Labuan Bulletin of International Business &Finance

Volume 20 Issue 2 eISSN 2600- 7894

THE IMPACT OF FINANCIAL LITERACY ON FINANCE AND ECONOMY: A LITERATURE REVIEW

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ABSTRACT

Financial literacy encourages individuals and society to improve their financial well-being. Hence, increase their capabilities to take part in economic life. This paper aims to investigate the impact of financial literacy on finance and the economy. An extensive review of financial literacy literature is carried out, with specific attention to its correlation with financial and economic aspects. This study unveils that financial literacy gives impacts on personal financial decisions, behaviour, saving and retirement, investment, financial risk tolerance, business, and national economy. This paper will be useful to economists and technologists about the importance of financial literacy with suggestions on the role of financial technology (FinTech) in enhancing financial literacy, thus financial well-being as well as overall well-being towards industrial revolution 4.0 (IR 4.0).

JEL classification: *G20, G23, G32, G40, G41.*
Keywords: *Financial literacy, financial decision, FinTech.*

Received: January 6, 2022
Revised: May 6, 2022
Accepted: November 29, 2022

1. INTRODUCTION

The Organisation for Economic Co-operation and Development (OECD) defines financial literacy as not only the knowledge and understanding of financial concepts and risks. Financial literacy in addition also includes the skills, motivation, and confidence to practise such knowledge and understanding in order to make effective decisions across a range of financial contexts (Lusardi, 2019). This ability will help individuals and society to improve their financial well-being, and capabilities to participate in economic life (Kumari et al., 2020). However, prior research studies paid less attention to a comprehensive investigation that reviews research articles on the importance of financial literacy. Hence this study aims to fill the gap by investigating the impacts of financial literacy from around the world, specifically on finance and the economy. To ensure relevancy, this study reviews studies from five recent years.

Previous studies show that financial literacy impacts the economy and financial market participation. The level of financial literacy is an essential indicator of people's ability to make financial decisions. In Vietnam, investors who have a higher level of financial literacy, mainly advanced financial literacy show higher interest to take part in the financial market (Nguyen & Nguyen, 2020). However, findings from financial literacy studies around the globe are worrying. Financial literacy is found to be low including the population in advanced economies with well-developed financial markets. The gaps remain within certain vulnerable subgroups population mainly from the lower knowledge of specific financial topics. In addition, there is also proof of a lack of confidence, specifically among women. The confidence level is known to have an implication on how the financial decision is being approached and made.

In the Malaysian context, Kimiyaghalam and Yap (2017) conclude that 51.54 per cent of Malaysians in Klang Valley have basic financial knowledge, but only 37 per cent have advanced financial literacy knowledge. However, the financial literacy level between male and female respondents does not show a clear difference. In terms of race, Indians need higher attention in financial education programs than Malay and Chinese. The study also suggests that low-income individuals have a low level of financial literacy. Meanwhile according to Zakaria et al. (2017), Malaysian consumers with low financial literacy face hardship in making an informed decision on their savings and investment choices.

The finding shows that financial literacy level has an impact on Malaysian financial decisions and financial market participation. Moreover, according to Lusardi (2019), individuals in this era are more responsible for their personal finances than in the previous era. For instance, social welfare and pension systems are being strained in many countries. Therefore the responsibility for retirement saving and investing shifted from employers to employees (Lusardi, 2019). In addition, employees also experience changes in labour markets. In this regard, skills are becoming more critical which leads to divergence in salary or wages between those with college degrees and those with lower levels of education.

At the same time, financial markets also are rapidly changing, with advancements in technology as well as new and more complex financial products. From education loans to insurance and *takaful*, credit cards, and unit trusts, the range of financial products consumers have to select from is very different from what was offered in the past. Simultaneously, these financial products-related decisions also have implications on their financial and overall well-being. In addition, with the exponential growth in financial technology (FinTech), the financial market is revolutionising in the way people make payments, seek financial advice, and make financial investment decisions. Therefore it is crucial to understand how financially literate people are and to what extent their financial literacy affects their financial decision-making.

In that sense, it is also important to understand the benefits of having a financially literate population for individuals' well-being and national economies. Financially literate individuals are believed to encourage participation in more suitable financial products that match their financial goals. Because of that, this study intends to highlight the urgency of financial literacy by exploring its implications specifically on finance and the economy and how we can improve financial literacy. In this study, there is an underpinning theory that explains financial literacy and its association with economy and finance. According to Bandura and Walters (1977) in social learning theory, as social entities, people are believed to learn from observation of the behaviour and actions of others. This theory grew from theories about learning processes that take place in society.

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In this study. financial literacy is found to be the result of education possessed and psychological factors.

From the findings of this review, investment firms in Malaysia will be able to identify the characteristics of their potential investors. Then, this study will discuss the policy implementation to increase financial literacy in Malaysia and suggestions on the utilisation of FinTech for investment education. Investment firms will be able to conduct investment education programs that help investors and potential investors with lower financial literacy to increase their financial literacy. Hence this will encourage them to take part effectively in the financial market and Malaysia will be able to achieve economic well-being towards IR 4.0. IR 4.0 is referred to the automation and data exchange in manufacturing technologies including the internet of things (IoT) to connect cyberspace to the ground of field application. In FinTech, IR 4.0 gives impacted by digital innovation and the fast financial process.

2. REVIEW OF THE IMPACT OF FINANCIAL LITERACY

Financial literacy is not only important in influencing financial decisions at the personal and firm levels, but also in determining national socio-economic development and financial well-being within societies. According to Janor et al. (2016), financial literacy levels are found to explain the variation in investment type selection. Not only that, there are several more studies conducted around the globe to investigate the other effects of financial literacy as well. In this regard, this study carries out extensive literature from five recent years of studies. From the studies reviewed, particular focus is given to the effects of financial literacy on finance and the economy.

2.1 Personal financial decision

In the personal financial decision aspect, Mwathi and Wangeci (2017) measure the significance of financial literacy on personal financial decisions among Egerton University employees, comprising lower-level staff, middle-level staff, including administrative, technical, and teaching staff, as well as management. In the study, the financial literacy components examined consist of financial knowledge, financial skills, and financial attitude. The study reveals that financial literacy has a significantly positive correlation with personal financial decisions. In addition, Nasir et al. (2021) investigate the significance of financial literacy, self-efficacy, and resource-facilitating conditions on the purchase intention of insurance and its *Syariah* compliance counterpart, *takaful*. Results from the analysis indicate that financial literacy, self-efficacy, and resource-facilitating condition determinants give an impact on individuals' purchase intention for insurance and *takaful* schemes.

On the other hand, Kim and Lee (2018) examine the impact of financial literacy on the use of payday loans in the United States. The study finds that financial literacy correlates negatively with the use of payday loans. In this regard, Kimiyaghalam and Yap (2017) emphasise that with relevant consumer protection well-practised, the financially literate population encourages access to suitable financial products due to better financial decisions.

Moreover, Grohmann and Menkhoff (2018) argue that financial literacy positively affects financial inclusion across different income levels and various subgroups within countries. The study indicates that a higher degree of financial literacy strengthens the effect of more financial depth in terms of the use of financial services. Whereas Nguyen and Nguyen (2020) indicate that Vietnamese respondents who have a higher level of financial literacy, mainly with advanced financial literacy, tend to participate in the financial market. Investors who have a basic financial literacy level, in contrast, do not have a tendency to participate in the financial market. The study also suggests that perceived financial literacy and peer effect positively affect investors' interest in financial market participation.

Amid increasing awareness of *Islamic* banking products, Muslichah and Sanusi (2019) investigate the correlation between *Islamic* finance literacy, attitude and religiosity with the interest of consumers to utilise the service of *Islamic* banking products amongst managers or business owners in Yogyakarta. The study argues that consumers' interest to take part in the *Islamic* banking market is influenced by attitude, *Islamic* financial literacy, and religiosity with the financial literacy variable showing the greatest impact among the relationships examined. This finding proves that as financial literacy encourages financial product consumption in the conventional market, so does *Islamic* financial literacy for the *Islamic* financial market.

Whereas Humaidi et al. (2020) investigate the significance of financial literacy, demographic profiles, and financial technology on financial decision-making amongst the productive age population with jobs and income in Surabaya. The results from the study indicate the significant positive roles financial literacy and financial technology play in determining one's financial management behaviour. However, demographic variables that consist of gender, age, and income do not explain financial management behaviour. Meanwhile, Liu et al. (2021) analyse the significance of financial literacy on rural household insurance participation amongst farmers in southwest China. The conclusion indicates that financial literacy plays a significant role in elevating participation in insurance amongst farmers. In this regard, financial literacy also shows a greater impact on insurance participation amongst female, younger-aged, and highly educated farmers than male, older age, and lower-education farmers.

Meanwhile, Farooq et al. (2021) examine the influence of financial literacy, financial attitude, and parental financial socialisation on prudent financial management practices among youth in Pakistan. The conclusion from the study reveals that financial literacy, financial attitude, and parental financial socialisation give a positive impact on prudent financial management practices significantly. Meanwhile, Hamid and Loke (2020) examine the correlation between financial literacy, money management skill, socioeconomic variables, overspending and impulsiveness in credit card repayment decisions among credit card users in Malaysia. In the study, money management skill consists of spending within budget, prompt bill payment, handling money matters well, and financial statements monitoring. From the study, financial literacy and money management skill show positive significance in decision-making amongst credit card holders. Whereas socioeconomic variables namely ethnicity, marital status, education, income, and the number of credit cards also show significance in credit card repayment decisions. Lastly, overspending and impulsiveness characteristics do not show significant relationships with credit card payment behaviour.

Meanwhile, Sabri et al. (2020) argue that financial literacy plays a significant role in financial vulnerability among Malaysian households. In addition, financial behaviour and money attitude also are found to explain the financial vulnerability variable in the study of mediating effect of money attitude on the association between financial literacy, financial behaviour, and financial vulnerability. On the other hand, Koe and Yeoh (2021) examine the urgency of financial literacy, attitude towards money, attitude towards debt, financial goals, and social influence on financial planning for marriage amongst married and soon-to-be-married couples in Malaysia. The study reveals that financial literacy, attitude towards money, financial goals, and social influence play positive roles in financial planning for marriage. Whereas attitude towards debt negatively affects financial planning for marriage. Not only marriage planning but financial literacy also is found to be vital in marriage life later on. A study such as Sabri et al. (2021) analyses the factors influencing financial vulnerability amongst Malaysian households. The study unveils the positive role financial literacy plays in determining an individual's financial behaviour, then financial behaviour negatively affects financial vulnerability.

2.2 Behaviour

In regard to behaviour, Zahra and Anoraga (2021) test the relationship between financial literacy, lifestyle, and social demographics with consumptive behaviour amongst students in Jawa Tengah. Consumptive behaviour means the behaviour of consumer goods that are less or not needed. The study proves that financial literacy, lifestyle, and social demographic positively influence students' consumptive behaviour. In addition, Chong et al. (2021) study the impact of financial literacy, self-coping, and self-efficacy on financial behaviour amongst emerging adults aged 40 and below in Malaysia. The study indicates that the variables examined explain financial behaviour significantly, suggesting improvement in financial literacy, self-coping, and self-efficacy as a mechanism to promote positive financial behaviours nationwide.

2.3 Saving and retirement

In saving and retirement matters, a study by Baidoo et al. (2018) suggests that financial literacy gives a positive impact on domestic saving in Ghana. Domestic saving is believed to be the prerequisite for investment, which then supports economic growth sustainability. Whereas amongst Spanish workers, Herrador-Alcaide et al. (2021) suggest that financial literacy, financial risk tolerance, optimism on retirement, financial retirement objectives, and commitment to financial planning predict behaviour towards retirement by 36 per cent.

On the other hand in Malaysia, Zakaria et al. (2017) study the relationship between the level of financial literacy and risk tolerance towards savings and investments. The study concludes that only advance financial literacy positively affects risk tolerance levels towards saving and investment. Basic financial literacy however does not correlate with risk tolerance level amongst respondents. According to the study also, consumers with low financial literacy face hardship in making an informed decision on their savings and investment choices. In addition, Mahdzan et al. (2017) investigate financial literacy amongst working individuals in Kuala Lumpur and its effect on retirement portfolio allocation. The conclusion from the study indicates that respondents with higher financial literacy levels have tendencies to hold risky assets in their retirement portfolio compositions.

In addition, Peiris (2021) examines the influence of financial literacy on savings behaviour amongst employed individuals in Sri Lanka. The study concludes that financial literacy plays a significantly positive impact on savings behaviour. Hence, the finding suggests the promotion towards knowledge of the financial system in order to support increasing positive savings behaviour. Moreover, Mpaata et al. (2021) investigate the relationship between financial literacy with saving behaviour amongst the owners of Micro and Small Enterprises (MSEs) in Uganda. The study suggests that financial literacy explains the saving behaviours of business owners. Furthermore, the study also indicates that individuals with low self-control require more financial literacy training as compared to those with high self-control in order to gain a positive effect on their saving behaviours.

Whereas in Indonesia, Hajam (2020) analyses the impact of financial literacy and future orientation on family retirement planning amongst families in Surabaya. From the study, it is concluded that financial literacy and future orientation show a positive influence on family retirement planning. Whereas Safari et al. (2021) investigate the impact of financial literacy indicated by financial knowledge and computation capability on personal retirement planning amongst public sector employees in Congo. Results from the investigation revealed that both of the financial literacy components have significant impacts on personal retirement planning, indicating the significant role financial literacy plays as a determinant of personal retirement planning.

In financial decision and financial markets participation, there are several studies in Malaysia also that investigate retirement planning and savings. Shariff and Ishak (2021) argue that retirement savings decision is influenced by individual judgement on retirement preparation and saving. Whereas Tan and Singaravelloo (2020) study the relationship between financial literacy levels and financial behaviour with retirement planning behaviour amongst Malaysian government officers working in the federal government administrative centres in Putrajaya and Kuala Lumpur. The study unveils that financial literacy does not impact retirement planning. The financial literacy variable also does not mediate the relationship between financial behaviours and retirement planning.

2.4 Investment

Financial literacy is also found to affect the investment aspect. For instance, Abadi et al. (2021) study the association of risk attitude and human resource financial literacy with investment motivation in joint venture funds amongst individuals and mutual funds investors in Iran. The study indicates that attitude towards risk and human resource financial literacy significantly give impact on motivation in joint venture funds amongst investors in Iran. Human resource financial literacy in this study is indicated by financial literacy in the field of financial jobs, knowledge of computer concepts, financial concepts knowledge, knowledge of statistics and financial mathematics concepts, ability in interaction and communication with financial concepts, skilful in using appropriate financial decisions, skills to manage personal financial affairs, and confidence in effective planning for future financial needs.

Moreover, Perdana and Yasa (2021) investigate the significance of financial literacy level, minimum investment capital, and family environment on interest towards the investment of Indonesian capital market among university students. The study concludes that the level of financial literacy and family environment are positively significant to students' investment interests. On the other hand, minimum capital investment is negatively significant on students' investment interest in the Indonesian capital market. Whereas Mwangi and Onsomu (2018) indicate that financial literacy gives an impact significantly on portfolio diversification amongst investors at the Nairobi securities exchange, Kenya. The study involved 200 investors who traded in stocks between June and July 2017 at the Nairobi Securities Exchange. Demographic criteria such as age, education, and income level on the other hand do not explain portfolio diversifications.

Meanwhile in Indonesia, Setyowati et al. (2018) investigate the correlation between the level of *Islamic* financial literacy with personal financial planning amongst 313 respondents of Solo society. The study indicates that people with a high level of Islamic financial literacy have a tendency to prefer investing in *Islamic* assets. People with a high level of *Islamic* financial literacy are also found to be better in their management of personal finances. In addition, Nugraha et al. (2021) investigate the influence of financial literacy and inclusion on decisions of financial investment in Manado. The analysis found that financial literacy and financial inclusion influence financial investment decisions significantly.

In this regard also, a study by Epaphra and Kiwia (2021) concludes that individuals with higher financial literacy, represented by financial knowledge variable as well as male and married people residing in Arusha, Tanzania have a better chance to invest in the financial market despite their education level. Meanwhile, other variables such as income level and risk attitude play significant roles to influence one's participation in the financial markets. Whereas a study by Bucher-Koenen et al. (2021) argues that financial literacy, comprising financial knowledge and confidence gives an impact on individuals' stock market participation in the Netherlands. In the findings, women's lower level of financial literacy is found to be explained by their lower confidence level.

Moreover in Japan, Yamori and Ueyama (2021) examine the correlation between financial literacy level and stock market participation among households. The study concludes that a high level of financial literacy promotes stock market participation. The investigation also unveils that households' level of financial literacy does not impact the shareholding ratio amongst financial assets. In addition, Alaaraj and Bakri (2020) investigate the impact of financial literacy, made of awareness and knowledge components, on the decision-making of investment amongst investors of four different banks in South Lebanon. In the study, decision-making in investment is represented by the way investors investigate, evaluate, anticipate, and interpret the steps and transactions to decide investment risk, investment decision model, and process. From the study, financial literacy shows a positive significant relationship with the decision-making of one's investment. In addition, Baihaqqy et al. (2020) examine the financial literacy among baby boomers, Generation X, and Generation Y in Indonesia and its impact on investment decisions. The study also concludes consistent findings with previous studies that investment decisions are explained by financial literacy.

Meanwhile, Senda et al. (2020) argue that financial literacy does not explain investment decisions of real assets and financial assets. The study was carried out to investigate the effect of financial literacy level and demographic variables on investment decisions amongst government employees of Kalibawang Community Health Centre, Yogyakarta. The study also reveals that only age, income, and investment experience show a correlation with those investment decisions studied. Whereas education and gender do not show significance in their relations with investment decisions. On the other hand, Afgani et al. (2021) investigate financial literacy and its significance on stock market participation amongst Generation Z in Bandung City. As one of the most technologically savvy generations, Generation Z is expected to have access to wealth information including stock investment. Therefore, participation from this generation is expected to be high. However, the study indicates that being technologically savvy only not enough. Generation Z's stock market participation is also influenced significantly by financial literacy. In addition, Asmara and Wiagustini (2021) investigate the role financial literacy plays in investment decisions amongst individuals who have invested and are investing in the Indonesian Stock Exchange. The finding from the study is parallel with previous studies that financial literacy shows a significant positive correlation with investment decisions.

Moreover, Padil et al. (2021) investigate the correlation between financial literacy, indicated in the study by financial goals and budgeting skills with the level of awareness of investment scams amongst university students in Malaysia. The study argues that having clear financial goals is found not to give an impact on their awareness in identifying investment scams. Therefore, properly guiding youngsters on realistic financial objectives is crucial to avoid them spending on luxurious lifestyles with fast and easy money. On the other hand, having adequate budgeting skills is found to significantly contribute to their awareness of identifying investment scams. Thus, instilling disciplined budgeting habits is found to affect lowering the possibility of becoming the victim of investment scams among youngsters. In addition, Samsulbahri et al. (2021) also argue that financial literacy is associated with investment decision behaviour amongst young Muslim adults in Malaysia. In the study, financial literacy together with herding behaviour and perceived *taqwa* or fear of God are examined to conclude their association with investment decision behaviour. The study also unveils the roles of herding behaviour and fear of God in explaining investment decision behaviour.

2.5 Financial risk tolerance

In the financial risk tolerance matter, study such as Bayar et al. (2020) concludes that financial literacy and education level give positive impacts on financial risk tolerance amongst investors within Turkish Usak University personnel. The study finds that financial literacy and education level are proven to ease complicated financial decision-making. Meanwhile, Mahdzan et al. (2017) examine the impact of financial literacy, as well as risk aversion and future expectations on retirement planning and allocation of a retirement portfolio in Malaysia. The conclusion from the study suggests that individuals who obtain higher financial literacy and lower level of risk aversion are more probably to hold risky assets in their retirement portfolios. Whereas, the probability of planning for retirement is explained significantly by individuals' future expectations.

2.6 Business

One of the studies that examine the impact of financial literacy on business is Valenzuela et al. (2021). The study investigates the effect of financial literacy on business innovation performance amongst Spanish from different sectors of SMEs. The study concludes that both direct and indirect financial literacy positively affect business innovation. The areas of business innovations studied are entrepreneurship, university, business management, and public policy. Whereas investigation by Eniola and Entebang (2017) studies the level of financial literacy amongst small and medium enterprises (SMEs) business owners and managers and its influence on the company's performance in southwest Nigeria. Financial literacy in the study comprises financial knowledge, financial awareness, and financial attitude. The conclusion indicates that financial awareness and financial knowledge of SME business owners and managers do not predict SME performance.

In addition, Tuffour et al. (2020) investigate to identify the significance of financial literacy comprising the aspects of knowledge, attitude, and awareness of the success of small-scale enterprises amongst managers in Ghana. The study concludes that all three aspects of financial literacy, namely knowledge, attitude, and awareness reveal significant impacts on enterprises' performance for both financial and non-financial components examined in the study. However, there is no evidence to prove the significance of demographic characteristics such as age, level of education, and individual experience on financial performance. These findings unveil the importance of financial literacy in determining the survival of small-scale enterprises.

Meanwhile, in Malaysia, Razak et al. (2020) reveal that financial literacy level determines the success of Micro Small and Medium Enterprises (MSMEs) of Amanah Ikhtiar Malaysia (AIM) since unsatisfactorily low financial literacy amongst the businesses is found to be the reason of their business failure. Increasing financial literacy in business management amongst MSMEs and SMEs is crucial, as they have been important forces in enhancing economic activities in Malaysia to provide consumers' demand as well as employment for locals.

2.7 Economy

Financial literacy is also found to give an impact on the economic aspect. Kumari et al. (2020) stated that financial literacy affects women's economic empowerment significantly among the rural poor in Sri Lanka. Women's empowerment is defined by The World Bank in 2016 as a principle for sustainable development and as a way towards the fulfilment of the Millenium Development Goals (MDG) (Kumari et al., 2020). The study also suggests that economic empowerment is an important element that directly impacts the improvement of women's financial well-being and decision-making power.

Furthermore, Adam and Frimpong (2017) investigate the role of financial literacy, financial behaviour, number of dependents, family support as a source of income, and retirement planning in the financial well-being of retirees in Cape Coast Metropolis, Ghana. The study argues that financial literacy, family support, and retirement planning have a positive correlation with the financial well-being of retirees. In addition, studies by Karakurum-Ozdemir et al. (2019) and Younas et al. (2019) conclude that financial literacy has a positive impact on financial well-being as a crucial factor. Therefore, the financial literacy dimension has been an important policy instrument to improve the financial well-being of individuals.

In this regard, the study by Karakurum-Ozdemir et al. (2019) investigates financial literacy-related policies in a group of middle-income countries by identifying financial literacy levels. Results from the participating countries of Colombia, Lebanon, Mexico, Turkey, and Uruguay indicate the least financially literate groups in each country to facilitate targeting of public policy. The study reveals that groups with lower financial literacy scores are women, younger adults, and individuals who cannot read or write in the official language of their country of residence. In addition, the quality of education also positively affect financial literacy by not only the years of education possessed by respective individuals but the quality of education as well.

On the other hand, Wewengkang et al. (2021) investigate the significance of financial literacy and financial technology use on financial inclusion amongst university students in Manado. From the study, it is revealed that financial inclusion amongst the students is explained significantly by financial literacy.

3. FRAMEWORK FOR THE IMPACT OF FINANCIAL LITERACY

In this study, an extensive literature review on financial literacy is carried out based on the theoretical framework in Figure 1. In this study, financial literacy is classified as the independent variable. Meanwhile, the aspects that are affected by financial literacy are categorised as dependent variables. Literature reviews on this subject are obtained from five recent years of studies to ensure the relevancy of this study.

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4. LITERATURE SUMMARY ON FINDINGS ABOUT THE IMPACT OF FINANCIAL LITERACY

Findings from this review above have revealed the influence of financial literacy on finance and economic aspects. The findings obtained are represented in Table 1.

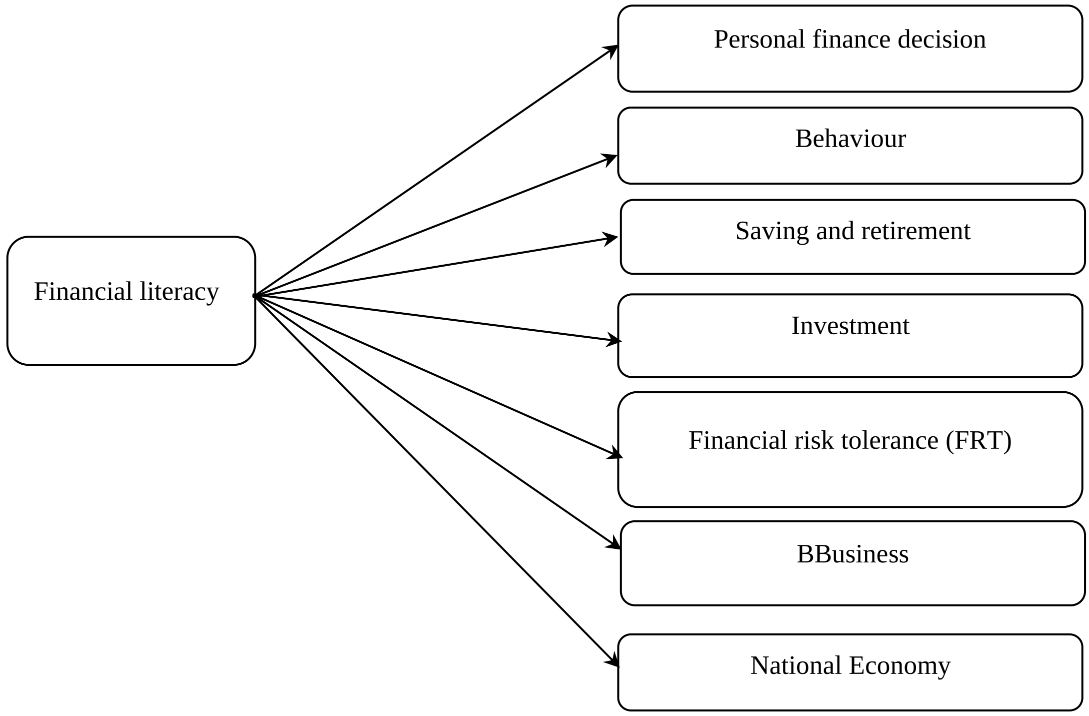

Figure 1: Theoretical framework of the impact of financial literacy.

Table 1: Literature summary of the impact of financial literacy.

Impact	Population	Findings
Personal financial decision	United States (Kim & Lee, 2018)	Correlates negatively with the use of payday loans.
	Egerton University (Mwathi & Wangeci, 2017)	Correlates positively with employees' personal financial decisions.
	Vietnam (Nguyen & Nguyen, 2020)	A higher level of financial literacy, mainly with advanced financial literacy, encourages participation in the financial market. Perceived financial literacy and peer effect positively affects investors' interest in financial market participation.
	Yogyakarta (Muslichah & Sanusi, 2019)	*Islamic* financial literacy affects consumers' interest to take part in the *Islamic* banking market.
	Surabaya (Humaidi et al., 2020)	Plays a significant positive role in determining one's financial management behaviour.
	China (Liu et al., 2021)	Plays a significant role in elevating participation in insurance amongst farmers.
	Pakistan (Farooq et al., 2021)	Gives a positive impact on prudent financial management practices significantly.
	Malaysia (Hamid & Loke, 2020)	Shows positive significance on decision-making amongst credit card holders.
	Malaysia (Sabri et al., 2020; Sabri et al., 2021)	Plays a significant role in financial vulnerability among households.

	Malaysia (Koe & Yeoh, 2021)	Plays a positive role in financial planning for marriage.
Behaviour	Jawa Tengah (Zahra & Anoraga, 2021)	Positively influences consumptive behaviour.
	Malaysia (Chong et al., 2021)	Explain financial behaviour significantly.
	Sri Lanka (Peiris, 2021)	Plays a significantly positive impact on savings behaviour.
	Uganda (Mpaata et al., 2021)	Explains saving behaviours amongst the business owners.
Saving and retirement	Ghana (Baidoo et al., 2018)	Positive impacts on domestic saving.
	Spain Herrador-Alcaide et al. (2021)	Predicts behaviour towards retirement.
	Malaysia (Zakaria et al., 2017)	Advanced financial literacy positively affects risk tolerance levels towards saving and investment. Low financial literacy causes hardship in making informed decisions on savings and investment choices.
	Kuala Lumpur (Mahdzan et al., 2017)	A higher financial literacy level encourages tendencies to hold risky assets in retirement portfolio compositions.
	Surabaya (Hajam, 2020) Congo (Safari et al., 2021)	Shows positive influence on personal and family retirement planning.
Investment	Iran (Abadi et al., 2021)	Gives impact on motivation in joint venture funds.
	Indonesia (Perdana & Yasa, 2021)	The level of financial literacy positively affects students' investment interest in the capital market.
	Kenya (Mwangi & Onsomu, 2018)	Gives impact significantly on portfolio diversifications amongst investors.
	Indonesia (Setyowati et al., 2018)	A high level of *Islamic* financial literacy encourages a tendency to prefer investing in Islamic assets. A high level of *Islamic* financial literacy encourages the management of personal finances.
	Manado (Nugraha et al., 2021)	Explains financial investment decisions significantly.
	Arusha, Tanzania (Epaphra & Kiwia, 2021)	Encourages better chance to invest in the financial market despite education level.
	Netherlands (Bucher-Koenen et al., 2021) Japan (Yamori and Ueyama, 2021)	Gives impact on individuals' stock market participation.
	South Lebanon (Alaaraj & Bakri, 2020) Indonesia (Asmara & Wiagustini, 2021) Malaysia (Samsulbahri et al., 2021)	Shows a positive significant relationship with the decision-making of one's investment.

	Indonesia (Baihaqqy et al., 2020) Bandung City. (Afgani et al., 2021)	Explains investment decisions amongst baby boomers, Generation X, and Generation Y. Significantly influences Generation Z's stock market participation.
Financial risk tolerance (FRT)	Turkey (Bayar et al., 2020)	Positively impacts on FRT and eases complicated financial decision-making.
	Kuala Lumpur (Mahdzan et al., 2017)	Higher financial literacy encourages more probability to hold risky assets in retirement portfolios.
Business	Spain (Valenzuela et al., 2021)	Positively affects business innovation.
	Ghana (Tuffour et al., 2020)	Impacts significantly on enterprises' performance.
	Malaysia (Razak et al., 2020)	Determines the success of Micro Small and Medium Enterprises (MSMEs) of Amanah Ikhtiar Malaysia (AIM)
National economy	Sri Lanka (Kumari et al., 2020)	Affects rural poor women's economic empowerment.
	Ghana (Adam & Frimpong, 2017)	Financial literacy has a positive correlation with the financial well-being of retirees.
	Middle-income countries: Colombia, Lebanon, Mexico, Turkey, and Uruguay (Karakurum-Ozdemir et al., 2019)	Groups with lower financial literacy scores are women, younger adults, and individuals who cannot read or write in the official language of their country of residence. Quality of education positively affects financial literacy by not only the years of education possessed but also the quality of education.

From the table obtained, financial literacy is found to be most influential in the decision-making of financial product consumptions such as saving, retirement, and investment. Financial literacy is also found to give an impact on these matters in many locations, worldwide and in Malaysia.

Financial literacy, in addition, is found to be significant in the financial decision of many financial products, such as insurance and credit card consumption, conventional as well as *Islamic* finances. Therefore investment firms and financial bodies in Malaysia should consider financial literacy as the indicator to identify their potential investors and participants, then consider increasing financial literacy amongst those in need through education programs. Financial bodies, as well as government agencies also can utilise FinTech to support financial education in order to improve financial literacy. This approach is believed will help to contribute to the development of an economically stronger nation.

The importance of financial literacy on the other hand can be seen in the desire amongst individuals to foster financial satisfaction and well-being. Therefore people are more aware of their responsibilities to make sound financial decisions. Moreover, financial literacy in these recent years may be more influenced by the environment and technology instead of parental influence. Therefore, implementation of financial education syllabus or more financial training courses in high school, after that in university, is crucial especially with the rise in bankruptcy among youth. This step is hoped will help more youth to handle their finances better to improve their financial well-being.

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Bankruptcy amongst youth also is related to their financial psychology and financial management. These factors relate to their financial literacy to manage their finances. Therefore official financial education should be employed in the education system. In addition to addressing bankruptcy issues, a better understanding of financial knowledge also will help individuals to choose a suitable financial product to manage their finances effectively towards achieving their desired financial goal. In long run, effective choice of financial products will ensure financial security upon retirement to reach better quality of life amongst senior citizens.

5. CONCLUSION

This study has revealed the impact of financial literacy on several financial and economic subjects. Hence, financial education should be implemented in high schools, higher institutions, and workshops to increase the financial literacy level in Malaysia.

For that purpose, FinTech is believed to have the potential to enhance financial capability. For instance, smartphone apps should be utilised to enhance financial capability. Through smartphone apps, consumers will be provided with financial knowledge and basic financial skills. They will be able to keep track of their income and expenditure. Thus they will be more resilient to facing unexpected financial shocks. Financial literacy also can be evaluated by smartphone apps that are linked to specific financial institutions for further action taken to increase consumers' financial literacy. This is because less financially literate consumers have a limited understanding of the greater risk and rewards trade-offs. These financially incompetent investors then potentially result in market volatility. With the smartphone apps utilisation taken into consideration, the role of (FinTech) in enhancing financial well-being as well as overall well-being towards IR 4.0 can be achieved.

Like any other study, this study is also bound to its limitations. Although this study has gathered evidence literature on the impact of financial literacy from many countries across the globe, it is still debatable for future related researches about whether other variables also need to be taken into account. However, to the best of our knowledge, the authors are confident that we have provided the most relevant impacts concerning the subject studied. In addition, this study also has discussed a limited number of publications available. The possibility of more studies on the impact of financial literacy that is not found is there. Notwithstanding the above limitations, this study believes that it is contributing to the existing literature towards a better understanding of the impact of financial literacy.

This study has reviewed the impact of financial literacy. One of the impacts of financial literacy identified is its contribution to business development. However, the study on this impact is still limited. For the future research study, this study suggests an investigation conducted on the impact of financial literacy across different businesses. With this approach, businesses can consider conducting financial literacy screening and courses amongst their managers and decision-makers in order to encourage better decision-making related to business development.

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