Jurnal Pendidikan Malaysia 47(2)(2022):25–44 DOI: http://dx.doi.org/10.17576/JPEN-2022-47.25-44

A Systematic Review of Financial Literacy among Malaysian B40 Households

Ananthan Munisamy & Sheerad Sahid

ABSTRACT

Despite the claim that finance management could be a potential risk factor to financial behaviours, there is a growing need for an in-depth exploration of the characteristics of a household's finance management in the context of financial literacy. This paper aims to analyse the level of financial literacy among low-income households (B40) in Malaysia based on a review of past literature. This study centres on how social and economic factors such as education level and financial well-being influence the financial literacy level of B40 households as well as on the interrelationship between financial knowledge, financial attitude, and financial behaviour. Design/methodology/approach – Using the PRISMA statement, a systematic review was conducted across four databases namely, Scopus, PubMed, Web of Knowledge and PsycArticles where research articles with Malaysian household financial literacy as the main feature are considered. Twelve articles were selected and two main trajectories were identified: (1) Context at-risk: Financial Literacy of lowincome households (B40), (2) Target at-risk: Financial literacy and financial wellbeing, socioeconomic and sociodemographic factors on low-income households (B40). Findings – This systematic review reveals that the financial literacy level among B40 households remains low in most developing countries. Various socio-economic and demographic factors such as income, marital status and educational attainment influence the financial literacy level of B40 households, potentially describing the existing relationship between financial literacy, financial well-being, and their contribution to the development of socioeconomic status (SES) of B40 households. In the Malaysian context, studies in this area remain underdeveloped and disorganized. Relevant studies are often concentrated on basic quantitative investigations. The National Financial Literacy Network emerged as the most widely investigated context with the highest risk influencing financial literacy behaviours. Additionally, low-income households also emerged as a particularly vulnerable category. Originality/value – Financial literacy is significant for low-income households (B40) to ensure their financial wellbeing. Research in this field can be extended using Structural Equation Modelling (SEM) methods for a deeper understanding of the meanings of financial literacy among low-income households (B40).

Keywords: Low-income households (B40), financial literacy, financial wellbeing, level of education, socioeconomic status (SES).

ABSTRAK

Walaupun pengurusan kewangan didakwa sebagai faktor risiko kepada tingkah laku kewangan, terdapat keperluan yang semakin meningkat untuk penerokaan mendalam mengenai ciri-ciri pengurusan kewangan isi rumah dalam konteks literasi kewangan. Manuskrip ini bertujuan menganalisis tahap literasi kewangan dalam kalangan isi rumah berpendapatan rendah (B40) di Malaysia berdasarkan ulasan literatur terdahulu. Kajian ini memberi tumpuan kepada bagaimana faktor sosial dan ekonomi seperti tahap pendidikan dan kesejahteraan kewangan mempengaruhi tahap literasi kewangan isi rumah B40 serta hubungan antara pengetahuan kewangan, sikap kewangan, dan tingkah laku kewangan. Rekabentuk/metodologi/pedekatan – Menggunakan penyataan PRISMA, satu kajian sistematik telah dijalankan merentasi empat pangkalan data iaitu Scopus, PubMed, Web of Knowledge dan PsycArticles di mana artikel penyelidikan dengan literasi kewangan isi rumah Malaysia sebagai ciri utama dipertimbangkan. Dua belas artikel telah dipilih dan dua trajektori utama dikenal pasti: (1) Konteks berisiko: Literasi kewangan isi rumah berpendapatan rendah (B40), (2) Sasaran berisiko: Literasi kewangan dan kesejahteraan kewangan, faktor sosioekonomi dan sosiodemografi pada isi rumah berpendapatan rendah (B40). Dapatan – Kajian sistematik ini mendedahkan bahawa tahap literasi kewangan dalam kalangan isi rumah B40 kekal rendah di kebanyakan negara membangun. Pelbagai faktor sosioekonomi dan demografi seperti pendapatan, status perkahwinan, dan pencapaian pendidikan mempengaruhi tahap literasi kewangan isi rumah B40, yang berpotensi menjelaskan hubungan sedia ada antara literasi kewangan, kesejahteraan kewangan, dan sumbangan mereka terhadap pembangunan status sosioekonomi (SES) isi rumah B40. Dalam konteks Malaysia, kajian dalam bidang ini masih kurang berkembang dan tidak tersusun. Kajian yang relevan

sering tertumpu pada penyiasatan kuantitatif asas. Rangkaian Literasi Kewangan Kebangsaan muncul sebagai konteks yang paling banyak disiasat dengan risiko tertinggi yang mempengaruhi tingkah laku literasi kewangan. Selain itu, isi rumah berpendapatan rendah juga muncul sebagai kategori yang sangat terdedah. Keaslian/nilai – Literasi kewangan adalah penting untuk isi rumah berpendapatan rendah (B40) bagi memastikan kesejahteraan kewangan mereka. Kajian dalam bidang ini boleh diperluaskan dengan menggunakan kaedah Pemodelan Persamaan Struktur (SEM) untuk pemahaman yang lebih mendalam tentang makna literasi kewangan dalam kalangan isi rumah berpendapatan rendah (B40).

Kata kunci: Isi rumah berpendapatan rendah (B40), literasi kewangan, kesejahteraan kewangan, tahap pendidikan, status sosioekonomi (SES).

INTRODUCTION

The increasing complexity of extensive financial products and services available in the marker complicates the task of money management especially for those in low-income households (B40). In Malaysia, there is an abundance of financial products even for lower-income individuals, providing them with alternatives e.g. bank account can be opened without minimum deposit (Central Bank of Malaysia, 2020; Jabatan Perangkaan Malaysia, 2016b). Understanding the financial world and having basic financial knowledge allows an individual to make decisions on the best financial products. Lee May Poh & Mohamad Fazli Sabri (2017) stressed the need for financial competence (financial literacy) as the responsibility for investing and saving has shifted from government, employers (Singhal & Singh, 2020) and parents (who are concerned about their own retirements) (Deb, 2020) onto individuals. Studies have shown evidence for a lower level of financial literacy particularly among youth (Agarwalla et al., 2013; Lusardi et al., 2010; Van Rooij et al., 2011), raising serious issues about an individual's capability in securing his financial well-being. The changing needs of the individual and the dynamic nature of financial products pose a dire need for continuous update of financial literacy among individuals across

age groups (Goyal & Kumar, 2021).

INTRODUCTION

The increasing complexity of extensive financial products and services available in the marker complicates the task of money management especially for those in low-income households (B40). In Malaysia, there is an abundance of financial products even for lower-income individuals, providing them with alternatives e.g. bank account can be opened without minimum deposit (Central Bank of Malaysia, 2020; Jabatan Perangkaan Malaysia, 2016b). Understanding the financial world and having basic financial knowledge allows an individual to make decisions on the best financial products. Lee May Poh & Mohamad Fazli Sabri (2017) stressed the need for financial competence (financial literacy) as the responsibility for investing and saving has shifted from government, employers (Singhal & Singh, 2020) and parents (who are concerned about their own retirements) (Deb, 2020) onto individuals. Studies have shown evidence for a lower level of financial literacy particularly among youth (Agarwalla et al., 2013; Lusardi et al., 2010; Van Rooij et al., 2011), raising serious issues about an individual's capability in securing his financial well-being. The changing needs of the individual and the dynamic nature of financial products pose a dire need for

continuous update of financial literacy among individuals across age groups (Goyal & Kumar, 2021).

Several government bodies and organisations have attempted to improve financial literacy at the individual level in their respective countries. In Australia, the Australian Securities and Investment Commission is launched (ASIC, 2011) while New Zealand developed the National Strategy for Financial Literacy (Hendriks, 2010). The Malaysian National Strategy for Financial Literacy (2019-2022) is entrusted to undertake efforts to improve financial literacy in the country. Financial literacy is important for both developing economies and developed economies as these countries endeavours to improve the financial well-being of their citizens. Financial literacy is considered a means of expediting financial well-being, facilitating the households with day-to-day financial tasks, dealing with a financial emergency and even lifting certain groups from the clutches of poverty (Ouachani et al., 2021).

The lack of financial well-being can strongly affect the socioeconomic status (SES) of specific groups (Kusairi et al., 2019; Mayan et al., 2017). According to Bank Negara Malaysia, (2020) and Jabatan Perangkaan Malaysia, (2016b): 40% of Malaysian households earn an average monthly income of below RM4830, indicating that their socio-economic status is well below a low level, reinforcing their need to improve their SES through financial literacy.

The Eleventh Malaysian Plan focuses on improving the living standards of the B40 household group and increasing the SES of B40 households (Mayan et al., 2017; Mohd. Amim Bin Othman, 2017; Siwar et al., 2019).

Khalid (2016) argues that the B40 households require economic balance and access to gain information and financial management knowledge, subsequently achieving financial well-being. Thus, financial well-being is a key element in measuring the achievement of socio-economic status or well-being. Therefore, the Malaysian government through the theme "Tethering People's Growth" in the Eleventh Malaysia Plan centres on increasing the income and financial well-being of B40 households. This effort is implemented through the first strategic thrust of the 11MP in enhancing a just society (Ministry of Economic Affairs, 2018; Ministry of Economic Affairs Malaysia, 2019; Unit Perancang Ekonomi, 2015). In the Financial Education Network (FEN) report, financial education encompasses financial literacy that involves imparting 'money wise' knowledge to households to achieve financial well-being and drive to improve their SES (Financial Education Network, 2019). In order to secure a higher number of Malaysians who are financially literate especially among B40 households in Malaysia, various aspects such as poverty, financial management, financial education and financial literacy need to be considered (Bank Negara Malaysia, 2019a, 2020; Ministry of Economic Affairs, 2018; Ministry of Economic Affairs Malaysia, 2019).

METHODOLOGY

This study attempts to provide an up-to-date review of studies on financial literacy among low-income households (B40) in Malaysia. The focus on Malaysian households is decided according to the economic crisis characterised by geographical, social, political and cultural determinants, which have specific consequences on the individual, relational and societal level. These dimensions are manifested in the B40 households, differentiating them from other types of households around the world.

INCLUSION/EXCLUSION CRITERIA

To be included in this review, studies need to meet the following inclusion criteria:

- 1. published between 2008 and 2020;
- 2. written in English;
- economic, business, and social science articles reporting the issue of financial literacy behaviour among B40 households in Malaysia;
- 4. studies that mention financial literacy in the

context of socioeconomic status of households including books, PhD theses, book chapters and editorials.

Research articles that are not peer-reviewed will be excluded to mitigate pervasive data quality issues. The timeframe of the previous 10 years of research was selected to identify possible gaps and growth in the research field.

DATA SOURCE AND SEARCH STRATEGY

The present study adheres to the PRISMA guidelines where the databases: Scopus, PubMed, Web of Knowledge and PsycArticles were searched. The following combinations of search terms were utilised: *financial literacy OR lowincome households OR financial wellbeing AND socioeconomic status (SES) OR determinants of financial literacy OR socioeconomic factors* and *financial literacy OR finance management OR financial education*. The abstracts for all these studies were extracted using the search strategy and is included or excluded based on the abovestated criteria.

SELECTION OF ARTICLES

Figure 1 presents the selection process of the relevant studies for the purpose of the systematic review. The initial database search yielded 381 articles where 276 were removed because they are either duplicates or irrelevant. The articles were first screened by title and abstract by two independent reviewers. The full text of the remaining 105 studies was then independently examined by the same reviewers to ensure that the inclusion/exclusion criteria are met. A total of 12 articles that qualifies for analysis were then selected.



Figure 1. Flow diagram of study selection.

Study	Type and instrument	Sample	Context and Country	Results related to financial literacy	Gaps/Findings/ Implications
1. Ani Coroline Grigion Potrch,Kelmar Mendes Vieira dan Wesley Mendes-Da-Silva (2016)	Quantitative approach: A survey design using self- administered questionnaires	Using a simple random sampling method. (n = 534).	Government and private universities in southern Brazil	Financial literacy is measured using a combination of dimensions namely, Financial Knowledge (FK), Financial Behaviour (FB), and Financial Attitude (FA).	This study can be extended to address the need for a rigorous assessment of financial literacy that grows at the same pace as the creation of more complex financial products.
2. Mageswari Ramasany, Husaina Banu Kenayathulla dan Muhammad Faizal A.Ghani (2018)	Quantitative approach: A survey design using self- administered questionnaires	Using a simple random sampling method. (n = 384).	Secondary school students from 13 segments were selected from 6 districts in Negeri Sembilan, Malaysia.	Financial literacy is measured using a combination of dimensions namely, Financial Knowledge (FK), Financial Behaviour (FB), and Financial Attitude (FA).	The level of financial literacy among students is moderate. Only two socio-economic factors namely, race and father's occupation can affect financial literacy.
				Socioeconomic factors are significant and can affect financial literacy.	
3.Chamhuri Siwar, Mohd Khairi Ismail, Nurul Ashikin alias & Siti Zalikha Zahari (2019)	Quantitative approach: Descriptive analysis using tables, pie charts and graphs.	Secondary data report	Used secondary data from reports published by government agencies such as the Ministrv of Economic	Vulnerability factors stem from economic, social, and environmental dimensions	The highest distribution of B40 households in 3 states namely Selangor, Perak, and Johor.
			Affairs, EPU, Institute, Khazana Nasional Research and the Department of Statistics Malaysia.		This is because B40 households are concentrated in urban areas related to employment opportunities, especially in the manufacturing, construction, and service sectors.
4.Nurshahirah Azman, Roza Hazli zakaria & Sabitha Marican (2017)	Quantitative approach: A survey design using self- administered questionnaires	Using a simple random sampling method. (n = 1155).	Households in the Klang Valley, Malaysia. The selection of the sample is done using a stratified multi-stage sampling method allowing economic	Economic factors such as household's income and sociodemographic factors such as education are significant and underpin the formation of household attitudes towards	The first dimension (self-perception) There is not much room for policy intervention because financing is important to purchase such as houses and cars.
			and socio-demographic factors to be considered in describing the population.	debt.	The second dimension (Holding value)
					Propose space for policy intervention, namely through education. Education in school on bad debt and the importance of saving can contribute to proper financial well-being.

to-face interview instruments. snowball method $(n = 6)$	composite Accepting and the Mertajam, Penang, sampling and the Mertajam, Penang, snowball method Malaysia. $(n = 6)$	Financial literacy planning is conducted by youth influenced by their total income and financial demands.	Suggest a financial planning literacy module. Youths that possess a good level of literacy suggest that they can afford to manage the country's economic resources well.
		by the level of education by the level of education and financial behaviour by socialization agents such as parents.	
Quantitative approach: A Using stratified survey design using self- random sampling administered questionnaires method. (n = 508).	 fied Respondents 40 years and below in the central zone of Malaysia, namely in). Putrajaya, Kuala Lumpur, Selangor, and Perak. 	Multiple regression analysis tests found that gender, financial status, obsession with money, self -esteem and financial stress are the main predictors in debt management studies.	Encourage employers to provide appropriate financial education programs for young workers who are exposed to issues and problems related to bankruptcy at a young age. Financial education in the workplace is seen as an intervention program that should be introduced.
Quantitative approach: A Using stratified survey design using self- random sampling administered questionnaires (n = 1400).	fied Respondents are 18 years pling and above in Rio Grande do .).	The marginal effect (upward tendency) is positive and statistically significant at the normal level for the following variables.	Need to create a model that allows the identification of Brazilian financial literacy level based on the socioeconomic and demographic variables.
		i) Gender (9.56%) ii) Education level (2.54%) iii)Individual income (6.32%) iv) Family income (3.73%)	This model can be useful, in helping various economic players devise financial strategies and products that suit customer profiles.
		67.1% of the respondents are categorized as having a low level of financial literacy.	Government can identify vulnerable groups and focus on actions to improve the financial literacy level of this group.

		Systematic review. Databases: 06 articles The level of financial Financial literacy level among Influence of various factors on Emerald, Web of Science, Biteracy among youth youth is low Various socio- financial literacy. Understanding the Embase. globally is based on conomic and demographic factors that contribute to or detract Embase. fmbase. from the acquisition of financial restrictions on selected income, marital status and literacy among youth can help create countries. influence the financial literacy among youth can help create influence the financial literacy level of youth. An policy interventions targeted at youth influence the financial literacy level of youth. An interrelationship exists between financial knowledge, financial attitude and financial attitude and financial	Systematic review. Databases: 74 articles This paper sheds light on FL as a concept is difficult to Highlights the relationship between Emerald, Web of Science, the principal methodologies define and measure. Several the content area and the study Embase. used in the literature to studies focus on the definition subjects. This paper suggests measure FL. No restrictions and the measure of this concept. puidance for future studies on on selected countries. Different items are used in measuring methods of FL. the literature and are mostly related to the study topics. The calculation methods employed	A critical literature review.22 articlesThis paper is an exploratoryThis study reviews the currentThe present study suggests variousDatabases: Emerald, Web of22 articlesresearch based onliterature on Financial Literacydemographic, socioeconomic factorsDatabases: Emerald, Web ofsecondary data sourcedand suggests areas that lackthat influence financial literacy suchScience, Embase.from journals,rigorous investigation.as age, gender, education, income,magazines. No restrictionson selected countries.on selected countries.	A brief systematic literature120 articlesExisting literature wasThe current study attemptedPapers published by selective globalreview. Databases: AcademicE-journals.examined using selectiveto review the financial literacypublishers in the last two decadesreview. Databases: Academickeywords and visitingresearch papers in a systematichave been reviewed to trace the trend,F-journals.scholarly databases such asmanner incorporating thehave been reviewed to trace the trend,SAGE, Oxford Universitymultiple facets ranging fromshaping future studies.Press, Rutledge, Emerald,factors to the present state ofand indian Accountingfinancial literacy literature indatabase studies.database
--	--	--	---	---	--

Three major themes were A conceptual framework was	identified: levels of financial proposed alongside potential areas		-		financial literacy exerts academic researchers of financial	on financial planning and literacy and identifies the relevant	behaviour, and the impact of areas that require investigation.	financial education.	Additionally, content analysis	of 175 papers has been	conducted. These are papers	from the last four years' articles	that were not covered in the	co-citation analysis. Emerging	themes include financial	capability, financial inclusion,	gender gap, tax & insurance	literacy, and digital financial	education.	
The study comprises a	review of 502 articles -	published in peer-reviewed	iournals from 2000 to 2019	JUULITAIS ILUILI 2000 10 2013.	Citation network, page-	rank analysis, co-citation	analysis, content analysis	and publication trends	were employed to identify	influential work, delineate	the intellectual structure	of the field, and identify	gaps. The most prominent	journals, authors, countries,	articles, and themes were	identified using bibliometric	analysis, followed by a	comprehensive analysis of	107 papers in the identified	
502 articles																				
A systematic review and	bibliometric analysis.	Databases: Academic	F-iolimals	L-JUULITAIS.																
12. Kirti Goyal & Satish	Kumar (2020)	~																		

Context at-risk: Financial Literacy of low-income	Target at-risk: Financial literacy and financial wellbeing
households (B40)	socioeconomic and sociodemographic factors of low- income households (B40)
32 studies	14 studies
Central of Bank Malaysia (2020)	Siwar et al. (2019)
Department of Statistics Malaysia (2020)	Kusairi et al. (2019)
Economic Planning Unit, 12th Malaysia plan (2015)	Bucher-Koenen et al. (2015)
OECD (2013)	OECD (2019)
OECD (2019)	Ute Filipiak (2015)
Potrich et al. (2016)	Rodrigo Garcia (2018)
Agarwalla et al. (2013)	Annamaria Lusardi (2011)
Lusardi et al. (2010)	Huang et al. (2013)
Jariwala (2013)	Nkundabanyanga et al. (2014)
Financial Education Network (2019)	Mahdzan et al. (2019)
Aqmin et al. (2018)	Abdullah Yusof (2019)
Atkinson & Messy (2012)	Candiya (2017)
Garg & Singh (2018)	Mohd. Amin (2017)
Remund (2010)	Fazli et al. (2017)
Van Rooij et al. (2011)	
Mustapha et al. (2018)	
Azam et al. (2018)	
Hoe. Kock (2015)	
Mansur et al. (2015)	
Sang (2020)	
Wai (2016)	
Allgoods & Walstad (2013)	
Zarinah Arshat (2018)	
Yunus (2020)	
Azmal et al. (2017)	
Hassan Sabri & Alwi (2019)	
Sawandi et al. (2018)	
Beckman (2019)	
Mayan et al. (2017)	
Lewis Mandell (2011)	
Klapper et al. (2012)	
Herd et al. (2012)	

Table 2.2 Research trajectories

DISCUSSION

CONTEXT AT RISK: FINANCIAL LITERACY OF LOW-INCOME HOUSEHOLDS (B40)

The first trajectory includes a wide range of research that investigated the three dimensions of financial literacy: financial knowledge, financial behaviour and financial attitude of B40 households, demonstrating a high prevalence of financial literacy programmes by Financial Education Network in Malaysia, emerging as a particularly "at-risk" context.

Households are defined as individuals who live in the same household and make economic decisions together. B40 households refer to the 40% of Malaysian households that earn the lowest income. In general, the average family income in 2019 is less than RM3,860 while in 2020, this income increases to RM4850. The B40 household category consists of four income groups, namely B1 (less than RM2500), B2 (RM2,501-RM3,170), B3 (RM3,171-RM3,970) and B4 (RM3,971-RM4,850), (Central of Bank Malaysia, 2020; Department of Statistics Malaysia, 2020). The classification of total household income earned in Malaysia involves three groups namely the B40, M40 and T20 (Department of Statistics Malaysia, 2016a). The B40 group consist of households with an income of RM4,360 and below while the households in the M40 and T20 groups have incomes of RM4,361-RM9,619 and RM9, 620 and above respectively (Department of Statistics Malaysia, 2016a).

These classes are determined based on income line which has long been employed in Malaysia. The Poverty Line Income (PGK) has been used to measure poverty since 1970 where the limitation of this categorisation is that it is based on income only. Although PGK can determine the category of poverty, it cannot account for the proper description of what poverty entails, preventing a detailed discussion of the situation faced by B40 households (Siwar et al., 2019).

The term financial literacy was first coined in 1787 in the USA, in John Adams' letter to Thomas Jefferson, admitting the need for financial literacy to overcome the confusion and widespread distress in America due to ignorance towards credit, circulation, and nature of coin by Financial Corps (International Monetary Fund, 2016). Subsequently, the term financial literacy is repetitively used by different researchers, organizations and governments and discussed differently (Angela A. Hung, Andrew M. Parker, 2009). Remund (2010) who reviewed past studies since 2000 considered conducting research on financial literacy a huge challenge as there is no well-defined, standard definition of financial literacy in the literature. Some researchers (Lusardi et al., 2010; Mokhtar et al., 2018) consider financial literacy synonymous with financial knowledge, conceptualising financial literacy as the knowledge of basic financial concepts and the ability to do simple calculations. On the other hand, Angela A. Hung, Andrew M. Parker (2009) and Lewis Mandell and Linda Schmid Klein (2011) defined financial literacy as "the ability to evaluate the new and complex financial instruments and make informed judgments in both choice of instruments and extent of use that would be in their own best long-run interests". Hasler & Lusardi (2017) highlight the importance of debt literacy as a component of financial literacy where it refers to the ability to make simple decisions regarding debt and applying knowledge of interest compounding to real-life situations. A widely accepted comprehensive definition by Organization for Economic Co-operation and Development (OECD) describes financial literacy as "knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life" (Financial Education Network, 2019, p.7). OECD focus on three basic comprehensive dimensions of financial literacy: financial knowledge, financial behaviour, and financial attitude (Atkinson & Messy, 2012; Morgan & Trinh, 2019; OECD, 2013, 2019).

Many researchers employ the financial literacy conceptual models proposed by OECD and Lusardi. It is evident through these models that individuals with high financial literacy possess better performance with numbers (Agarwalla et al., 2013; Atkinson & Messy, 2012; Lusardi et al., 2010; Van Rooij et al., 2011) savings (Agarwalla et al., 2013; Atkinson & Messy, 2012; Jariwala, 2013; Klapper et al., 2012), earnings on savings, identifying better interest rates (Deuflhard et al., 2015), risk diversification (Agarwalla et al., 2013; Atkinson & Messy, 2012; Lusardi & Mitchell, 2014) and risk tolerance (Jariwala, 2013; K. M. Yu et al., 2015). Researchers also reported that financially literate individuals have lower inflation expectations (Bruine de Bruin et al., 2010), possess an understanding of the impact of inflation on return (Agarwalla et al., 2013; Atkinson & Messy, 2012; Lusardi & Mitchell, 2014) usually borrow at a low cost and pay attention to fees (Annamaria Lusardi, 2011; Bucher-Koenen et al., 2017; Moore, 2004) besides feeling more empowered to make investment decisions and have proper spending behaviour (Jariwala, 2013).

Furthermore, financially literate individuals also possess debt literacy (Annamaria Lusardi, 2011) and understand the concept of interest compounding (Lusardi et al., 2010; Van Rooij et al., 2011) and time value of money (Agarwalla et al., 2013; Atkinson & Messy, 2012). They also tend to plan their retirement (Bucher-Koenen et al., 2017; Lusardi et al., 2010; Lusardi & Mitchell, 2014; Van Rooij et al., 2011), have higher spending capacity (Klapper et al., 2012), participate in stock markets and formal financial markets (Bucher-Koenen et al., 2017; Klapper et al., 2012; Van Rooij et al., 2011) and are less likely to experience low spending capacity during a crisis (Klapper et al., 2012). In this sense, they are better at facing macroeconomic and income shocks (Bucher-Koenen et al., 2017; Klapper et al., 2012). (Huston, 2010) further discovered that financially literate credit cardholders have no intention to use their card as a borrowing instrument and were not concerned about borrowing costs. (Salleh, 2015) found that non-welfare recipients are more likely to give correct responses to financial literacy questions as compared to welfare recipients in Brunei.

The low level of financial literacy is prevalent among US consumers (Huston, 2010), developed economies (Lusardi et al., 2010), youth in the USA, the Netherland and Germany (Bucher-Koenen et al., 2017), students from well-developed market economies in a survey of OECD countries (Nicolini & Haupt, 2019) and in India as well as Indonesia (Shawn Cole, 2009). This phenomenon is also observed among investors in Gujarat (Jariwala, 2013) and in the low level of debt literacy among Americans (Annamaria Lusardi, 2011). (Agarwalla et al., 2013) proposed a model of financial literacy involving three comprehensive dimensions of financial literacy: financial knowledge, financial attitude, and financial behaviour.

FINANCIAL KNOWLEDGE: DATA AND RESEARCH

A financially literate person will possess the basic knowledge of key financial concepts (OECD, 2013). It is a key dimension of financial literacy (Huston, 2010) and is considered synonymous with financial literacy (Bucher-Koenen et al., 2017; Hilgert et al., 2003; Huang et al., 2013; Lusardi et al., 2010) Various researchers have conceptualized the term financial knowledge by considering different content areas. (Huang et al., 2013) consider financial knowledge as an individual's understanding of financial concepts while (Huston, 2010) identify four main components of financial knowledge: basic money concepts, saving or investment, borrowing and protection concepts. (OECD, 2013) states that financial knowledge constitutes the understanding of five basic dimensions namely, simple interest, compound interest, time value of money, impact of inflation on price levels and impact of inflation on investment returns. Meanwhile, (Lusardi et al., 2010) found that the financial knowledge of Americans include - interest rate calculation, inflation and working of risk diversification.

(Herd et al., 2012) measured financial knowledge as an individual's knowledge of his own financial situations and treated it as a pre-requisite in making effective financial decisions. In examining the financial knowledge of Indians, (Ute Filipiak, 2015) used general financial knowledge questions (regarding government guarantees for deposits in national banks, the current value of their investments) and specific financial knowledge questions (regarding credit card, Kisan card). Individuals with high financial knowledge tend to understand better the basic financial concepts (Agarwalla et al., 2013; Atkinson & Messy, 2012; Lusardi et al., 2010; Remund, 2010; Van Rooij et al., 2011), interest compounding (Agarwalla et al., 2013; Annamaria Lusardi, 2011; Huang et al., 2013; Lusardi et al., 2010; Van Rooij et al., 2011) time value of money (Agarwalla et al., 2013; Atkinson & Messy, 2012; Van Rooij et al., 2011) impact of inflation on price levels (Agarwalla et al., 2013; Atkinson & Messy, 2012; Huang et al., 2013; Lusardi et al., 2010; Van Rooij et al., 2011), impact of inflation on investment returns (Agarwalla et al., 2013; Atkinson & Messy, 2012; Huang et al., 2013; Van Rooij et al., 2011), numeracy (Agarwalla et al., 2013; Atkinson & Messy, 2012; Lusardi et al., 2010; Van Rooij et al., 2011; K. M. Yu et al., 2015), relationship between risk and return (Agarwalla et al., 2013; Atkinson & Messy, 2012), role of diversification in risk reduction (Agarwalla et al., 2013; Atkinson & Messy, 2012; Huang et al., 2013; Lusardi et al., 2010), and credit card issues (Annamaria Lusardi, 2011). They also have a high self-perceived financial knowledge (K. M. Yu et al., 2015).

The B40 households in Malaysia possess a low level of financial literacy knowledge, (Financial Education Network, 2019; Mahdzan et al., 2019; Siwar et al., 2019). The overall income inequality continues to decline due to the increase in the monthly expenditure of B40 households. The Family Well-Being Index states that well-being has improved in the year 2016, but remains at a moderate level. . Despite the reported progress, challenges in strengthening household inclusion still exist including the low economic participation of B40 households, limited ownership of Bumiputera financial and non-financial assets, increased inequality growth and population between states/regions as well as between urban and rural areas. The Financial Education Network (FEN) outlined five major challenges faced by Malaysian B40 households with the first issue being the low level of confidence in financial knowledge among B40 households.

FINANCIAL ATTITUDE: DATA AND RESEARCH

Financial attitude is the predisposition to behave in a particular manner due to economic and non-economic beliefs possessed by an individual on the outcome of certain behaviours (Ajzen, 1991). Attitude and preferences are vital components of financial literacy (OECD, 2013) where individuals with high financial attitude are more likely to have a positive attitude towards planning (Agarwalla et al., 2013; Atkinson & Messy, 2012; Garg & Singh, 2018; Lusardi et al., 2010; Lusardi & Mitchell, 2014; Nuraini Abdullah & Mohamad Fazli Sabri, 2016; Remund, 2010; Van Rooij et al., 2011), lower inflation expectations (Bruine de Bruin et al., 2010), more propensity to save (Atkinson & Messy, 2012), Agarwalla et al., 2013), less propensity to consume (Agarwalla et al., 2013; Atkinson & Messy, 2012) and have high-risk tolerance (K. M. Yu et al., 2015). (Van Rooij et al., 2011) argued that Dutch households did not exhibit a positive financial attitude for retirement planning where only a small group (12.9%) considered retirement a lot. (Agarwalla et al., 2013) observed that, almost half of the working young respondents in India display a positive attitude towards financial planning and a low propensity to consume. The problem faced by B40 Malaysian households is the rising cost of living and debt burden (Aqmin et al., 2018) leading to have difficulties in managing their (Nor, 2019; Siwar et al., 2019; Unit Perancang Ekonomi, 2015). (Abdullah Yusof, 2019) found ethnic differences in financial vulnerability among Malaysians where Malays and Indians are more vulnerable when compared to Chinese since socioeconomic factors, financial attitudes and financial behaviours also influence their financial stability.

According to a report by Bank Negara Malaysia and the Financial Education Network, one in ten Malaysians believe that they are not disciplined in managing their finances Approximately 84% of Malaysians claim that they only regularly save for the short term as they often withdraw their savings by the end of the month to cover their expenses -43% of their income are spent on receiving health care while 39% is spent on buying groceries (Bank Negara Malaysia, 2019b, 2020; Financial Education Network, 2019). Additionally, B40 households encounter a challenge that is considered a financial literacy factor, the readiness for unexpected life events (Financial Education Network, 2019). Findings reported by (Mustapa et al., 2018; Rahman et al., 2015; Yusof et al., 2015) align with the issues outlined in the Malaysian National Financial Literacy Strategy (2019-2023). As many as 52% of Malaysians find it difficult to come up with RM1,000 in the event of an emergency while only 24% are able to cover their three-months living expenses should they lose their main source of income. B40 households in Malaysia that stem from financial literacy factors is the ineffectiveness of planning for retirement. Financial reports from(Bank Negara Malaysia, 2019b; Financial Education Network, 2019) and the works of (Azam et al., 2018; Hoe Kock, 2015; Mansor et al., 2015; Sang, 2020; Wai, 2016) also confirm that low-income households are less knowledgeable in planning for retirement in old age, preventing them from enjoying financial well-being and affecting their SES.

FINANCIAL BEHAVIOUR: DATA AND RESEARCH

The way in which a person behaves will significantly influence his financial well-being, thus, it is imperative to understand the behavioural dimension within the financial literacy measure (OECD, 2013). Individuals with high financial behaviour are more likely to participate in the stock market and formal financial markets (Bucher-Koenen et al., 2017; Klapper et al., 2012; Van Rooij et al., 2011), actively work on their savings (Agarwalla et al., 2013; Atkinson & Messy, 2012; Klapper et al., 2012) make timely payment of bills (Agarwalla et al., 2013; Atkinson & Messy, 2012) carefully evaluate financial products, (Agarwalla et al., 2013; Atkinson & Messy, 2012) prefer savings than borrowings at time of crisis (Agarwalla et al., 2013; Atkinson & Messy, 2012), self-assess the affordability of products (Agarwalla et al., 2013; Atkinson & Messy, 2012), plan for retirement (Herd et al., 2012; Lusardi et al., 2010;

Van Rooij et al., 2011), accumulate and manage assets well (Herd et al., 2012; Van Rooij et al., 2011) and prefer lowcost borrowing (Agarwalla et al., 2013; Atkinson & Messy, 2012; Huston, 2010; Klapper et al., 2012). They also plan and monitor their household budget and personal savings (Agarwalla et al., 2013; Annamaria Lusardi, 2011; Atkinson & Messy, 2012; Klapper et al., 2012; Remund, 2010), besides having a bank account (Klapper et al., 2012) and a formal credit (Klapper et al., 2012). They tend to make appropriate financial decisions (Bucher-Koenen et al., 2017; Remund, 2010) and have high spending capacity (Klapper et al., 2012).

In contrast, (Annamaria Lusardi, 2011) found that only one-third of the US population could apply the compound interest concept in real-life situations while (Huston, 2010) established that those who exhibited low-cost behaviour possessed more wealth. (Shawn Cole, 2009) who surveyed India and Indonesia, reported less access to bank accounts in both countries, i.e., just 12% in India and 41% in Indonesia. Both countries have better access to informal credit - 64% in Indian households and 52% in Indonesian households. (Agarwalla et al., 2013) found that majority of Indian working youth (68%) exhibit desirable financial behaviour as they were self-disciplined when dealing with household finance and personal money. They were also more likely to make a timely bill payment, assess the affordability of products, set financial goals, and carefully evaluate financial products. In times of crisis, they depend on their savings or assets instead of taking a loan. A study by (Siwar et al., 2019) found that the average monthly income of rural B40 households increased from RM1,760 to RM1,969 in the year 2020 while the median monthly income increased from RM1,797 to RM2,012 during the same period. On the other hand, the average monthly income of urban B40 households increased from RM2,928 to RM3,262 while the median monthly income increased from RM3,095 to RM3,367. The increase in income reflects the overall success of implemented initiatives but there are financial problems faced by B40 households that persist (Jabatan Perangkaan Malaysia, 2016a, 2020; Ministry of Economic Affairs, 2018). Malaysians belonging to the lowincome group are affected by the rising cost of living in the past decade (Kusairi et al., 2019; (Fazli S., Jariah M., Laily P., Amin O., 2007; Siwar et al., 2019) where a majority of B40 households feel that they cannot achieve their current standard of living with their earned income. A large number of individuals from this group are forced to do two jobs, making them desperate and vulnerable to financial fraud. These results were found to align with the findings of the survey in OECD countries.

TARGET AT-RISK: FINANCIAL LITERACY, FINANCIAL WELL-BEING, SOCIOECONOMIC & DEMOGRAPHIC FACTORS OF LOW-INCOME HOUSEHOLDS (B40)

The second trajectory of research involves studies that explore the financial literacy and financial wellbeing, socioeconomic and demographic factors and status of socioeconomic B40 households, demonstrating a specific target at risk.

FINANCIAL LITERACY, FINANCIAL WELL-BEING, AND EDUCATION LEVEL OF B40 HOUSEHOLD

(Klapper et al., 2012) found that a person who provided more correct answers to financial literacy questions were more likely to have a bank account while (Annamaria Lusardi, 2011) established a strong association between debt literacy, financial experiences and over-indebtedness. It was found that less knowledgeable Americans suffer from excessive debt loads or are doubtful about the appropriateness of their debt position, engaged in high-cost borrowing and less advantageous financial transactions (Klapper et al., 2012). It was also found that they display a high level of financial knowledge where high-cost borrowers appear to be financially weak and exhibit a low level of financial literacy. (Van Rooij et al., 2011) identify a significant positive relationship between financial knowledge and retirement planning among Netherland households and found that financial sophistication boosted retirement planning. Furthermore, (Lusardi & Mitchell, 2014) found that financially knowledgeable US respondents thought about retirement while (Huang et al., 2013) reported that having a child positively affected respondents' financial knowledge and enhanced financial capability. (Nkundabanyanga et al., 2014) provided empirical evidence that in Ugandan SMEs, financial literacy positively influences access to formal credit, suggesting that Government should aim to promote financial literacy and improve their access to finance. Furthermore, (Huston, 2010) identified the need of understanding credit terms and markets for making credit decisions while (Van Rooij et al., 2011) established a strong positive association between financial knowledge and attitude towards retirement planning. Inflation expectations were also found to be higher among respondents who thought about specific prices and how to cover expenses (Bruine de Bruin et al., 2010). (Allgood & Walstad, 2013) found a significant positive association between actual and perceived financial literacy and credit card behaviour. Additionally, (Shawn Cole, 2009) identified a significant association between financial literacy

and the immense use of insurance in India and bank accounts in Indonesia. Financial literacy is also reported to be a significant predictor of financial behaviour in developing economies, signalling financial illiteracy as a barrier to financial inclusion. (Agarwalla et al., 2013) also found a significant positive association between financial knowledge and financial behaviour, but a negative relationship between financial behaviour and financial attitude. They also reported no association between financial knowledge and financial attitude.

(Hassan Sabri & Alavi, 2019; Németh & Zsótér, 2019; Sawandi et al., 2018) mention in their study that B40 households face different financial problems over a long period of time and would need to possess financial literacy knowledge to manage their finances wisely and subsequently achieve financial well-being and improve their socioeconomic status. Thus, B40 households need to be educated to independently make wise financial decisions besides accessing relevant financial management information (Abdullah Yusof, 2019; Maki, 2019; Yusof et al., 2015). Furthermore, this also indicates the need to understand better the issues faced by B40 households in obtaining financial well-being and improving their socioeconomic status (Kusairi et al., 2019; Siwar et al., 2019). The 11MP Mid-Term Review also highlights the need for further studies that account for government aspirations, economic challenges and current global trends. Government efforts will be focused on stimulating economic growth for B40 households particular (Ministry of Economic Affairs, 2018).

A study by (Beckmann, 2019) reported that Malaysians generally do not understand financial risks and returns, affecting their financial decisions. This argument is reinforced by the reports from the Financial Education Network 2019 and the economic reports issued by the Malaysian government as well as the Central Bank, (Bank Negara Malaysia, 2020; Yunus, 2020). A survey on financial literacy shows that three out of four Malaysians find it difficult to gauge the value of RM1,000, (Financial Education Network, 2019). Research by the Financial Education Network also demonstrates that a majority of Malaysians tend to spend on immediate gratification rather than long term savings. Only 40% of Malaysians consider themselves unprepared to retire despite the increasing life expectancy. Another study showed that a majority of Malaysians do not possess a proper budget plan or practise financial discipline to manage their expenses and debt (Azman et al., 2017). This problem is also discussed in the National Financial Literacy Strategy (2019-2023), (Financial Education Network, 2019) and several other studies (Arshat et al., 2018; Mayan et al., 2017; Mohamed & Xavier, 2015).

These findings highlight the importance of financial

education based on financial literacy to encourage consumers to wisely manage their finances besides planning and managing the risks associated with financial problems. Meticulous financial planning can be done either through personal financial management or by appointing a qualified financial practitioner where personal financial planning is a more popular choice in Malaysia. Many still lack understanding of the importance of personal financial planning and various benefits that may arise from such planning (Azman et al., 2017; Financial Education Network, 2019; Mayan et al., 2017; Zarinah Arshat et al., 2018).

The lack of financial knowledge among B40 households triggers various financial issues preventing them from achieving financial well-being and affecting their SES (Zarinah Arshat et al., 2018). The B40 group of households often run out of money before the next paycheque, possess no savings with increasing expenses and debt burden. They also tend to disregard proper retirement plans and, thus require the need of financial assistance. These conditions and socioeconomic factors will also burden B40 households and affect their financial well-being (Kusairi et al., 2019; Magesvari et al., 2018; Mayan et al., 2017). The results of this study can go hand-in-hand with the Personal Finance Education Module issued by Bank Negara Malaysia as it involves every Malaysian household. The proposed model in this study can also serve as a baseline for MOE in integrating financial education elements in both the KSSR and KSSM curriculum by providing details to the MOE regarding the socioeconomic status of households that can affect student academic achievements.

SOCIO-ECONOMIC AND DEMOGRAPHIC FACTORS: DATA AND RESEARCH

Researchers(Regina A. Ooko, 2017) found that socioeconomic and demographic factors such as age, gender, income, family background, and educational attainment of an individual also influence their financial literacy level and the relevant dimensions (financial knowledge, financial attitude, and financial behaviour).

SOCIO-ECONOMIC, DEMOGRAPHIC FACTORS AND FINANCIAL LITERACY

Prior research provided evidence that socioeconomic and demographic factors influence the level of financial literacy and its dimensions. Generally, young adults (Agarwalla et al., 2013; Annamaria Lusardi, 2011; Jariwala, 2013; Lusardi et al., 2010; OECD, 2013; Van Rooij et al., 2011) and older adults (Agarwalla et al., 2013; Annamaria Lusardi, 2011; Jariwala, 2013; Lusardi et al., 2010; OECD, 2013; Van Rooij et al., 2011) displayed a lower financial literacy. In terms

of gender, women are more likely to possess low financial literacy (Agarwalla et al., 2013; Annamaria Lusardi, 2011; Atkinson & Messy, 2012; Klapper et al., 2012; Remund, 2010), gave more "do not know" response to financial literacy questions (Bucher-Koenen et al., 2017), and possessed low debt literacy (Annamaria Lusardi, 2011). (Lusardi et al., 2010) reveal that the financial literacy gender gap among young adults (23-28 years) in the USA. (Shawn Cole, 2009) discovered that families with female heads have a low level of financial literacy but financial literacy is not significantly predicted by gender in India. (Ute Filipiak, 2015) who surveyed the matrilineal and patriarchal states of India, argued that it is not the environment that makes men more knowledgeable than women in terms of financial literacy level, but the type of nurturing they receive (involvement in making financial decisions). (K. M. Yu et al., 2015) calls for more research in uncovering the underlying gender differences in financial literacy.

From the perspective of income earning, a higher income is directly proportionate to a higher financial literacy level (Annamaria Lusardi, 2011). This argument is evident as the financial literacy level among the low-income group is low (Jariwala, 2013; OECD, 2013). Furthermore, the financial literacy among young females (with a college degree) is lower compared to a young male (with a college degree) (Lusardi et al., 2010). (Shawn Cole, 2009) reported a significant positive correlation between cognitive ability and financial literacy in India and Indonesia.

Some studies established a significant relationship between financial literacy and educational attainment where higher education indicate a higher financial literacy (Lusardi et al., 2010; Rodrigo Garcia, 2013; Van Rooij et al., 2011). Highly educated people tend to be more financially literate (Lusardi et al., 2010). Those with courses in algebra, trigonometry, and physics have higher financial literacy. The association between financial literacy and education level is most significant for known asset values known (Herd et al., 2012). A positive relationship between financial education and financial literacy was also reported by (Lusardi et al., 2010).

When it comes to marital status, lower financial literacy was more prevalent among divorced, widowed or separated individuals (Annamaria Lusardi, 2011), young single and young married without children (Jariwala, 2013). However, (Shawn Cole, 2009) reported marital status to be an insignificant predictor of financial literacy in India as well as Indonesia. Similarly, there is no significant association between financial literacy and employment structure, but a significant association exists between years of work experience and financial literacy (Jariwala, 2013). In terms of family background, individuals with parents with socioeconomic status, were less financial literate (Herd et al., 2012) while financial literacy and financial advice complement each other from the perspective of socialisation (Bucher-Koenen et al., 2017).

SOCIO-ECONOMIC, DEMOGRAPHIC FACTORS AND FINANCIAL KNOWLEDGE

Young adults (Allgood & Walstad, 2013; Lusardi et al., 2010; Van Rooij et al., 2011) and older adults (Allgood & Walstad, 2013; Lusardi et al., 2010; Van Rooij et al., 2011) possessed low financial knowledge concerning basic financial concepts, inflation, interest compounding and risk diversification. (Ute Filipiak, 2015) demonstrated a significant positive relationship between age and financial knowledge. Women are also more likely to have low financial knowledge (Bucher-Koenen et al., 2017; Lusardi et al., 2010; Van Rooij et al., 2011) whether it is debt (Annamaria Lusardi, 2011), or perceived financial knowledge (Bucher-Koenen et al., 2017; T. Yu & Richardson, 2015), and lack understanding of critical financial concepts such as interest compounding, risk diversification, inflation (Lusardi & Mitchell, 2014), numeracy, etc. (T. Yu & Richardson, 2015). As mentioned earlier, (Ute Filipiak, 2015) argued that the lower level of financial knowledge among women is mainly due to nurture and not nature, i.e. using fewer mass media sources or low formal education or lower understanding of the English language.

Thus, in matrilineal (female-dominated) states of India - Mizoram, Nagaland and Meghalaya, there is no reported gender gap in financial knowledge (as women used to make financial decisions in the family). Women in matrilineal states performed better than men and women of patriarchal (male-dominated) states of India in terms of financial knowledge. On the contrary, patriarchal states reflect a wider gender gap in financial knowledge with men having high financial knowledge relative. High-income households also displayed better financial knowledge (Van Rooij et al., 2011) where individuals with higher income tend to possess high financial knowledge (Ute Filipiak, 2015). (Salleh, 2015) studied the financial literacy among welfare and non-welfare recipients in Brunei found provided empirical evidence of the significant positive relationship between earnings, money management and retirement planning knowledge. In terms of educational attainment, younger women with high educational attainment can possess a low level of financial knowledge (Bucher-Koenen et al., 2017). A low level of financial knowledge is also associated with the less educated (Van Rooij et al., 2011; Herd et al., 2012).

Some studies reported a significant positive relationship between educational attainment and financial knowledge (Lusardi & Mitchell, 2014; Ute Filipiak, 2015) while early life experiences (related to cognition and schooling) were correlated with late financial knowledge. For respondents without a college degree, academic performance shares a significant relationship with late financial knowledge where mathematics-specific skills contribute more to financial knowledge than general reading comprehension (Herd et al., 2012).On the contrary, some scholars reported no significant influence of education on financial knowledge (Huston, 2010; Lewis Mandell and Linda Schmid Klein, 2011). Additionally, (Ute Filipiak, 2015) found no statistically significant relationship between marital status and financial knowledge level in India. In terms of employment status, low financial knowledge was prevalent among even working women (Bucher-Koenen et al., 2017) as well as among the unemployed (Annamaria Lusardi, 2011). The unemployed tend to do much worse with financial literacy questions as compared to the selfemployed or working individuals (Lusardi & Mitchell, 2014). As for family background, respondents with families of high socioeconomic status have less knowledge about their asset levels (Herd et al., 2012) while from the socialisation perspective, women are more likely to approach friends and family for financial advice and not financial advisors (Bucher-Koenen et al., 2017). There is a significant association between personal financial education and financial socialization (Shim et al., 2009) where financial socialization can involve formal or informal sources (Bucher-Koenen et al., 2017; Lusardi et al., 2010; Shim et al., 2009). According to (Mahdzan et al., 2019), B40 individuals or households who want to achieve a strong SES need to focus on effective financial planning.

Malaysian National Strategy for Financial Literacy (2019-2023) implemented by the Financial Education Network consists of several agencies including the Ministry of Education Malaysia (MOE), Malaysian National Bank (MNB), Securities Commission Malaysia (PIDM), Employees Provident Fund (EPF), Malaysia Deposit Insurance Corporation, Credit Counselling and Management Agency (AKPK) and Permodalan Nasional Berhad (PNB), stressed the importance of household financial literacy in achieving the aspirations and direction of strong financial well -being and SES for family institutions (Financial Education Network, 2019). (Kempson, 2009; Potrich et al., 2016; Sawandi et al., 2018) described financial literacy as the financial knowledge, financial attitude and financial behaviour of a person who achieved financial well-being, leading to a strong SES. Furthermore, the Financial Education Network, also further postulates that financially literate households can handle financial management and planning effectively besides making relevant financial decisions (Financial Education Network, 2019).

SOCIO-ECONOMIC, DEMOGRAPHIC FACTORS AND FINANCIAL ATTITUDE

When it comes to age, it was found that youth are less likely to think about retirement (Van Rooij et al., 2011) and tend to have a negative attitude towards planning (Lusardi et al., 2010) while older respondents have higher inflation expectations (Bruine de Bruin et al., 2010). In terms of gender, men think more often about retirement planning (Van Rooij et al., 2011), are more risk-tolerant (Ute Filipiak, 2015; T. Yu & Richardson, 2015), and have a positive planning attitude (Lusardi & Mitchell, 2014). Individuals with low income also have a relatively higher inflation expectation (Bruine de Bruin et al., 2010). Several studies reported a significant association between educational attainment and attitude towards retirement planning (Van Rooij et al., 2011), as well as between education and willingness to take a risk (Rodrigo Garcia, 2013). On the other hand, some scholars observed no positive impact of studying personal finance on financial attitude (Lewis Mandell and Linda Schmid Klein, 2011). Respondents who have low education levels are more likely to have higher inflation expectations (Bruine de Bruin et al., 2010) while single (vs married or living with a partner) individuals are more likely to have high inflation expectations (Bruine de Bruin et al., 2010). From the perspective of employment status, self-employed individuals displayed a positive financial attitude towards retirement planning compared to working employees(Van Rooij et al., 2011).

SOCIO-ECONOMIC, DEMOGRAPHIC FACTORS AND FINANCIAL BEHAVIOUR

Financial behaviour tends to evolve (Agarwalla et al., 2013). Age significantly predicts the use of formal loans in India (Shawn Cole, 2009). Young respondents are more likely to have less costly credit card behaviour (Allgood & Walstad, 2013), and are less likely to plan (Lusardi & Mitchell, 2014). Older respondents were more likely to have more costly credit card behaviour (Allgood & Walstad, 2013). In contrast, (Huston, 2010) reported that a person's age does not affect his ability to access low-cost loans. In terms of gender, women are less likely to plan for retirement (Lusardi & Mitchell, 2014), and have pension accounts (Herd et al., 2012) but women in Hong Kong tend to depend on themselves due to the rising trend of divorce (K. M. Yu et al., 2015). In this sense, married men are more likely to be involved in household financial activities than married women (K. M. Yu et al., 2015). (Shawn Cole, 2009) found gender to be a significant predictor in the use of bank accounts as well as formal loans in Indonesia but not in India. Individuals having high income tend to have a bank

account (Klapper et al., 2012) while respondents suffering from a sharp decline in income or have low income tend to misjudge their debt load (Annamaria Lusardi, 2011), and subsequently engage in retirement planning (Lusardi & Mitchell, 2014). Marital status is also a significant predictor of access to bank accounts in India (Shawn Cole, 2009). From the perspective of educational attainment, educated individuals are more likely to have a bank account (Klapper et al., 2012; Shawn Cole, 2009), earn more income on financial investments and retirement savings, have high credit scores and are less likely to declare bankruptcy in the USA (Shawn Cole, 2009). In contrast, the less educated are more likely to have informal credit (Klapper et al., 2012; Shawn Cole, 2009) and no pension account (Herd et al., 2012). Educated Chilean households are also more likely to participate in the financial market and vice versa (Rodrigo Garcia, 2013). On the contrary, some studies did not find any significant association between education and retirement planning (Van Rooij et al., 2011) and between studying personal finance courses and financial behaviour (Lewis Mandell and Linda Schmid Klein, 2011).

In the context of employment status, job stability has a direct impact on an individual's ability to access low-cost borrowing (Huston, 2010) while in terms of family background, single persons are more likely to have informal credit (Klapper et al., 2012). Formal socialization sources like schools (Shim et al., 2009) and informal socialization sources like family (Lusardi & Mitchell, 2014) impact personal financial behaviour the most where decisions regarding retirement savings and retirement age are reported to be influenced by friends, colleagues (Duflo & Saez, 2002) and spouses (Henkens, 1999). respectively. Male workers have more spousal support for the retirement savings (K. M. Yu et al., 2015). Economic socialization, i.e., encouragement to save during childhood has a long-lasting impact and influences adult economic behaviour (Webley & Nyhus, 2006). Parents are role models for their children when they save for retirement (Bandura, 1977).

CONCLUSION

The present study aims to provide an up-to-date literature review on the theme of financial literacy in the context of Malaysian households. Financial literacy has garnered research interest over the years where world economies strive to improve the financial well-being of their citizens, inducing an increasing awareness for financial literacy. Various studies have been conducted addressing different dimensions of financial literacy and assessing the impact of different socio-economic and demographic factors on the impact of financial literacy level. Previous studies reported that in developing countries like Malaysia, financial Literacy is generally low. Socioeconomic factors were found to be significant factors influencing financial literacy. Economic, social and environmental dimensions are among significant factors affecting the B40 households studied in the survey (Siwar et al., 2019). This idea is reviewed and supported by (Azman et al., 2017) where they found that economic factors i.e. financial well-being and social factors i.e. level of education stimulates the probability of household debt and indebtedness, reflecting the socio-economic status of households. The findings of this study strengthen theories related to the concept of financial literacy influencing the socio-economic status (SES) of the B40 household group.

In Malaysia, although there are researches that measure the level of financial literacy, the construction of a specific financial literacy model to measure the level of financial literacy of B40 households and its influence on the achievement of financial well-being remains limited. Therefore, a proper model is crucial to understand the level of financial literacy and financial well-being of the socioeconomic status of B40 households in Malaysia. The demographic and socio-economic factors outlined in this study can serve as internal and external factors that contribute to the development of this model.

Further research needs to be conducted to adapt the elements of financial literacy according to the Malaysian context. A financial literacy model needs to be constructed based on its effectiveness on SES where household financial literacy needs to be emphasised (Ali et al., 2016; Financial Education Network, 2019; Magesvari et al., 2018; Moreno-Herrero et al., 2018; Németh & Zsótér, 2019; Siwar et al., 2019).

Financial literacy is deemed as a major factor because households are fundamental decision-makers that are considered the country's economic growth drivers (Financial Education Network, 2019), highlighting the need for households to be well-equipped with basic financial knowledge (Kempson, 2009; Lusardi & Mitchell, 2014; Potrich et al., 2016). (Sawandi et al., 2018) mentioned that a high level of financial literacy for the B40 household group is important to financial well-being in line with the thrust emphasized by the Malaysian government on improving the socio-economic status (SES) of B40 households.

To conclude, an extended quantitative investigation into the socioeconomic status meanings and functions of demographic factors across cultures is needed to integrate financial literacy, financial well-being, socioeconomic and demographic factors among B40 households.

REFERENCES

- Agarwalla, S. K., Barua, M. S. K., Jacob, J., & Varma, J. R. (2013). Financial Literacy among Working Young in Rural India. Sobhesh Kumar Agarwalla ManagementSamir K. Barua Joshy Jacob Jayanth R. Varma, 3(03), 1–7.
- Ajzen, I. (1991). The Theory of Planned Behavior University. Organazational Behaviour and Human Decision Processes, 50, 179–21(1), 51–58.
- Ali, P., Anderson, M., McRae, C., & Ramsay, I. (2016). The Financial Literacy of Young People: Socio-Economic Status, Language Background, and the Rural-Urban Chasm. *Australian and International Journal of Rural Education*, 26(1), 54–66.
- Allgood, S., & Walstad, W. (2013). Financial Literacy and Credit Card Behaviors: A Cross-Sectional Analysis by Age. *Numeracy*, 6(2). https://doi.org/10.5038/1936-4660.6.2.3
- Angela A. Hung, Andrew M. Parker, nJoannie K. Y. (2009). Defining and Measuring Financial Literacy. In *Final Report to ASHRAE*. https://doi.org/10.2139/ ssrn.1498674
- Annamaria Lusardi, D. J. S. and S. and P. T. (2011). Financially fragile households: Evidence and implications. *Brookings Papers on Economic Activity*, 1, 83–134. https://doi.org/10.1353/eca.2011.0002
- Aqmin, M., Wahab, A., Shahiri, H. I., Mansur, M., Azlan, M., & Zaidi, S. (2018). Kos Sara Hidup Tinggi di Malaysia: Pertumbuhan Pendapatan Isi Rumah Yang Perlahan atau Taraf Hidup Yang Meningkat? *Jurnal Ekonomi Malaysia*, 52(1), 117–133. https://doi. org/10.17576/jem-2018-5201-10
- Arshat, Z., Ismail, Z., Mansor, M., Madon, Z., & Omar, R. (2018). Relationship Between Economic Pressure and Family Functioning Among B40 Family. 5, 8–11.
- Atkinson, A., & Messy, F.-A. (2012). Measuring Financial Literacy: Results of the Oecd Infe Pilot Study. In Oecd (Issue 15). https://doi.org/https://doi.org/10.1787/ bb2cd70c-en
- Azam, M., Yahya, H., & Mohamad, A. B. (2018). Pengaruh Pinjaman Peribadi Terhadap Penjawat Awam. Maw'izah's Jounal, 1(1), 119–136.
- Azman, N., Zakaria, R. H., & Marican, S. (2017). Sikap isi rumah terhadap hutang dan keberhutangan: kajian kes di Lembah Klang, Malaysia. *The Malaysian Journal* of Social Administration, 9(1), 59–86. https://doi. org/10.22452/mjsa.vol9no1.4
- Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review* 1977, Vol. 84, No. 2, 191-215, 84(2), 191–215. https:// doi.org/10.1007/978-3-319-75361-4
- Bank Negara Malaysia. (2019a). Financial Stability and Payment Systems Report in 2018. In *Bank Negara Malaysia*.
- Bank Negara Malaysia. (2019b). Tinjauan Kestabilan Kewangan Separuh Kedua 2019.

- Beckmann, E. (2019). Household Savings in Central Eastern and Southeastern Europe : How Do Poorer Households Save? World Bank Policy Research Working Paper, 8751.
- Bruine de Bruin, W., Vanderklaauw, W., Downs, J. S., Fischhoff, B., Topa, G., & Armantier, O. (2010). Expectations of inflation: The role of demographic variables, expectation formation, and financial literacy. *Journal of Consumer Affairs*, 44(2), 381–402. https://doi.org/10.1111/j.1745-6606.2010.01174.x
- Bucher-Koenen, T., Lusardi, A., Alessie, R., & van Rooij, M. (2017). How Financially Literate Are Women? An Overview and New Insights. *Journal of Consumer Affairs*, 51(2), 255–283. https://doi.org/10.1111/ joca.12121
- Candiya, B. G. O. (2017). Institutional framing and financial inclusion. *International Journal of Social Economics*, 44(12), 1727–1744. https://doi. org/10.1108/IJSE-02-2015-0032
- Deb, R. (2020). Financial Literacy : A Brief Systematic Literature Review. V(2).
- Deuflhard, F., Georgarakos, D., & Inderst, R. (2015). Financial literacy and savings account returns. In *Journal of the European Economic Association* (Vol. 17, Issue 1). https://doi.org/10.1093/jeea/jvy003
- Duflo, E., & Saez, E. (2002). Participation and investment decisions in a retirement plan: The influence of colleagues' choices. *Journal of Public Economics*, 85(1), 121–148. https://doi.org/10.1016/S0047-2727(01)00098-6
- Economic Planning Unit (EPU). (2016). Elevating B40 Households Towards a Society. *Strategy Paper 2, Eleventh Malaysia Plan 2016-2020*. http://rmk11. epu.gov.my/pdf/strategy-paper/Strategy Paper 02.pdf
- Fazli S., Jariah M., Laily P., Amin O., N. N. (2007). Kajian keteguhan kewangan di kalangan belia. *Institut Penyelidikan Pembangunan Belia Malaysia*.
- Financial Education Network. (2019). Strategi Literasi Kewangan Kebangsaan.
- Gakkhar, A., Rani, D., & Kohli, M. (2017). Financial literacy and socio-economic status: A study of working and non-working women. 4(6), 506–508.
- Garg, N., & Singh, S. (2018). Financial literacy among youth. *International Journal of Social Economics*, 45(1), 173–186. https://doi.org/10.1108/IJSE-11-2016-0303
- Goyal, K., & Kumar, S. (2021). Financial literacy: A systematic review and bibliometric analysis. International Journal of Consumer Studies, 45(1), 80–105. https://doi.org/10.1111/ijcs.12605
- Hasler, A., & Lusardi, A. (2017). The Gender Gap in Financial Literacy: A Global Perspective. Global Financial Literacy Excellence Centre, 91(5), 287.
- Hendriks, T. P. (2010). National financial literacy strategy. In *National Financial Literacy Strategy* (Issue

March).

- Henkens, K. (1999). Retirement intentions and spousal support: A multi-actor approach. Journals of Gerontology - Series B Psychological Sciences and Social Sciences, 54(2). https://doi.org/10.1093/ geronb/54B.2.S63
- Herd, P., Holden, K., & Su, Y. T. (2012). The Links between Early-Life Cognition and Schooling and Late-Life Financial Knowledge. *Journal of Consumer Affairs*, 46(3), 411–435. https://doi.org/10.1111/j.1745-6606.2012.01235.x
- Hilgert, M., Hogarth, J., & Beverly, S. (2003). Household financial management: the connection between knowledge and behavior. *Federal Reserve Bulletin*, *Jul*, 309–322.
- Hoe Kock, T. (2015). [THESIS] Financial Planning for Post-Retirement Among Urban Malaysians in Klang Valley.
- Huang, J., Nam, Y., & Sherraden, M. S. (2013). Financial Knowledge and Child Development Account Policy: A Test of Financial Capability. *Journal of Consumer Affairs*, 47(1), 1–26. https://doi.org/10.1111/ joca.12000
- Huston, S. J. (2010). Measuring Financial Literacy. Journal of Consumer Affairs, 44(2), 296–316. https:// doi.org/10.1111/j.1745-6606.2010.01170.x
- International Monetary Fund. (2016). *Monetary and Financial Statistics Manual and Compilation Guide.*
- Jabatan Perangkaan Malaysia. (2016a). *laporan* penyiasatan migrasi, malaysia, 2016.
- Jabatan Perangkaan Malaysia. (2016b). Laporan Penyiasatan Pendapatan Isi Rumah dan Kemudahan Asas 2016. In *Sumber Statistik Rasmi Malaysia*. https://www.dosm.gov.my/v1/index.php?r=column/ cthemeByCat&cat=120&bul_id=RUZ5REwveU1ra1 hGL21JWVIPRmU2Zz09&menu_id=amVoWU54U Tl0a21NWmdhMjFMMWcyZz09
- Jabatan Perangkaan Malaysia. (2020). SIARAN AKHBAR LAPORAN SURVEI PERBELANJAAN ISI RUMAH 2019.
- Jabatan Perdana Menteri. (2017). Malaysia Sustainable Development Goals Voluntary National Review 2017. In *Economic planning unit 2017*.
- Jariwala, H. V. (2013). To study the level of financial literacy and its impact on investment decision An in-depth analysis of investors in Gujarat state.
- Kempson, E. (2009). Framework for the Development of Financial Literacy Baseline Surveys: A First International Comparative Analysis. In OECD Working Papers on Finance, Insurance and Private Pensions (Issue 1). https://doi.org/10.1787/5kmddpz7m9zq-en
- Khalid, M. A. (2016). Climbing the Ladder. In Power and Passion in Egypt. https://doi. org/10.5040/9780755609871.ch-005
- Klapper, L. F., Lusardi, A., & Panos, G. A. (2012). Financial Literacy and the Financial Crisis. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.2038765

Bank Negara Malaysia. (2020). Laporan Annual Report Tahunan.

- Kulub Abd. Rashid, N., Nasir, A., Anang, Z., & Alipiah, R. M. (2018). Determinants of Muslim household basic needs consumption expenditures. *Jurnal Ekonomi Malaysia*, 52(1), 309–323. https://doi.org/10.17576/ jem-2018-5201-23
- Kusairi, S., Sanusi, N. A., Muhamad, S., Shukri, M., & Zamri, N. (2019). Financial households' efficacy, risk preference and saving behaviour: Lessons from lower-income households in Malaysia. *Economics* and Sociology, 12(2), 301–318. https://doi. org/10.14254/2071-789X.2019/12-2/18
- Lee May Poh dan Mohamad Fazli Sabri. (2017). FINANCIAL KNOWLEDGE, FINANCIAL MANAGEMENT PRACTICES, FINANCIAL PRESSURE AND FINANCIAL STABILITY AMONG SINGLE FEMALE HOUSEHOLDS IN MALAYSIA. 12–21.
- Lewis mandell and Linda Schmid Klein. (2011). On congruences related to central binomial coefficients. *Journal of Number Theory*, 131(11), 2175–2191. https://doi.org/10.1016/j.jnt.2011.01.011
- Lusardi, A., & Mitchell, O. S. (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, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *Journal of Consumer Affairs*, 44(2), 358–380. https://doi.org/10.1111/ j.1745-6606.2010.01173.x
- Magesvari, R., Kenayathulla, H. B., & Ghani, M. F. A. (2018). Faktor Sosioekonomi Yang Mempengaruhi Kemahiran Literasi Kewangan Pelajar Sekolah Menengah Di Negeri Sembilan. Jurnal Kepimpinan Pendidikan, 5(3), 10–33. http://e-jpurnal.um.edu.my/ publish/JuPiDi/
- Mahdzan, N. S., Zainudin, R., Sukor, M. E. A., Zainir, F., & Wan Ahmad, W. M. (2019). Determinants of Subjective Financial Well-Being Across Three Different Household Income Groups in Malaysia. *Social Indicators Research*, 146(3), 699–726. https:// doi.org/10.1007/s11205-019-02138-4
- Mansor, M. F., Hong, C. C., Abu, N. H., & Shaari, M. S. (2015). Demographic Factors Associated with Retirement Planning: A Study of Employees in Malaysian Health Sectors. *Asian Social Science*, *11*(13), 108–116. https://doi.org/10.5539/ass. v11n13p108
- Mayan, S. N. A., Nor, R. M., & Samat, N. (2017). Challenges To the Household Income Class B40 Increase in Developed Country Towards 2020 Case Study: Penang. *International Journal of Environment, Society and Space*, 5(2), 35–41.
- Ministry of Economic Affairs. (2018). Ringkasan eksekutif kajian separuh penggan Rancangan Malaysia Kesebelas 2016-2020: Keutamaan dan penekanan baharu. In *Kementerian Hal ehwal Ekonomi Malaysia*.
- Ministry of Economic Affairs Malaysia. (2019). Twelfth

Malaysia Plan. September 2019, 1–53. http://rmke12. mea.gov.my/about-us

- Mohamed, M. Z., & Xavier, J. A. (2015). Poverty Alleviation Strategies and New Economic Model in Malaysia. *International Academic Research Journal* of Academics and Finance, 3(3), 17–31.
- Mohd-Amim, O. (2017). Kajian Faktor-faktor Literasi, Sosiolisasi dan Tingkah Laku Pengguna Terhadap Perancangan Kewangan Islam Berdasarkan Tingkah Laku Terancang dalam Kalangan Kakitangan Awam Di Wilayah Persekutuan, Putrajaya. *Tesis PhD, Univerisiti Malaya*, 326. http://studentsrepo.um.edu. my/id/eprint/8281
- Mohd.Amim Bin Othman. (2017). Kajian Faktor-faktor Literasi, Sosialisasi dan Tingkah Laku Pengguna terhadap perancangan Kewangan Islam berdasrkan Teori Tingkah Laku yang terancang dalam kalangan kakitangan Awam di Wilayah Persekutuan, Putrajaya. univeriti Malaya.
- Mokhtar, N., Thinagaran, M. D., Sabri, M. F., & Ho, C. S. F. (2018). A Preliminary Evaluation of Financial Literacy in Malaysia. *Journal of Wealth Management* & *Financial Planning*, 5(6), 3–16.
- Moore, D. (2004). Survey of Financial Literacy in Washington State: December 2003. https://doi. org/10.13140/2.1.4729.4722
- Moreno-Herrero, D., Salas-Velasco, M., & Sánchez-Campillo, J. (2018). Factors that influence the level of financial literacy among young people: The role of parental engagement and students' experiences with money matters. In *Children and Youth Services Review* (Vol. 95, pp. 334–351). https://doi.org/10.1016/j. childyouth.2018.10.042
- Morgan, P., & Trinh, L. (2019). Determinants and Impacts of Financial Literacy in Cambodia and Viet Nam. *Journal of Risk and Financial Management*, 12(1), 19. https://doi.org/10.3390/jrfm12010019
- Mustapha, M. (2015). Financial Literacy and Demographic Factors. Journal of Technology Management and Business, 2(1), 0–0.
- Németh, E., & Zsótér, B. (2019). Anxious spenders: Background factors of financial vulnerability. *Economics and Sociology*, 12(2), 147–169. https:// doi.org/10.14254/2071-789X.2019/12-2/9
- Nicolini, G., & Haupt, M. (2019). The assessment of financial literacy: New evidence from Europe. *International Journal of Financial Studies*, 7(3), 1–20. https://doi.org/10.3390/ijfs7030054
- Nkundabanyanga, S. K., Ntayi, J. M., Ahiauzu, A., & Sejjaaka, S. K. (2014). Intellectual capital in ugandan service firms as mediator of board governance and firm performance. *African Journal of Economic and Management Studies*, 5(3), 300–340. https://doi. org/10.1108/AJEMS-06-2012-0041
- Nor, R. M. (2019). Inclusive Development for B40 Households Group: Malaysian Reality in Achieving Developed Nation Status by 2025. *International*

Journal of Academic Research in Business and Social Sciences, 9(7), 1035–1048. https://doi.org/10.6007/ ijarbss/v9-i7/6208

- Nuraini Abdullah, & Mohamad Fazli Sabri. (2016). Faktor peramal pengurusan hutang dalam kalangan pekerja muda. *International Journal of Education and Training (InjET)*, 2(2), 1–19.
- OECD. (2013). Financial Literacy and Inclusion: results of OECD/INPE survey across countries and by gender. *Financial Literacy & Education: Russia Trust Fund*, *June*, 1–175. https://www.oecd.org/daf/fin/financialeducation/TrustFund2013_OECD_INFE_Fin_Lit_ and_Incl_SurveyResults_by_Country_and_Gender. pdf
- OECD, secretary-general of the. (2019). OECD Economic Surveys: Malaysia 2019. OECD Economic Surveys: Malaysia 2019, July. https://doi.org/10.1787/ eaaa4190-en
- Ouachani, S., Belhassine, O., & Kammoun, A. (2021). Measuring financial literacy: a literature review. *Managerial Finance*, 47(2), 266–281. https://doi. org/10.1108/MF-04-2019-0175
- Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. M. (2016). Management Research Review Development of a financial literacy model for university students For Authors Development of a financial literacy model for university students. *Management Research Review Iss The Journal of Risk Finance African Journal of Economic and Management Studies Iss International Journal of Social Economics*, 3944(7), 356–376. https://doi.org/10.1108/MMR-06-2014-0143
- Rastogi, S., & Ragabiruntha, E. (2018a). Financial inclusion and socioeconomic development: gaps and solution. *International Journal of Social Economics*, 45(7), 1122–1140. https://doi.org/10.1108/IJSE-08-2017-0324
- Rastogi, S., & Ragabiruntha, E. (2018b). Financial inclusion and socioeconomic development: gaps and solution. *International Journal of Social Economics*. https://doi.org/10.1108/IJSE-08-2017-0324
- Regina A. Ooko. (2017). Demographic and Socioeconomic Factors Influencing Financial Literacy among Employees of Deloitte Kenya. *Journal of Chemical Information and Modeling*, 21(2), 1689–1699. https:// www.oecd.org/dac/accountable-effective-institutions/ Governance Notebook 2.6 Smoke.pdf
- Remund, D. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs*, 44(2), 276–295. https://doi.org/10.1111/j.1745-6606.2010.01169.x
- Rodrigo Garcia, J. T. (2013). The Effect of Education on Financial Market Participation: Evidence from Chile. In Working paper Series Finance UC (Vol. 1, Issue July).
- Salleh, A. M. H. A. P. M. (2015). A comparison on financial

literacy between welfare recipients and non-welfare recipients in Brunei. *International Journal of Social Economics*, 42(7), 598–613.

- Sang, L. T. (2020). Hubungkait Pengetahuan Kewangan dan Kesedaran Insurans Hayat dan Takaful Keluarga. 1–11.
- Sawandi, N., Abu Bakar, A. S., Shaari, H., Saad, R. A., & Amran, N. A. (2018). Financial literacy among Malaysian: Level of financial knowledge score. *Journal of Social Sciences Research*, 2018(Special Issue 6), 300–304. https://doi.org/10.32861/jssr. spi6.300.304
- Shapee, nur amira syafiqah bt. (2017). Faktor-faktor yang menyumbang kepada hubungan kesejahteraan isi rumah nur amira syafiqah bt shapee universiti teknologi malaysia.
- Shawn Cole, T. S. and B. Z. (2009). Financial literacy, financial decisions, and the demand for financial services: evidence from India and Indonesia. In *Harvard Business School Working Paper 09-117*. http://www1.worldbank.org/prem/poverty/ie/dime_ papers/1107.pdf
- Shim, S., Xiao, J. J., Barber, B. L., & Lyons, A. C. (2009). Pathways to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology*, 30(6), 708–723. https://doi.org/10.1016/j.appdev.2009.02.003
- Singhal, M., & Singh, A. (2020). "Factors Contributing to the Financial Literacy of Individual : A Critical Literature Review." *Acclaims*, 8(January), 1–12.
- Siwar, C., Ismail, M. K., Alias, N. A., & Zahari, S. Z. (2019). Kumpulan isi rumah berpendapatan 40 peratus terendah (B40) di Malaysia: Mengenal pasti trend, ciri, isu dan cabaran. *Pemerkasaan B40: Kesejahteraan Strategi Dan Implikasi Sosioekonomi*, *December*, 33–50.
- Unit Perancang Ekonomi, J. P. M. (2015). Rancangan Malaysia Kesebelas Kertas Strategi 2: Meningkatkan Taraf Isi Rumah B40 ke Arah Masyarakat Kelas Menengah. In *Bahagian Pembangunan Kurikulum*. http://rmk11.epu.gov.my/pdf/kertas-strategi/ Kertas%5CnStrategi%5Cn02.pdf
- Ute Filipiak, Y. M. W. (2015). *The financial literacy gender gap: A question of nature or nurture?*
- Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial Literacy and Stock Market. *Journal of Financial Economics*, 101(2), 449–472.
- Wai, K. T. (2016). Perancangan kewangan dan aplikasi teori tingkah laku kewangan dan teori keperluan Maslow: Kajian kes KWSP di Malaysia. Geografia: Malaysian Journal of Society & Space, 12(8), 10–21.
- Webley, P., & Nyhus, E. K. (2006). Parents' influence on children's future orientation and saving. *Journal of Economic Psychology*, 27(1), 140–164. https://doi. org/10.1016/j.joep.2005.06.016
- Yu, K. M., Wu, A. M., Chan, W. S., & Chou, K. L. (2015). Gender Differences in Financial Literacy Among

Hong Kong Workers. *Educational Gerontology*, *41*(4), 315–326. https://doi.org/10.1080/03601277.2 014.966548

- Yu, T., & Richardson, J. C. (2015). An exploratory factor analysis and reliability analysis of the student online learning readiness (SOLR) instrument. *Online Learning Journal*, 19(5). https://doi.org/10.24059/olj. v19i5.593
- Yunus, N. S. (2020). *Tinjauan Ekonomi dan Monetari* 2019. www.bnm.gov.my/ar2019/files/emr2019_bm_ full.pdf
- Zarinah Arshat, Farah Syuhada Pai, & Zanariah Ismail. (2018). Keluarga B40: Tekanan dan Kekuatan B40 Family: Stress and Strength. *Journal of Advanced Research in Social and Behavioural Sciences Journal Homepage*, 10(1), 91–102. www.akademiabaru.com/ arsbs.html

Ananthan Munisamy Faculty of Education, The University of National Malaysia, Bangi, Malaysia.

Sheerad Sahid Faculty of Education, The University of National Malaysia, Bangi, Malaysia Correspondence Author: sheerad@ukm.edu.my