to white students rarely or never discussed financial matters with their parents while growing up. White students were also twice as likely to receive parental assistance to obtain a credit card prior to college as compared to black students. Another study by M. Gutter, Copur, and Garrison (2009) found that racial factor influences financial socialisation, with white emerging adults receiving more parent-child financial discussions compared to their non-white peers . Additionally, Gutter, Garrison, and Copur (2010) noted that white children and emerging adults were more likely to have a savings account than their nonwhite counterparts.

What Does This All Mean?

These variations highlight the need to tailor and test financial socialisation to suit local cultural contexts. While family has been frequently cited as the primary agent, the financial socialisation processes within a family are also influenced by cultural backgrounds, as cultural values shape family roles and communication patterns (Van Campenhout 2015; Gudmunson and Danes 2011). Cross-cultural research in consumer socialisation has demonstrated that culture influences specific aspects of economic socialisation. Our literature review suggests that it is essential to empirically test financial socialisation concepts in consideration of local cultural and regional nuances (LeBaron and Kelley 2021).

Despite its complex and challenging nature, some studies have attempted to explore how culture influences and socialises individuals' financial literacy. De Beckker, De Witte, and Van Campenhout (2020) investigated how national culture explains variations in financial literacy using a sample of 24,512 individuals from 12 countries. The study found that people were more financially literate in "uncertainty-avoiding" cultures, while those in individualistic cultures were less so. These findings align with studies suggesting that uncertainty-avoiding individuals invested more in financial literacy to mitigate risks, as opposed to those in individualistic cultures who were overconfident and were less likely to seek financial advice. A key criticism of this study, however, would be how culture was analysed at the national level, missing the intricacies between distinct cultures belonging to diverse communities within a country.

For example, Falicov (2001) identified cultural differences between Latino- and Anglo-Americans in terms of how meaning was attributed to money, while Ivan and Dickson (2008) found that, cultural differences influenced the understanding of complex financial concepts when comparing the Netherlands and Hong Kong, despite citizens of both countries having similar ideas about the function of banks. Another study, for example, analysed the impact of geographical variations on the financial attitudes and spending behaviour of college students from several regions in the US and Portugal (Jorgensen et al. 2017). The researchers discovered distinct patterns of financial attitudes and spending behaviours in different geographic areas. They suggested that geographic location should be a key factor in studies on financial socialisation, in addition to considering socialisation agents like parents, peers, siblings, schools, and media.

Another study by Thomas and Spataro (2018), which examined nine European countries, stressed the importance of geographic location in financial socialisation outcomes. The researchers explored differences in stock market participation and found that while some variations could be attributed to financial literacy, the education system, and the attractiveness of stock markets, there were still unexplained differences. These remaining disparities are likely due to macro-level factors such as cultural differences, attitudes towards risk, and other unobserved elements.

Kunovskaya, Cude, and Alexeev's (2014) study reviewed the World Bank Financial Capability and Consumer Protection Survey and surmised that the six-item measure used was inadequate. They proposed a reassessment of some of the six items and some additional items in the measurement. The authors also stated "perhaps most importantly" that researchers should adjust the measurement to suit specific cultural environments. This is vital, as a culturally sensitive indicator would enable policymakers to formulate accurate and effective interventions for the local populace (LeBaron and Kelley 2021). To summarise, past studies in financial socialisation had either only focused on the influence of a single socialising agent or had collected data from only a single region (Lebaron-Black et al. 2022).

Some studies have argued that Malaysian values emphasise stronger family values, filial piety, collective orientation and even. As mentioned earlier, this approach is also needed in Malaysia, which has its unique set of cultural contexts and diverse population. Fazli Sabri, Cook, and Gudmunson (2012) argued that religion is likely an important agent in Malaysia despite not being conclusively identified yet in the literature. Religion, for instance, appeared to have some influence on the savings and consumer behaviour of Malay Muslims (Abdullah and Abd. Majid 2009; Mokhlis 2009). M. Fazli Sabri and Masud (2018) found that while family remains the primary socialisation agent, religion also appears as a significant agent, higher than TV/radio, internet and teachers. Zulkarnain, Zaimah, and Sarmila (2024) also found that religion is an important agent. Md. Sapir @ Md. Shafik and Wan Ahmad (2020) argued in their study on Malaysian Muslim students that financial socialisation could occur through religious educational circles, popularly known as "usrah". The lack of attention given towards the influence of religion on financial literacy and socialisation presents yet another gap that this aspirational study could fill.

Social media may also emerge as a potential financial socialisation agent. Current literature broadly interprets media to resemble traditional media, i.e. television, newspapers or magazines. Widespread digital literacy, especially among the younger generation, necessitates an investigation into the influence of social media as a key agent of financial socialisation (Abdul Ghafoor and Akhtar 2024). This has already been indicated by the 2024 RinggitPlus survey, which found that social media was the most popular source of financial information (RinggitPlus 2024). Trust towards social media had even increased from the 2023 survey. This is not surprising given the growth of financial information content and financial "influencers" on social media platforms.

Thus, this paper attempts to contribute to the literature by exploring other financial socialisation agents that may be relevant for Malaysia's local context and population. In the next chapter, we describe a pilot survey to explore this question.

Part 5: Pilot Survey

We conducted a pilot survey on the role of financial socialisation agents during the Minggu Saham Amanah Malaysia (MSAM) in September 2024. A basic, online, survey questionnaire protocol was employed, leveraging the myASNB digital application, which asked respondents to self-assess how various socialisation agents might have influenced their financial knowledge and financial decisions. This digital survey collected 2,526 responses from MSAM visitors. The purpose of the survey was to gauge the extent to which various agents of financial socialisation influenced respondents, and how they differed by income group, age group and ethnicity. It must be noted that this survey was conducted on a trial-and-error basis and does not claim to have any valid generalisability. Hence, it is important to note that this survey is not statistically representative. However, it serves as an initial exploration to gauge the sentiments around financial socialisation in preparation for work to be done at a much more nationally representative scale.

As shown in Figure 2 (a) below, respondents were predominantly Bumiputera Malay (87%), which did not come as a surprise, given that ASNB's main clientele were traditionally the Bumiputera community - particularly because its flagship product, the Amanah Saham Bumiputera (ASB) is only available for the Bumiputeras. The respondents consisted mainly of youth below 40 years old (Figure 2 (b)), which may indicate a demographic largely comprising individuals in their early to mid-career stages. Furthermore, as many as 67% of the respondents reported an income of less than RM5,000 (Figure 2 (c)), suggesting that many respondents may be navigating challenges related to financial stability, depending on the size of their dependents and commitments. These observations provide important context for interpreting their responses.

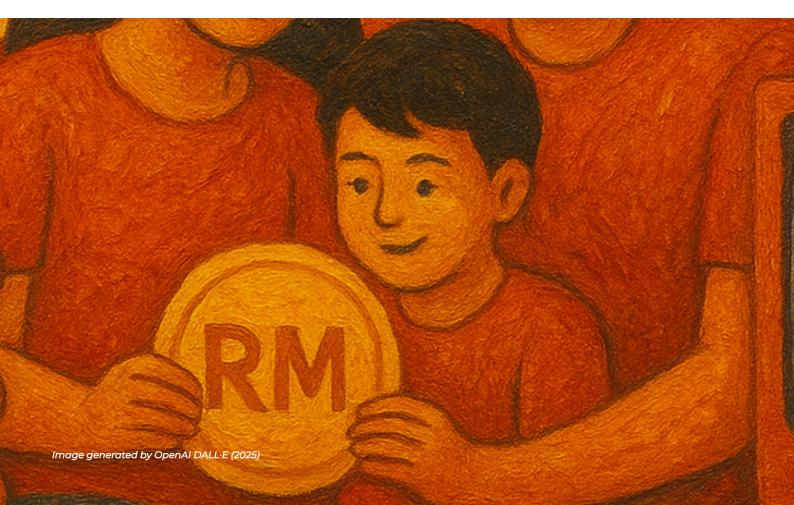


Figure 2 (a)-(c): Profile of MSAM 2024 Survey by (a) race and ethnicities, (b) age group, and (c) income group



The survey mainly asked respondents for their perception of the extent of influence that agents of socialisation had on their (1) financial knowledge, and (2) financial decisions. As discussed in Part 3 (Figure 1: The conceptual framework of financial socialisation process), financial knowledge and decisions are part of socialisation outcomes for individuals. The agents of socialisation investigated in this survey were: (1) family, (2) culture, (3) religion, (4) social media, (5) friends, and (6) community. The findings are summarised in Table 1 below.

RM5,001 -

RM10,000

RM10,001 -

RM15,000

RM15,001 &

above

N/A

Up to RM1,500

RM1,501 -

RM3,000

RM3,001 -

RM5,000

Table 1: Rank of Agents' Influences on Respondents' Financial Knowledge and Financial Decision, by Race

Race		1 st = Most influential	2nd	3rd	4th	5th	6 th = Least influential
Bumiputera Malay	Financial Knowledge	religion, 77%	culture, 75%	family, 68%	social media, 66%	friends, 65%	community, 49%
	Financial Decision	religion, 80%	culture, 69%	family, 69%	friends, 58%	social media, 53%	community, 45%
Bumiputera others	Financial Knowledge	religion, 78%	culture, 78%	family, 61%	social media, 61%	community, 50%	friends, 44%
	Financial Decision	religion, 78%	family, 78%	culture, 72%	social media, 61%	friends, 56%	community, 56%
Chinese	Financial Knowledge	family, 50%	friends, 49%	culture, 45%	social media, 44%	religion, 35%	community, 29%
	Financial Decision	family, 56%	culture, 42%	friends, 37%	religion, 36%	social media, 33%	community, 30%
Indian	Financial Knowledge	culture, 65%	family, 65%	friends, 62%	religion, 57%	social media, 57%	community, 51%
	Financial Decision	culture, 70%	family, 68%	religion, 65%	friends, 57%	social media, 43%	community, 38%

Note: the percentages represent the portion of respondents from each race group that agree on the influence of respective socialisation agents on their (1) financial knowledge, and (2) financial decisions.

Based on the reported perceived influence, a higher proportion of respondents from the Bumiputera and Indian communities, compared to Chinese, tended to agree that agents of socialisation influence their financial outcomes. This was especially evident as nearly half of the Bumiputera Malays respondents acknowledged the influence of community, which was ranked as the least influential agent, while barely half of the Chinese respondents agreed on the influence of family, which they perceived as the most influential socialisation agent.

Furthermore, the findings enriched our earlier discussions in Part 1, which highlighted the gap between financial knowledge and behaviour, noting that knowledge and literacy alone do not necessarily translate into decisions and behaviour. Interestingly, findings presented in Table 1 revealed that socialisation agents exerted a relatively similar degree of influence, whether high or low, on both financial knowledge and behaviour. This consistency suggests that socialisation agents may play a critical mediating role in bridging the gap between knowledge acquisition and behavioural outcomes. Rather than influencing solely the financial knowledge acquisition, it could be inferred that these agents also influence the integration of knowledge into actionable financial decisions. However, it is important to note that these findings were based on the perceived influence rather than the true or actual influence, as reported by respondents. In reality, there may be behavioural mechanisms at play.

Religion appeared to be the most influential socialisation agent among the Bumiputera Malay respondents but seemed to have less perceived influence on the Indian and Chinese communities. Results indicated that the majority of Bumiputera Malay respondents perceived religion as a significant socialisation agent influencing their financial outcomes. The perceived degree of religion's influence was relatively balanced for both financial outcomes, with Bumiputera Malays reporting that their financial decisions were slightly more influenced by religion (80%). For the Indian community, religion was still perceived to have a considerable influence, albeit not the strongest. In contrast, less than 40% of the Chinese respondents agreed that religion played a role in their financial knowledge and decisions.

As for culture and family, respondents across all races and ethnicities generally agreed that culture and family played significant roles in shaping their financial outcomes. For Bumiputera Malay respondents, the influence of these two socialisation agents was comparable to that of religion. Meanwhile, Chinese respondents perceived family as the most influential agent, followed by culture, whereas Indian respondents felt strongest about culture, with family ranking second in importance.

While it is interesting to observe how these three agents of socialisation emerged as the highest level of influence for all three major ethnic groups, this alignment is not entirely unexpected. It is crucial to recognise that the influence of the family may have been deeply intertwined with those of one's culture and one's religion. While family is identified as an agent of financial socialisation (Gudmunson and Danes 2011), they are also an agent of religious and cultural socialisation (Trommsdorff 2008; Ari 2023). This suggests that the process of family financial socialisation is not isolated but is significantly or partly shaped by cultural and religious elements.

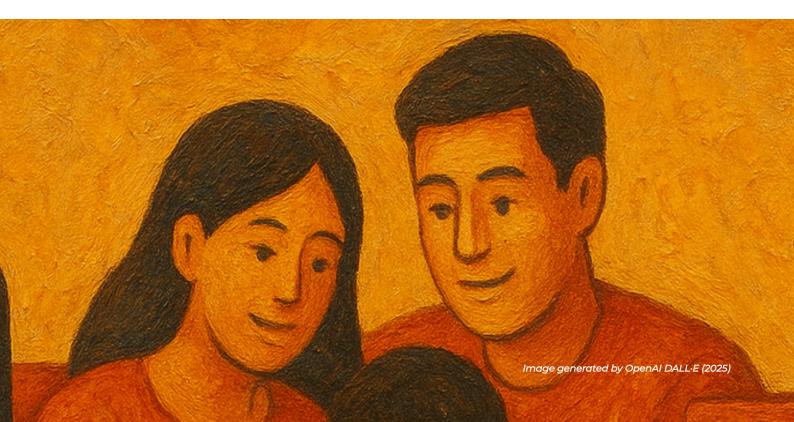


Table 2: Rank of Agents' Influences on Respondents' Financial Knowledge and Financial Decision, by Age Groups

Age Group		lst	2nd	3rd	4th	5th	6th
18 - 29 years old	F. Knowledge	Religion, 74.4%	Culture, 73.2%	Family, 68.6%	Social Media, 66.9%	Friends, 65.0%	Community, 49.2%
	F. Decision	Religion, 74.4%	Culture, 70.4%	Family, 60.2%	Friends, 60.2%	Social Media, 56.5%	Community, 47.6%
30 - 39 years old	F. Knowledge	Religion, 72.5%	Culture, 70.1%	Family, 65.5%	Social Media, 63.9%	Friends, 62.9%	Community, 47.1%
	F. Decision	Religion, 72.5%	Culture, 65.7%	Family, 55.7%	Friends, 55.7%	Social Media, 51.0%	Community, 44.1%
40 - 49 years old	F. Knowledge	Culture, 73.7%	Religion, 72.2%	Family, 65.4%	Friends, 62.9%	Social Media, 62.2%	Community, 45.0%
	F. Decision	Religion, 72.2%	Culture, 65.8%	Family, 52.6%	Friends, 52.6%	Social Media, 48.4%	Community, 41.3%
50 - 59 years old	F. Knowledge	Religion, 70.8%	Culture, 67.9%	Family, 64.6%	Friends, 59.7%	Social Media, 57.2%	Community, 46.1%
	F. Decision	Religion, 70.8%	Culture, 63.4%	Family, 52.7%	Friends, 52.7%	Social Media, 44.0%	Community, 37.0%
60 years old & above	F. Knowledge	Culture, 64.4%	Family, 66.1%	Religion, 59.3%	Social Media, 47.5%	Friends, 44.1%	Community, 30.5%
	F. Decision	Religion, 59.3%	Culture, 59.3%	Family, 37.3%	Friends, 37.3%	Social Media, 32.2%	Community, 25.4%

Note: the percentages represent the portion of respondents from each age group that agree on the influence of respective socialisation agents on their (1) financial knowledge, and (2) financial decisions.

Building on the analysis by ethnicity, it is equally important to examine how the perceived influence of socialisation agents varied across different age groups to uncover additional patterns and insights. To note, as high as 87.3% of respondents were Bumiputera Malay, so the discussion here is heavily skewed towards the Bumiputera Malay community, by their respective age groups.

As shown in Table 2, religion, culture, and family remained the most influential socialisation agents in transmitting financial knowledge across all age groups. This pattern reinforces earlier findings and confirms a consistent pattern of influence across different age brackets. Moreover, when it came to financial decisions, all age groups in this survey unanimously regarded religion as the most influential socialisation agent. This unanimity highlights the pervasive role of religion in shaping financial decision-making, regardless of age.

There was a noticeable decline in the extent of perceived influence of religion on respondents as their age increased. Generally, the influence of religion tends to increase with age. Research supports this notion, suggesting that significant life events such as retirement, loss of loved ones, and health challenges often prompt older adults to seek meaning and comfort through religion (McManus 2024). However, the results of this sample indicated the opposite in the context of religion as a financial socialisation agent. It is possible, then, that while older individuals may turn to religion for meaning or existential reflection, this engagement does not necessarily translate into religious influence in other domains such as financial attitudes or behaviours. This distinction between meaning-seeking and domain-specific influence remains a hypothesis rather than a conclusion, requiring further investigation.

This particular observation is not too different from existing studies that have found the diminishing role of traditional socialisation agents as individuals age. For example, one study found that as people grew older, the influence of agents tends to wane, mainly due to the stabilisation of social roles and identities (Plexa et al. 2021). Furthermore, older adults often exhibit higher levels of individual agency in the socialisation process. They become more selective about the social influences they accept, relying instead on personal experiences and well-established beliefs (Luong, Rauers, and Fingerman 2015).

While our pilot study cannot be generalised nor taken as evidence for any attributive conclusions, the observed pattern of declining influence of socialisation agents in older age groups appeared similar to what social studies literature broadly observes as a "shift" from external to internal guidance. According to the Continuity Theory (Atchley 1989), individuals tend to maintain established patterns of thought and behaviour as they age, increasingly relying on internalised beliefs and personal experience rather than external social influences. In this context, older adults might prioritise their own judgment and accumulated wisdom over the traditional influences of religion, culture, family, and other agents. This transition, as explained by the literature, might reveal something about the usefulness of financial socialisation in predicting financial outcomes among experienced individuals: while early financial socialisation agents play a foundational role, their impacts diminish as individuals gain confidence and autonomy in navigating financial decisions independently.

Overall, the findings provided early indications that different financial socialisation agents vary in their level of influence, depending on culture or sociodemographic factors, at least as perceived by the sample of respondents who attended the MSAM 2024. However, the result of this pilot is still severely limited in its ability to infer specific financial outcomes, such as savings behaviour. That is, the design of the pilot merely contained information on how one perceived to have been socialised in the past. It points to the need to understand how one had actually been socialised and the financial outcomes of the socialisation process.

Additionally, the survey highlighted variations in personal autonomy among respondents. For example, Chinese respondents and older individuals exhibited lower levels of agreement on the perceived influence of socialisation agents compared to respondents of other ethnic groups. This points to the need for credible evidence – using a more representative sample – if certain groups may be less impacted by socialisation agents, and if such reduced impact of socialisation is due to higher individual agency and independence in their decision-making processes. These nuanced differences hint at the complex interplay between socialisation agents and individual autonomy in shaping financial outcomes.

Part 6: What Next?

Bringing it all together, the existing literature on financial socialisation provides an avenue for understanding the agents and processes that shape a person's or community's savings behaviour (Danes, 1994).

The Impact of Financial Socialisation on **Financial Literacy**

An investigation into a subject's savings behaviour must go beyond financial literacy and consider the financial socialisation process that takes place. Such an investigation should thus be motivated to uncover what the major financial socialisation agents are that shape the savings behaviour of Malaysians and how they do so. The following may be the possible research questions to form the basis of such an investigation:

Research Question 1:

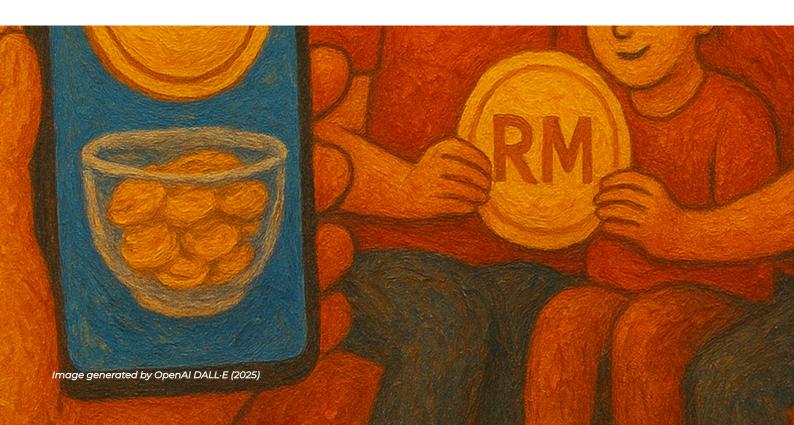
What are the financial socialisation agents that influence the savings behaviour of Malaysians?

Research Question 2:

How do the financial socialisation agents influence the savings behaviour of Malaysians?

Research Question 3:

How strongly do the financial socialisation agents influence the savings behaviour of Malaysians?



The Mediating Role of Sociodemographics

In addition, there is a need to understand the role of ethnic and cultural background in influencing savings behaviour. Literature often documents the association of some sociodemographic factors, such as age group, ethnicity, and gender, with financial or savings behaviour (Hira et al., 2013; Lusardi et al., 2009; Lusardi & Mitchell, 2007). Lusardi and Mitchell's (2007) study in the US, for example, found that white respondents display higher financial literacy than Black and Hispanic respondents.

This approach is helpful in Malaysia, where the populace is diverse in terms of ethnicity and religion. Fazli Sabri, Cook, and Gudmunson (2012) discussed how differences in culture within Malaysia may affect factors that lead to financial well-being. Religion, for instance, appears to have some influence on the savings and consumer behaviour of Muslims in Malaysia and Indonesia (Wijaya et al. 2024; Mokhlis 2009; Abdullah and Abd. Majid 2009).

One recent study, for example, indicated that financial literacy and behaviour of younger Malaysian cohorts - namely millennials and Gen-Z - varied by ethnicity alongside income level (Institute for Capital Market Research 2021). More than half of Malay respondents in the study did not invest at all, while those who did invest heavily only did so in low-risk capital market instruments. Ethnically Chinese respondents, on the other hand, tended to heavily invest in riskier products and had a more diverse portfolio. This begs the question of whether the influence of financial socialisation agents is uniform and homogenous across different communities in Malaysia. In this regard, an investigation into another question is also due:

Research Question 4:

How do sociodemographic factors influence the savings behaviour of Malaysians?

Conducting an ethnic-based analysis of financial socialisation is vital to better understand factors driving the observed unequal outcomes in terms of savings behaviour between the different ethnicities in Malaysia. Data from EPF in 2024, for instance, showed the median savings of Bumiputera members aged below 55 to be roughly half and one-sixth those of Indian and Chinese members, respectively (Employees Provident Fund 2024b). Bumiputera EPF savings also declined the most (by approximately 70%) during the rounds of Covid-19 withdrawal schemes, as compared to 40% and 1% among the Indians and the Chinese, respectively (The Edge 2023).

This EPF data would have more likely revealed income differences, rather than behavioural differences, between the two ethnic groups. However, it is worth noting that the EPF enabled voluntary contributions in 2024, thus hinting at how behavioural drivers may have contributed to widening this difference. In addition, such interpretations are limited to those in the formal sector and contributing to EPF, thus excluding the remainder of the population who are not working in the formal and private sector.

While wealth inequality is difficult to capture due to limited data availability, Abdul Khalid (2011) used the Household Income Survey (HIS) to impute that among Malaysians without wealth, 72% consisted of Bumiputera as opposed to 17% and 11%, respectively, for Chinese and Indians. A greater understanding of how each community is being socialised with the idea of savings, wealth accumulation, and financial well-being will enable us to formulate culture-sensitive strategies that are more effective in improving the financial behaviour of Malaysia's diverse society.

The Impact of Financial Literacy on Savings Behaviour

Given such limitations, especially in interpreting inter-ethnic savings behaviour from existing databases, there remains a need to empirically examine the relationship between financial literacy and savings behaviour. Given substantial investments made by the government in financial education initiatives, it has become imperative to assess the extent to which these programmes influence financial outcomes, particularly savings behaviour.

The OECD defines financial literacy as "a combination of financial awareness, knowledge, skills, attitudes and behaviours necessary that enables a person to make sound financial decisions and achieve financial well-being" (Organisation for Economic Co-operation and Development, n.d.). The OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion recommends that any measure of financial literacy comprise three aspects financial knowledge, financial behaviour, and financial attitude. This OECD framework is adopted into the Bank Negara Malaysia's Financial Capability and Inclusion Demand Side Survey (Bank Negara Malaysia 2022) - which has been among the primary resources for the development of national strategies on financial literacy and well-being.

However, the literature offers alternative definitions of financial literacy. It is sometimes distinguished from financial behaviour, knowledge, and attitude. Some studies, for example, had also used "financial literacy" interchangeably with financial knowledge or financial education (Loke, Chin, and Hamid 2022).

There is a case to be made to limit the scope of financial literacy to its financial knowledge component to avoid confusion and for simplicity (De Beckker, De Witte, and Van Campenhout 2020). The findings of such nationwide empirical investigation will be helpful to support and improve the FEN's efforts to promote effective delivery of financial education initiatives to Malaysians in a sustainable manner. This gives rise to a fifth and most important research question.

Research Question 5:

How does financial knowledge influence the savings behaviour of Malaysians?

Making The Case for an Updated Investigation of Savings Behaviour

As mentioned, our pilot study in 2024 did not represent a stratified, national sample, thus prompting the need for an investigation into the role and influence of different financial socialisation agents on various subgroups in Malaysia. It also suggests the significance of underexplored financial socialisation agents, namely religion, culture, and social media. Curiously, for the Bumiputera community, the pilot may challenge the role of family members as financial socialisation agents as a primary agent, as suggested by most major studies. Thus, this paper makes the case for a nationwide study to test the validity of the family financial socialisation theory on savings behaviour. It also aims to explore other agents that may have emerged in recent times or agents that had been overlooked by the predominant literature.

Such a study will contribute to the empirical financial socialisation literature as most studies done in Malaysia are limited to micro sample sets such as university students or public service (Loke 2024; M. Fazli Sabri and Masud 2018; Fazli Sabri, Cook, and Gudmunson 2012). While these studies offer some insights into the topic, they lack external validity and cannot be generalised for policymakers to formulate an impactful and evidence-based decision. This study should also aim to address this gap by conducting a nationwide representative survey that can provide a macro-level insight for policymakers.

With the launch of the National Strategy for Financial Literacy 2.0, the government's focus on enhancing financial literacy to improve financial behaviour appears to be on the right track. However, we believe that not enough attention is being given to understanding more foundational causes of financial literacy and financial behaviour, particularly in the form of financial socialisation processes that Malaysia's diverse population have undergone. A deeper understanding of financial socialisation processes will potentially improve the effectiveness of financial literacy programmes and ultimately improve Malaysians' financial behaviour.



References

- Abdul Ghafoor, Khalid, and Muhammad Akhtar. 2024. "Parents' Financial Socialization or Socioeconomic Characteristics: Which Has More Influence on Gen-Z's Financial Wellbeing?" Humanities and Social Sciences Communications 11 (1): 1-16. https://doi.org/10.1057/S41599-024-03007-3;SUBJMETA=4000, 4001,4006;KWRD=BUSINESS+AND+MANAGEMENT,FINANCE.
- Abdul Khalid, Muhammed. 2011. "Household Wealth in Malaysia: Composition and Inequality among Ethnic Groups." Jurnal Ekonomi Malaysia 45:71–80.
- Abdullah, Naziruddin, and M. Shabri Abd. Majid. 2009. "The Influence of Religiosity, Income and Consumption on Saving Behaviour: The Case of International Islamic University Malaysi." Iqtisad 4 (1): 37–55. https://doi.org/10.20885/IQTISAD.VOL4.ISS1.ART3.
- Abdullah, Naziruddin, and M. Shabri Abd.Majid. 2003. "The Influence of Religiosity, Income And Consumption on Saving Behaviour: The Case of International Islamic University Malaysia (IIUM)." Iqtisad Journal of Islamic Economics 4 (1): 37-55. https://doi.org/10.20885/IQTISAD.VOL4.ISS1.ART3.
- Agensi Kaunseling dan Pengurusan Kredit. 2018. "Financial Behaviour and State of Financial Well-Being of Malaysian Working Adults."
- Course | Akpk." February 17, 2023. https://www.akpk.org.my/akpk-thirty-nine-institutions-higherlearning-offer-personal-financial-management-course.
- more-seek-help-pay-debts.
- Agnew, Stephen, and Trudi Cameron-Agnew. 2015. "The Influence of Consumer Socialisation in the Home on Gender Differences in Financial Literacy." International Journal of Consumer Studies 39 (6): 630-38. https://doi.org/10.1111/ijcs.12179.
- Aminuddin, Aisyah, Shahnaz Ismail, Nurasyikin Jamaludin, and Nadia Mohd Nawi. 2022. "What Drives Saving Behaviour among Undergraduate Students of Universiti Malaysia Terengganu?" Universiti Malaysia Terengganu Journal of Undergraduate Research 4 (2): 81–88. https://doi.org/10.46754/ UMTJUR.V4I2.277.
- Ari, Yılmaz. 2023. "The Role and Functions of the Family in the Religious Socialization Process." In International Izmir Congress on Humanities and Social Sciences Proceedings Book, edited by Timilehin Olubiyi, Magruba Matkulieva, and B. F. Fazil, 268-86. Izmir: BZT Academy. https://www. academia.edu/105519218/THE_ROLE_AND_FUNCTIONS_OF_THE_FAMILY_IN_THE_RELIGIOUS_ SOCIALIZATION_PROCESS.
- Atchley, Robert C. 1989. "A Continuity Theory of Normal Aging." The Gerontologist 29 (2): 183-90. https:// doi.org/10.1093/GERONT/29.2.183.
- Bank Negara Malaysia. 2022. "The Financial Capability and Inclusion Demand Side Survey 2021."
- -. 2025. "Annual Report 2024." https://bnm.gov.my/documents/20124/8440087/fsr22h1_en_box1. pdf.
- Beckker, Kenneth De, Kristof De Witte, and Geert Van Campenhout. 2020. "The Role of National Culture in Financial Literacy: Cross-Country Evidence." Journal of Consumer Affairs 54 (3): 912–30. https:// doi.org/10.1111/JOCA.12306.

- Campenhout, Geert Van. 2015. "Revaluing the Role of Parents as Financial Socialization Agents in Youth Financial Literacy Programs." Journal of Consumer Affairs 49 (1): 186-222. https://doi.org/10.1111/ JOCA.12064.
- Carpena, Fenella, Shawn Cole, Jeremy Shapiro, and Bilal Zia. 2011. "Unpacking the Causal Chain of Financial Literacy." http://econ.worldbank.org.
- Chakraborty, Anujit. 2019. "Present Bias." SSRN Electronic Journal, September. https://doi.org/10.2139/ SSRN.3474231.
- Cho, Esther Yin Nei. 2024. "A Qualitative Investigation of Financial Decision-Making and Enabling Factors among Ethnic Minority Young Adults in Hong Kong." Humanities and Social Sciences Communications 11 (1): 1-15. https://doi.org/10.1057/S41599-024-03605-1;SUBJMETA=160,4006,4014,5 23;KWRD=EDUCATION,FINANCE,SOCIOLOGY.
- Chui, Andy C.W., and Chuck C.y. Kwok. 2008. "National Culture and Life Insurance Consumption." Journal of International Business Studies 39 (1). https://www.jstor.org/stable/25483247.
- Cole, Shawn, and Nilesh Fernando. 2008. "Assessing the Importance of Financial Literacy." ADB Finance for the Poor 9 (3).
- Cole, Shawn, Thomas Sampson, and Bilal Zia. 2011. "Prices or Knowledge? What Drives Demand for Financial Services in Emerging Markets?" Journal of Finance 66 (6): 1933–67. https://doi.org/10.1111/ J.1540-6261.2011.01696.X;SUBPAGE:STRING:ABSTRACT;WEBSITE:WEBSITE:PERICLES;REQUESTEDJ OURNAL:JOURNAL:15406261;WGROUP:STRING:PUBLICATION.
- Danes, Sharon M. 1994. "Parental Perceptions of Children's Financial Socialization." Journal of Financial Counseling and Planning 5 (January):127-49. https://experts.umn.edu/en/publications/parentalperceptions-of-childrens-financial-socialization.
- Employees Provident Fund. 2024a. "EPF Releases Belanjawanku 2024/2025 And Retirement Income Adequacy Framework." December 12, 2024. https://www.kwsp.gov.my/en/w/epf-releasesbelanjawanku-2024/2025-and-retirement-income-adequacy-framework.
- —. 2024b. "Savings of EPF Members by Savings Level Group (As at 31 Dec 2023)," March.
- Falicov, Celia J. 2001. "The Cultural Meanings of Money: The Case of Latinos and Anglo-Americans." American Behavioral Scientist, no. 2, 313-28. https://doi.org/10.1177/00027640121957088.
- Falk, Armin, Anke Becker, Thomas Dohmen, Benjamin Enke, David B. Huffman, and Uwe Sunde. 2017. "Global Evidence on Economic Preferences," October. https://doi.org/10.3386/W23943.
- Fazli Sabri, Mohamad, Eugene Cheng-Xi Aw, Abdul Rahim, Ahmad Sufian Burhan, Amim Othman, and Megawati Simanjuntak. 2021. "Financial Literacy, Behavior and Vulnerability Among Malaysian Households: Does Gender Matter?" International Journal of Economics and Management Journal Homepage 15 (2): 241–56. http://www.ijem.upm.edu.my.
- Fazli Sabri, Mohamad, Christine C. Cook, and Clinton G. Gudmunson. 2012. "Financial Well-being of Malaysian College Students." Asian Education and Development Studies 1 (2): 153-70. https://doi. org/10.1108/20463161211240124.
- Fernandes, Daniel, John G. Lynch, and Richard G. Netemeyer. 2014. "Financial Literacy, Financial Education, and Downstream Financial Behaviors." Management Science 60 (8): 1861–83. https:// doi.org/10.1287/MNSC.2013.1849;WGROUP:STRING:PUBLICATION.

- Financial Education Network. n.d. "About Financial Education Network." Accessed May 13, 2025. https://www.fenetwork.my/about/.
- Fulk, Martha, and Kenneth John White. 2018. "Exploring Racial Differences in Financial Socialization and Related Financial Behaviors among Ohio College Students." Cogent Social Sciences 4 (1): 1–16. https://doi.org/10.1080/23311886.2018.1514681.
- Goldberg, Jessica. 2014. "Products and Policies to Promote Saving in Developing Countries." IZA World of Labor, October. https://doi.org/10.15185/izawol.74.
- Grohmann, Antonia, Roy Kouwenberg, and Lukas Menkhoff. 2015. "Childhood Roots of Financial Literacy." SSRN Electronic Journal, August. https://doi.org/10.2139/SSRN.2664468.
- Gudmunson, Clinton G., and Sharon M. Danes. 2011. "Family Financial Socialization: Theory and Critical Review." Journal of Family and Economic Issues. https://doi.org/10.1007/s10834-011-9275-y.
- Gutter, Michael, Zeynep Copur, and Selena T. Garrison. 2009. "Which Students Are More Likely to Experience Financial Socialization Opportunities? Exploring the Relationship between Financial Behaviors and Financial Well-Being of College Students." 2009-WP-07. Networds Financial Institute . Elsevier BV. https://doi.org/10.2139/SSRN.1432523.
- Gutter, Michael S., Selena Garrison, and Zeynep Copur. 2010. "Social Learning Opportunities and the Financial Behaviors of College Students." Family and Consumer Sciences Research Journal 38 (4): 387–404. https://doi.org/10.1111/j.1552-3934.2010.00034.x.
- Hira, Tahira K., Mohamad Fazli Sabri, and Cäzilia Loibl. 2013. "Financial Socialization's Impact on Investment Orientation and Household Net Worth." International Journal of Consumer Studies 37 (1): 29–35. https://doi.org/10.1111/ijcs.12003.
- Institute for Capital Market Research. 2021. "The Rise of Millennial & Gen Z Investors: Trends, Opportunities, and Challenges for Malaysia."
- Ismail, Shafinar, Nadia Syazwani Khairuddin, Nurul Ezaili Alias, Wei Loon- Koe, and Rozana Othman. 2018. "An Empirical Analysis of Saving Behavior among Malaysian Employees." International Journal of Academic Research in Business and Social Sciences 8 (10). https://doi.org/10.6007/IJARBSS/V8-I10/4822.
- Ivan, Beutler, and Lori Dickson. 2008. "Consumer Economic Socialization." In Handbook of Consumer Finance Research, edited by J. J. Xiao, 83–102. New York: Springer. https://doi.org/10.1007/978-0-387-75734-6_6.
- Jamal, Amer Azlan Abdul, Wijaya Kamal Ramlan, Rosle Mohidin, and Zaiton Osman. 2016. "Determinants of Savings Behavior Among University Students in Sabah, Malaysia." International Journal of Accounting, Finance and Business, September. https://www.academia.edu/30144458/ Determinants_of_Savings_Behavior_Among_University_Students_in_Sabah_Malaysia.
- John, Deborah Roedder. 1999. "Consumer Socialization of Children: A Retrospective Look at Twenty-Five Years of Research." Journal of Consumer Research 26 (3): 183–213. https://doi.org/10.1086/209559.
- Jorgensen, Bryce L., Diane Foster, Jakob F. Jensen, and Elisabete Vieira. 2017. "Financial Attitudes and Responsible Spending Behavior of Emerging Adults: Does Geographic Location Matter?" Journal of Family and Economic Issues 38 (1): 70–83. https://doi.org/10.1007/S10834-016-9512-5/METRICS.
- Kim, J., and S. Chatterjee. 2013. "Childhood Financial Socialization and Young Adults' Financial Management." Journal of Financial Counseling and Planning 24 (1): 61–79. https://doi.org/tbd.

- Kunovskaya, Irina A., Brenda J. Cude, and Natalia Alexeev. 2014. "Evaluation of a Financial Literacy Test Using Classical Test Theory and Item Response Theory." Journal of Family and Economic Issues 35 (4): 516–31. https://doi.org/10.1007/S10834-013-9386-8/METRICS.
- LeBaron, Ashley B., and Heather H. Kelley. 2021. "Financial Socialization: A Decade in Review." Journal of Family and Economic Issues. Springer. https://doi.org/10.1007/s10834-020-09736-2.
- Lebaron-Black, Ashley B., Heather H. Kelley, E. Jeffrey Hill, Bryce L. Jorgensen, and Jakob F. Jensen. 2022. "Financial Socialization Agents and Spending Behavior of Emerging Adults: Do Parents, Peers, Employment and Media Matter?" Journal of Financial Counseling and Planning 34 (1): 6-19. https://doi.org/10.1891/JFCP-2021-0036.
- Lin, Qi, and Jinkook Lee. 2004. "Consumer Information Search When Making Investment Decisions." Financial Services Review 13.
- Loibl, Cazilia, and Tahira K. Hira. 2006. "A Workplace and Gender-Related Perspective on Financial Planning Information Sources and Knowledge Outcomes." Financial Services Review 15 (1). https://www.proquest.com/openview/e16902c3c84b6736b2cabc940e401236/1?cbl=31458&pqorigsite=gscholar.
- Loke, Yiing Jia. 2024. "EXPLORING FAMILY FINANCIAL SOCIALISATION ACTIVITIES IN MALAYSIA." Kajian Malaysia 42 (2): 1-27. https://doi.org/10.21315/km2024.42.2.1.
- Loke, Yiing Jia, Phaik Nie Chin, and Fazelina Sahul Hamid. 2022. "Financial Literacy in Malaysia, 2015-2018." Malaysian Journal of Economic Studies. Malaysian Economic Association. https://doi. org/10.22452/MJES.vol59no2.1.
- Luhr, Sigrid. 2018. "How Social Class Shapes Adolescent Financial Socialization: Understanding Differences in the Transition to Adulthood." Journal of Family and Economic Issues 39 (3): 457–73. https://doi.org/10.1007/S10834-018-9573-8/METRICS.
- Luong, Gloria, Antje Rauers, and Karen L. Fingerman. 2015. "The Multifaceted Nature of Late-Life Socialization: Older Adults as Agents and Targets of Socialization." Edited by J. E. Grusec and P. D. Hastings, 109-31. https://books.google.com/books/about/Handbook_of_Socialization_Second_ Edition.html?hl=es&id=vTRFBQAAQBAJ.
- Lusardi, Annamaria. 2008. "Household Saving Behavior: The Role of Financial Literacy, Information, and Financial Education Programs."
- Lusardi, Annamaria, and Olivia S. Mitchell. 2007. "Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy, and Housing Wealth." Journal of Monetary Economics 54 (1): 205-24. https://doi.org/10.1016/J.JMONECO.2006.12.001.
- —. 2014. "The Economic Importance of Financial Literacy: Theory and Evidence." Journal of Economic Literature 52 (1): 5-44. https://doi.org/10.1257/jel.52.1.5.
- Lusardi, Annamaria, Olivia S. Mitchell, and Vilsa Curto. 2009. "Financial Literacy Among the Young." SSRN Electronic Journal, August. https://doi.org/10.2139/SSRN.1476982.
- Lusardi, Annamaria, Olivia S Mitchell, and George Washington. 2011. "Financial Literacy around the World: An Overview," June. https://doi.org/10.3386/W17107.
- Lusardi, Annamaria, and Peter Tufano. 2009. "Debt Literacy, Financial Experiences, and Overindebtedness," March. https://doi.org/10.3386/W14808.

- Mad, Salina, Nor Alwani Omar, Mahfuzah Ahmad, and Maizura Meor Zawawi. 2024. "The Impact of Financial Literacy on Saving Habits among Malaysian Youth: A Gender-Based Analysis." International Journal of Research and Innovation in Social Science VIII (VIII): 4381-92. https://doi. org/10.47772/IJRISS.2024.8080335.
- Malay Mail. 2024. "Malaysians' Financial Literacy Surpasses Global Average, but 61pc Still Lack Emergency Savings, Says BNM Deputy Governor ." Malay Mail, November 17, 2024. https://www. malaymail.com/news/money/2024/11/17/malaysians-financial-literacy-surpasses-global-averagebut-61pc-still-lack-emergency-savings-says-bnm-deputy-governor/157181.
- McManus, Deborah Tessitore. 2024. "The Intersection of Spirituality, Religiosity, and Lifestyle Practices in Religious Communities to Successful Aging: A Review Article." Religions 15 (4): 478. https://doi. org/10.3390/REL15040478.
- Md. Sapir @ Md. Shafik, A. S., and Wan Marhaini Wan Ahmad. 2020. "Financial Literacy among Malaysian Muslim Undergraduates." Journal of Islamic Accounting and Business Research 11 (8): 1515-29. https://doi.org/10.1108/JIABR-10-2017-0149/FULL/XML.
- Mohd Isa, Salmi, and Juanita Ooi Kim. 2024. "Examining Factors of Savings Behavior Among Malaysian Youth." Journal of Governance and Integrity 7 (1): 650–67. https://doi.org/10.15282/JGI.7.1.2024.9733.
- Mokhlis, Safiek. 2009. "Relevancy and Measurement of Religiosity in Consumer Behavior Research." International Business Research 2 (3). https://doi.org/10.5539/IBR.V2N3P75.
- Moschis, George P., and Gilbert A. Churchill. 1978. "Consumer Socialization: A Theoretical and Empirical Analysis." Journal of Marketing Research 15 (4): 599. https://doi.org/10.2307/3150629.
- Nawi, H. M., O. H. Siong, and C. Y. Nee. 2020. "The Effects of Human Capital, Financial Socialisation Agents, and Motivation on Financial Literacy among Private University Students in Malaysia." International Journal of Academic Research in Business and Social Sciences 10 (10). https://doi. org/10.6007/IJARBSS/V10-I10/7737.
- OpenAI. 2025. AI-generated image of a Family Saving Money with a Transparent Bowl Filled with Coins. Generated by ChatGPT (DALL-E).
- Organisation for Economic Co-operation and Development. n.d. "International Network on Financial Education (INFE) | OECD." Accessed May 9, 2025. https://www.oecd.org/en/networks/infe.html.
- Pahlevan Sharif, Saeed, Ashraf Sadat Ahadzadeh, and Jason James Turner. 2020. "Gender Differences in Financial Literacy and Financial Behaviour Among Young Adults: The Role of Parents and Information Seeking." Journal of Family and Economic Issues 41 (4): 672-90. https://doi.org/10.1007/ s10834-020-09674-z.
- Perbadanan Insurans Deposit Malaysia. 2021. "Why Don't We Save More: Behavioural Principles." Household Accounts. OECD. https://doi.org/10.1787/cfc6f499-en.
- Plexa, Andreia, Helena Gonçalves, Rosa Castanheira, Sofia Marçal, Olga Valentim, César Fonseca, and Lara Guedes de Pinho. 2021. "Impact of Socialization on Active Aging in the Geriatric Population: A Systematic Literature Review." In Gerontechnology III. IWoG 2020. In Lecture Notes in Bioengineering, edited by J. Garcia-Alonso and C. Fonseca, 202-16. Springer, Cham. https://doi. org/10.1007/978-3-030-72567-9_20.
- Rhine, Sherrie L. W., and Maude Toussaint-Comeau. 2002. "Adult Preferences for the Delivery of Personal Finance Information." Journal of Financial Counseling and Planning 13 (2). https://www. afcpe.org/news-and-publications/journal-of-financial-counseling-and-planning/volume-13-2/ adult-preferences-for-the-delivery-of-personal-finance-information/.

- RinggitPlus. 2024. "Malaysian Financial Literacy Survey 2024," September.
- Robertson-Rose, Lynne. 2020. "Because My Father Told Me To": Exploratory Insights into Parental Influence on the Retirement Savings Behavior of Adult Children." Journal of Family and Economic Issues 41 (2): 364-76. https://doi.org/10.1007/S10834-019-09643-1/TABLES/1.
- Rooij, Maarten van, Annamaria Lusardi, Rob J Alessie, and DNBNL Annamaria Lusardi George Washington. 2011. "Financial Literacy, Retirement Planning, and Household Wealth," August. https://doi.org/10.3386/W17339.
- Sabri, M. Fazli, and J. Masud. 2018. "Sosialisasi Kewangan Dalam Kalangan Remaja." Malaysian Journal of Consumer and Family Economics 5:21-31. https://www.researchgate.net/publication/330010303_ SOSIALISASI_KEWANGAN_DALAM_KALANGAN_REMAJA.
- Sabri, Mohamad Fazli, and Leila Falahati. 2012. "Estimating a Model of Subjective Financial Well-Being among College Students." International Journal of Humanities and Social Science 2 (18). www. ijhssnet.com.
- Sabri, Mohamad Fazli, Maurice MacDonald, Tahira K. Hira, and Jariah Masud. 2010. "Childhood Consumer Experience and the Financial Literacy of College Students in Malaysia." Family and Consumer Sciences Research Journal 38 (4): 455-67. https://doi.org/10.1111/J.1552-3934.2010.00038.X;JOURNAL: JOURNAL:15523934;WGROUP:STRING:PUBLICATION.
- Serido, Joyce, Ashley B. Le Baron, Lijun Li, Emily Parrott, and Soyeon Shim. 2020. "The Lengthening Transition to Adulthood: Financial Parenting and Recentering during the College-to-Career Transition." Journal of Family Issues 41 (9): 1626-48. https://doi.org/10.1177/0192513X19894662/ASSET/898336B6-1850-459C-8D35-9452C2500BF9/ASSETS/IMAGES/LARGE/10.1177_0192513X19894662-FIG3.JPG.
- Shim, Soyeon, Bonnie L. Barber, Noel A. Card, Jing Jian Xiao, and Joyce Serido. 2010. "Financial Socialization of First-Year College Students: The Roles of Parents, Work, and Education." Journal of Youth and Adolescence 39 (12): 1457-70. https://doi.org/10.1007/S10964-009-9432-X/METRICS.
- Shim, Soyeon, Joyce Serido, and Bonnie L. Barber. 2011. "A Consumer Way of Thinking: Linking Consumer Socialization and Consumption Motivation Perspectives to Adolescent Development." Journal of Research on Adolescence 21 (1): 290-99. https://doi.org/10.1111/J.1532-7795.2010.00730.X;CSUBTYPE:S TRING:SPECIAL;PAGE:STRING:ARTICLE/CHAPTER.
- Thaler, R. 2016. "Behavioral Economics: Past, Present and Future." In Presidential Address at the 2016 American Economic Association Annual Meeting.
- The Centre for Youth Research and Practice. 2020. "A Study on Education and Career Pathways of Ethnic Minority Youth in Hong Kong." Hong Kong.
- The Edge. 2023. "Pandemic-Era Withdrawals Significantly Eroded Savings Levels of Bumiputera and Indian EPF Members, Says Fund's CEO." The Edge. March 4, 2023. https://theedgemalaysia.com/ node/657796.
- Thomas, Ashok, and Luca Spataro. 2018. "Financial Literacy, Human Capital and Stock Market Participation in Europe." Journal of Family and Economic Issues 39 (4): 532-50. https://doi. org/10.1007/S10834-018-9576-5/METRICS.
- Trommsdorff, Gisela. 2008. "Intergenerational Relations and Cultural Transmission." Cultural Transmission: Psychological, Developmental, Social, and Methodological Aspects, January, 126-60. https://doi.org/10.1017/CBO9780511804670.008.

- Varcoe, Karen P., Shirley Peterson, Connie Garrett, Martin Allen, Paula Rene, and Connie Costello. 2001. "What Teens Want to Know about Financial Management." Journal of Family and Consumer Sciences 93 (2): 30-34. https://www.proquest.com/openview/b3a3edcaea57299eb4dcaac3a6596c4 f/1?cbl=41036&pq-origsite=gscholar.
- Wijaya, Haykal Rafif, Sri Rahayu Hijrah Hati, Irwan Adi Ekaputra, and Salina Kassim. 2024. "The Impact of Religiosity and Financial Literacy on Financial Management Behavior and Well-Being among Indonesian Muslims." Humanities and Social Sciences Communications 11 (1): 1-13. https://doi. org/10.1057/S41599-024-03309-6;SUBJMETA=4000,4001,4006,4014;KWRD=BUSINESS+AND+MANA GEMENT, FINANCE.
- Wu, Shiyou, Mathieu R. Despard, and Gina Chowa. 2017. "The Role of Parents in Introducing Children to Financial Services: Evidence from Ghana." Journal of Family and Economic Issues 38 (3): 453-62. https://doi.org/10.1007/S10834-017-9519-6/METRICS.
- Zhao, Haidong, and Lini Zhang. 2020. "Talking Money at Home: The Value of Family Financial Socialization." International Journal of Bank Marketing 38 (7): 1617-34. https://doi.org/10.1108/IJBM-04-2020-0174.
- Zulkarnain, Nur Muzdalifah, R Zaimah, and M. S. Sarmila. 2024. "Financial Socialization among the Millennial Generation." International Journal of Academic Research in Business and Social Sciences 14 (3). https://doi.org/10.6007/IJARBSS/v14-i3/21058.