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RESEARCH ARTICLE

The Links Between Demographic Factors and Financial Literacy Among Youths

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ABSTRACT

There is a prevalent effort to increase financial literacy among youth due to increasing concerns over debt and bankruptcy. The issue becomes more pronounced for working youth due to their early financial responsibilities and lack of financial knowledge. Hence, the objective of this study is to assess the level of financial literacy among youth and investigate the association between financial literacy and their characteristics. A survey was administered to a sample of employed youth in Malaysia, with a focus on those between the ages of 18 and 35. The analysis of the 188 responses indicates that the participants possess an adequate level of financial literacy. The findings indicate that age, income level, number of dependent children, employment status, and number of credit cards have positive and significant correlations with financial literacy. This research study presents additional empirical findings about financial literacy and offers interesting insights towards the enhancement of financial literacy among youth in developing countries.

Contribution/Originality: This study contributes to the existing literature by presenting new evidence of the relationships between the characteristics of youth and financial literacy. It also documents the relationship between financial literacy and financial well-being in developing countries, using Malaysia as a case study.

1. Introduction

In today's rapidly evolving digital era, many young people struggle to grasp the complexities of modern financial products. The number of young individuals who are experiencing financial challenges has been rising, which puts them at risk of bankruptcy. According to a report by the Malaysia Insolvency Department (MID) (2022), it was discovered that a substantial majority of bankruptcy cases in Malaysia between 2019 and 2023 involved individuals under the age of 44, accounting for 57.34% of the total. The issue is intensified by lifestyle choices, impulsive buying behaviour, stagnant salaries, and the ease of accessing credit (Lusardi & Mitchell, 2023). Dube et al. (2023)

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claimed that individuals who have limited knowledge about finances are exposed to the possibility of falling victim to financial fraud, making poor financial choices, overlooking opportunities for wealth growth, and having the tendency to accumulate too much debt (Garz et al., 2021). It is crucial to have a thorough understanding of financial literacy to minimise risks and enhance the future financial well-being of young individuals (Demirgüç-Kunt et al., 2022).

However, the inclination to adopt financial literacy differs among individuals. Various factors, including one's attitude towards financial matters and personal characteristics, play a role in determining an individual's inclination to enhance their financial literacy (Sticha & Sekita, 2023). Although there has been extensive research on financial literacy, the exploration of this topic among young people in developing countries remains relatively scarce (Thomas & Subhashree, 2020). Gaining insight into the elements that relate to the extent of financial literacy would aid in addressing the financial challenges faced by youth.

Considering this context, this study aims to evaluate the extent of financial literacy among youth in Malaysia. This research offers new empirical evidence in the field by examining the financial literacy among Malaysian youth in the digital era, shedding light on the financial behaviour and well-being among young Malaysians. Additionally, this research assists policymakers in formulating strategies to enhance financial literacy across all segments of society. The rest of this paper is organised as follows: The literature review is demonstrated in the following section, followed by the methodology. This article ends with findings, discussions, and a conclusion.

1.1. Research Objectives

The objectives of this study are to evaluate the extent of financial literacy among youth in Malaysia, to investigate the connections between youth characteristics and their level of financial literacy, and to examine the associations between financial literacy and financial well-being.

2. Literature Review

Financial literacy refers to the knowledge of how individuals can effectively manage their day-to-day finances and make informed financial choices to address unexpected financial requirements (World Bank, 2013). Lusardi (2011) argued that financial literacy is assessed based on four areas: making ends meet; planning; choosing and managing financial products; and financial literacy and self-assessed skills. Meanwhile, Atkinson et al. (2007) divided financial literacy into managing money, planning, choosing products, and staying informed. Lusardi and Messy (2023) reported that many individuals do not make provisions against shocks due to a lack of knowledge of financial basic concepts. Mireku et al. (2023) claimed that individuals with a high level of financial literacy tend to exhibit more responsible financial habits when compared to those who have a limited understanding of finance. Students who possess a strong understanding of financial matters are more inclined to demonstrate responsible financial practices. Similarly, research conducted by Kolade et al. (2022) and Eloriaga et al. (2022) has determined that financial literacy exerts a significant influence on both financial development and financial well-being. People lacking financial knowledge often make poor financial decisions, which can have detrimental effects on their financial well-being. In addition, individuals who are experiencing financial difficulties may struggle to make meaningful

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contributions to society. Leskinen and Raijas (2006) asserted that financial competence is shaped by individuals' financial behaviour in spending, investing, and saving. Financial behaviour involves the capacity to assess and understand the wider consequences of financial actions and decisions (Rai et al., 2019). Delavande et al. (2008) argued that the acquisition of financial knowledge is considered an investment in human capital.

Sticha and Sekita (2023) found a statistically significant association regarding the level of financial literacy and active behaviour towards investing, which substantially impacts personal wealth accumulation and overall financial well-being. Lusardi (2011) revealed that respondents who lack knowledge regarding credit terms often end up splurging money on irrelevant expenditures, including paying high amounts of interest or fees.

2.1. Factors associated with financial literacy

Numerous studies have investigated the extent of financial literacy and the factors that influence it in various contexts. For example, Jappelli and Padula (2013) found that individual behaviour and preferences, resources, and the cost of financial education may affect whether certain people will proceed to acquire financial knowledge or not. If the cost of acquiring financial knowledge in terms of time, effort, and cost is greater than the expected benefits, some individuals might choose not to enhance their knowledge of finance, thus creating a group of consumers with a low level of financial literacy.

Leskinen and Raijas (2006) revealed that demographic characteristics (age, gender, education, values, and attitudes); the phase of life and immediate environment (family, socialisation); and the macroenvironment (society and its social, economic, and cultural settings) may have direct and indirect relationships with financial literacy. Thomas and Subhashree (2020) found that financial knowledge, financial attitude, family influence, and peer-group pressure influenced the level of financial literacy among the undergraduate students. Financial literacy is particularly acute in some demographic sub-groups that are already financially vulnerable, such as those with low incomes and low education. This population demonstrates a greater inclination to have financial fragility (Lusardi & Messy, 2023). . Taylor et al. (2011) demonstrated in their study that a low level of financial literacy is contributed by factors such as unemployment as opposed to full-time working adults. In the context of psychology, Melhuish et al. (2008) and De Meza et al. (2008) suggest that a higher level of financial literacy among individuals contributes to a higher level of mental health. This is supported by Taylor et al. (2011), who claimed that low financial literacy creates problems like unemployment and divorce, which intensify the psychological costs. In contrast, individuals with higher financial literacy may prevent bigger psychological and other related effects.

Atkinson et al. (2006) revealed that young people, those on low incomes, who have children with low education levels, literacy, and numeracy, are most likely to have low levels of financial literacy. It was also found that increased age and experience lead to greater financial literacy. Similarly, Atkinson et al. (2007) reported that at least half of the UK population needs reminding that it is dangerous to live for the day and make no provision for changes in circumstance, unexpected expenditure, or retirement. Meanwhile, Pellinen et al. (2011) concluded that while sufficient knowledge about financial products and concepts is essential, it does not guarantee individuals will use the knowledge in investment decisions. Similarly, Von stumm et al. (2013) show that socioeconomic status is associated with financial literacy.

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The literature review highlights the significance of financial literacy in fostering responsible and well-informed behaviour in today's environment. The literature suggests that having a solid understanding of financial matters can have a positive impact on overall well-being. Based on various demographic factors as highlighted in the previous literature, this study proposes the following nine hypotheses:

H1a: Age level is significantly related to financial literacy.
H1b: Income level is significantly related to financial literacy.
H1c: Education level is significantly related to financial literacy.
H1d: The number of children is significantly related to financial literacy.
H1e: Working status is significantly related to financial literacy.
H1f: Debt level is significantly related to financial literacy.
H1g: Credit card possession is significantly related to financial literacy.
H2a: Financial literacy is significantly related to saving behaviour.
H2b Financial literacy is significantly related to spending/investing behaviour.
H2c: Financial literacy is significantly related to financial well-being.

3. Research Methods

This study utilised a quantitative approach for exploring financial literacy among youth in Malaysia. Data were collected through the distribution of questionnaires to youth between 16 and 35 years old using the convenience sampling method. The questionnaire comprised Section A, that collected data on respondents' profiles; Section B, on the level of financial behaviour based on three components (saving behaviour (SB) and spending and investment behaviour (SIB); and Section C, which assessed the level of financial literacy (FL) and financial well-being (FWB). The components of SB, SIB, FL, and FWB were measured using a scale of 1 (very low) to 7 (very high). The items were adapted from Atkinson et al. (2007). The questionnaire survey was conducted among 500 target respondents who work in the private and public sectors in a district of Batu Pahat, Johor, Malaysia. After several follow-ups, 188 valid questionnaires were received, which equals 37.6% of the response rate. A reliability test shows that the measurements used are good and reliable where the Cronbach's alpha values are greater than 0.70.

4. Results

4.1. Respondent background

Table 1 indicates that most of the respondents are female (73%), single (68%), and hold a bachelor's degree (59%). Meanwhile, a smaller percentage have completed secondary education (27%). The age group of 20 to 25 years old constitutes the largest proportion of respondents (47). Most respondents have a modest income level, ranging from RM 0 to RM 2,000. Among the respondents, 13% are currently unemployed, 27% work part-time, and the remaining 60% are fully employed and self-employed. Most respondents currently reside with their parents (41%), while a considerable number live with friends (32%). 67% of respondents do not have any children who depend on them financially. Almost half of the respondents stated that they do not possess a credit card, and more than two-thirds of the overall respondents are presently in debt or have financial commitments.

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Table 1: Respondents background

	N	%		N	%
Gender			Financially Dependent Children		
Male	51	27.1	No child	114	60.6
Female	137	72.9	No financial child	13	6.9
Total	188	100.0	1 child	23	12.2
Marital Status			2 children	18	9.6
Single	127	67.6	2-3 children	12	6.4
Married	61	32.4	>4 children	8	4.3
Total	188	100.0	Total	188	100.0
Education Level			Age (years old)		
Primary	1	0.5	15-20	38	20.2
Secondary	51	27.2	20-25	89	47.3
Bachelor's degree	110	58.5	25-30	40	21.3
Masters/PhD	26	13.8	30-35	21	11.2
Total	188	100.0	Total	188	100.0
Income			Living Arrangement		
RM0-RM2 000	114	60.6	The only adult	47	25.0
RM2 000-RM4 000	44	23.4	With parents	77	41.0
RM4 000-RM6 000	21	11.2	With friends	61	32.4
>RM6 000	9	4.8	Others	3	1.6
Total	188	100.0	Total	188	100.0
Number of Credit Card			Level of Debt		
0	90	47.9	No at all	62	33.0
1	52	27.7	Little	80	42.6
2	19	10.1	Moderate	34	18.1
>2	27	14.4	High	12	6.4
Total	188	100.0	Total	188	100.0
Employment					
Unemployed	24	12.8	Self Employed	46	24.5
Work Part-Time	50	26.6	Others	2	1.1
Work Full-Time	66	35.1	Total	188	100.0

4.2. Level of financial literacy

Table 2 indicates that the average mean score for saving behaviour as well as spending and investment behaviour is 4.85 and 4.61, respectively. This suggests that respondents engage in saving activities to a slightly greater extent than other activities. Heightened uncertainty and rising costs of living may prompt young individuals to exercise greater prudence in their expenditures. Nevertheless, both financial behaviours are considered oderate. Under the saving behaviour category, planning for retirement has the highest mean score (5.30), indicating that respondents prioritise planning for their future retirement. Respondents have quite high levels of emergency savings (5.02) and retirement contributions (5.01). These aspects are crucial for ensuring financial security in the future and being ready for unexpected situations. The level of commitment to checking the monthly financial status is considered quite high, with a mean score of 4.97. In the spending behaviour category, investment activity has the highest mean score of 4.68. The items related to spending behaviour are rated at a moderate level. The findings suggest that keeping track of expenses can be a challenging task, requiring discipline and commitment. The results suggest that the respondents have a relatively good level of financial literacy, as demonstrated by an average mean score of 5.02. The findings indicate that most respondents possess a certain level of understanding when it comes to financial literacy. Although the overall level of financial literacy may not be

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exceptionally high, it is satisfactory. Lastly, the level of financial well-being reported by respondents is fairly moderate, with an average mean score of 4.29.

Table 2: Descriptive results for financial literacy

No.	Items	Min.	Max.	Mean	Std. Dev.
SB1	I have set planning retirement	1	7	5.30	1.303
SB2	I have set emergency fund	1	7	5.02	1.397
SB3	I have set/contribute to retirement accounts	1	7	5.01	1.457
SB4	I check monthly financial status	1	7	4.97	1.433
SB	Average saving behaviour	2	7	4.85	1.08
SIB1	I have investment in a few financial instruments	1	7	4.68	1.757
SIB2	I do not overuse credit card for spending	1	7	4.25	1.98
SIB3	I do not spend more than my income	1	7	4.49	1.69
SIB4	I can cover monthly expenses	1	7	4.43	1.61
SIB	Average spending & investment behaviour	1	7	4.61	1.27
FL1	Good at dealing with day-to-day financial matters	1	7	4.76	1.321
FL2	I know how to manage savings	2	7	5.21	1.298
FL3	I know how to manage spending	1	7	4.95	1.389
FL4	I have good financial planning ability	2	7	5.05	1.261
FL5	I have good financial knowledge	1	7	5.11	1.377
FL6	I know how to manage my financial product	2	7	5.04	1.514
FL	Overall FL	2	7	5.02	1.05
FWB	Financial well-being	1	7	4.29	1.385

4.3. Confirmatory factor analysis

To find out how well the items represented the main concepts, a confirmatory factor analysis with varimax rotation was used. The Kaiser-Meyer-Olkin test score for financial literacy is 0.869, surpassing the minimum threshold of 0.80. All variables were considered appropriate for conducting a component analysis. The Bartlett's test of sphericity yielded a significance value of 0.000. The study additionally demonstrates that the dimensions explained 61.86% of the total variation. The items with eigenvalues over 1.0 were separated into three distinct elements, each displaying factor loadings beyond 0.50.

4.4. The relationships between youth characteristics and financial literacy.

This section investigates the relationships between the characteristics of the respondents and financial literacy. This will facilitate the evaluation of the proposed hypotheses formulated in this research. The analyses are conducted using Pearson correlation analysis. Table 3 displays the findings of the relationships among age (Age), income level (Inc), education (Edu), number of financially dependent children (Child), employment status (Emp), debt commitment (Debt), number of credit cards (Card), and financial literacy. Table 4 presents the correlation analysis between financial literacy and saving behaviour, spending/ investing behaviour, and financial well-being.

The findings indicate that age, income level, number of dependent children, employment status, and number of credit cards exhibit positive and significant correlations with financial literacy. This means that the higher the age, income level, and number of dependents, the higher the financial literacy level. People with limited income often have less knowledge about managing their finances, which can increase their chances of facing financial challenges. The findings additionally demonstrate a significant

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correlation between youth and financial literacy. It appears that individuals who are employed have more chances to improve their understanding of personal finance. This could be due to the availability of courses, training programmes, or easier access to information. In contrast, individuals without employment have fewer opportunities to enhance their personal finances. Next, the findings indicate that individuals who own multiple credit cards exhibit a financial literacy. Individuals with higher financial literacy are more likely to understand the potential consequences of mishandling credit card usage.

Table 3: Correlation analysis for characteristics and financial literacy.

	Age	**Inc**	**Edu**	**Children**	**Emp**	**Debt**	**Card**	**FL**
Age	1	.448**	.313**	.624**	.327**	0.094	.282**	.324**
		0.000	0.000	0.000	0.000	0.198	0.000	0.000
Inc		1	.352**	.552**	.423**	-0.004	0.093	.320**
			0.000	0.000	0.000	0.955	0.204	0.000
Edu			1	.229**	0.018	.217**	.148*	0.054
				0.002	0.803	0.003	0.043	0.459
Children				1	.254**	0.092	.162*	.183*
					0.000	0.209	0.026	0.012
Emp					1	-0.128	.167*	.328**
						0.080	0.022	0.000
Debt						1	.236**	-.182*
							0.001	0.013
Card							1	.237**
								0.001
FL								1

Meanwhile, debt commitment has negative and significant relationships with financial literacy. The findings suggest that those with a lower level of financial literacy are more likely to have larger levels of debt commitments. This could be attributed to a deficiency in comprehending debt management, which consequently results in an increased debt burden. Therefore, the results suggest that various characteristics of the respondents are significantly linked to their level of financial literacy. The subsequent findings presented in Table 4 illustrate the correlation analysis conducted to examine the relationship between saving behaviours, spending and investment behaviours, financial literacy, and financial well-being. The findings indicate a strong and statistically significant association between financial literacy and both saving and spending/investment behaviours, with correlation coefficients of 0.546 ($p = 0.000$) and 0.596 ($p = 0.000$) correspondingly. Individuals who possess a higher level of financial literacy are more inclined to engage in saving, investing activities, and maintaining control over their expenses. There is also a strong and statistically significant correlation between financial literacy and the respondents' financial well-being (correlation coefficient: 0.624, p-value: 0.000). It is evident that individuals who possess a strong understanding of personal financial management are more likely to achieve financial stability.

Overall, the results indicate that all hypotheses are supported with the exception of H1c, which posits that education level is significantly related to financial literacy. The findings indicate that there are positive and significant relationships between financial literacy and variables such as age, income, the number of financially dependent children,

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employment status, and the number of credit cards owned. Furthermore, it has been discovered that there is a significant and negative relationship between the amount of debt and the level of financial literacy. These findings suggest that young people who have more debt obligations tend to have a poorer level of financial literacy. Therefore, it may be concluded that H1f is supported. Finally, the findings demonstrate significant correlations between financial literacy and saving behaviour, spending/investing behaviour, and financial well-being. As a result, H2a, H2b, and H2c are all supported.

Table 4: Correlation analysis between financial literacy and financial well-being.

	SB	SIB	FL	FWB
SB	1	.827**	.546**	.490**
		0.000	0.000	0.000
SIB		1	.596**	.390**
			0.000	0.000
FL			1	.624**
				0.000
FWB				1

5. Conclusion

Having a strong understanding of financial literacy is essential for today's society, as it greatly enhances their capacity to effectively handle their finances. It also empowers individuals to build, grow, track, and protect wealth, thereby enhancing their overall well-being. This study examines the level of financial literacy among youth and explores the relationships between youth characteristics and financial literacy. Additionally, this study investigates whether financial literacy is significantly related to individual saving, spending, and investing behaviours, as well as its relationship with financial well-being. The results suggest that the respondents possess a moderate level of financial literacy. It can be inferred that the Malaysian youth possess the financial capability to control and manage their financial well-being. Moreover, youth with a greater level of financial literacy exert greater influence over their saving, spending, and investment activities. They possess a reduced likelihood of incurring significant levels of debt. Personal characteristics have a significant impact on financial literacy levels. Older individuals with higher incomes and stable employment tend to have a better understanding of financial matters. In addition, individuals who have a higher level of understanding of how to manage their finances tend to experience improved financial stability. It is crucial for the younger generation to have a strong understanding of financial literacy in order to effectively manage their finances and ensure a secure financial future.

This study contributes to the existing literature by presenting new evidence of the relationships between the characteristics of youth and financial literacy. It also documents the relationship between financial literacy and financial well-being in developing countries, using Malaysia as a case study. The outcome of this study provides valuable information to today's youth and relevant policymakers regarding the importance of financial literacy among young individuals in navigating unforeseen financial challenges. Equipping youth with a fundamental knowledge of financial management should be given high priority by the government to ensure youth are able to make well-informed choices, prioritise their financial well-being, avoid scams and fraud, and contribute positively to society. It is crucial to establish financial literacy programmes in secondary or high schools to proactively address potential financial challenges that young people may face in the future.

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The study concentrates on a sample of young Malaysians living in the country's southern region. It is important to exercise caution when drawing conclusions about the entire youth population from the results. Nonetheless, this study provides interesting evidence of financial literacy among young people in developing countries. To increase the generalizability of the findings, it is important to increase the sample size in future research.

Ethics Approval and Consent to Participate

This research followed the research ethics outlined by the Research Ethics Committee of the Universiti Tun Hussein Onn Malaysia. All procedures performed in this study involving human participants were conducted in accordance with the ethical standards of the institutional research committee.

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Conflict of Interest

The authors reported no conflicts of interest for this work and declare that there is no potential conflict of interest with respect to the research, authorship, or publication of this article.

References

Atkinson, A., McKay, S., Collard, S., & Kempson, E. (2007). Levels of Financial literacy in the UK. *Public Money and Management*, 27(1), 29-36. https://doi.org/10.1111/j.1467-9302.2007.00552.x

Atkinson, A., McKay, S., Kempson, E., & Collard, S. (2006). Levels of financial literacy in the UK: Results of a baseline survey. *FSA Consumer Research Paper*, 47. FSA: London.

De Meza, D., Irlenbusch, B., & Reyniers, D. (2008). *Financial literacy: A behavioural economics perspective*. London: Financial Services Authority.

Delavande, A., Rohwedder, S., & Willis, R. (2008). Preparation for Retirement, Financial Literacy and Cognitive Resources MRRC Working Paper WP 2008-190

Demirgüç-Kunt, A., Leora, K., Dorothe, S., & Saniya, A. (2022). The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19: World Bank Publications, Washington,

© 2023 by the authors. Published by Secholian Publication. This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

Dube, V. S., Asthana, K., HAbdullah, A. (2023). Digital Financial Literacy: An Empirical Study on Millennials in India *Empirical Economics Letters, 22*(2). 10.5281/zenodo.8253419

Eloriaga, E. F., Roxas, E. R. F., Cuaresma, P. J. R., & Cabauatan, R. R. (2022). A study on financial literacy and financial behavior of young professionals in Metro Manila. *International Journal of Research in Engineering, Science and Management*, *5*(1), 226–236. https://journal.ijresm.com/index.php/ijresm/article/view/1713/1652

Garz, S., Xavier, G. & Dean, K., Rafe, M. Caitlin, S. & Jonathan Z. (2021). Consumer Protection for Financial Inclusion in Low-and Middle-Income Countries: Bridging Regulator and Academic Perspectives." *Annual Review of Financial Economics,* 13, 219–246.

Jappelli, T. & Padula, M. (2013). Investment in financial literacy and saving decisions, *Journal of Banking & Finance*, *37*(8), 2779-2792. https://doi.org/10.1016/j.jbankfin.2013.03.019.

Kolade, T., Orekoya, S., & Adeniyi, O. (2022). Determinants Of Financial Literacy and Its Effects on The Financial Behaviour of Undergraduates In A Nigerian University, *Ife Social Sciences Review*, *30*(1), 11–26. Https://Issr.Oauife.Edu.Ng/Index.Php/Issr/Article/View/162

Leskinen, J., & Raijas, A. (2006). Consumer financial literacy-a life cycle approach. *Consumer Financial literacy: Empowering European Consumers,* In European Credit Research Institute (Ed.), Consumer Financial literacy: Empowering European Consumers: Brussels: The European Credit Research Institute (ECRI), 8-23.

Lusardi, A. & Mitchell, O.S. (2023). *The Importance of Financial Literacy: Opening a New Field*. NBER Working Paper 31145, https://doi.org/10.3386/w31145

Lusardi, A. (2011). *Americans' Financial literacy*. National Bureau of Economic Research, NBER Working

Lusardi, A. & Messy, F.A (2023). The importance of financial literacy and its impact on financial wellbeing. *Journal of Financial Literacy and Wellbeing*, 1, 1–11. https://doi.org/10.1017/flw.2023.8

Melhuish, E., Belsky, J., & Malin, A. (2008). *An investigation of the relationship between financial literacy and psychological wellbeing in mothers of young children in poor areas in Britain*. Occasional Paper, 30. London: FSA.

Mireku, K., Appiah, F. & Agana, J.A. (2023) Is there a link between financial literacy and financial behaviour?. *Cogent Economics & Finance, 11*(1), 2188712, https://doi.org/10.1080/23322039.2023.2188712

Malaysia Insolvency Department (MID) (2022). *Bankruptcy statistic, 2022*. Malaysia Insolvency Department (MID). https://www.mdi.gov.my/index.php/legislation/statistics/75-bankruptcy/1983-bankruptcy-statistic-2022

Pellinen, A., Tormakangas, K., Uusitalo, O., & Raijas, A. (2011). Measuring the financial literacy of investors. *International Journal of Bank Marketing*, 29(2), 107–133. https://doi.org/10.1108/02652321111107611

Rai, K., Dua, S., & Yadav, M. (2019). Association of Financial Attitude, Financial Behaviour and Financial Knowledge Towards Financial Literacy: A Structural Equation Modeling Approach, *FIIB Business Review*, 8(1). https://doi.org/10.1177/23197145198266

Sticha, A. & Sekita, S. (2023), The importance of financial literacy: Evidence from Japan. *Journal of Financial Literacy and Wellbeing*, 1–19. doi:10.1017/flw.2023.9

Thomas, B. & Subhashree, P. (2020). Factors that Influence the Financial Literacy among Engineering Students 9th World Engineering Education Forum, WEEF 2019, *Procedia Computer Science,* 172, 480–487. 10.1016/j.procs.2020.05.161

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Taylor, M. P., Jenkins, S. P., & Sacker, A. (2011). Financial capability and psychological health. *Journal of economic psychology*, *32*(5), 710-723. 10.1016/j.joep.2011.05.006

Von stumm, S., O'Creevy, M. F., & Furnham, A. (2013). Financial literacy, money attitudes and socioeconomic status: Risks for experiencing adverse financial events. *Personality and Individual Differences*, *54*(3), 344-349. https://doi.org/10.1016/j.paid.2012.09.019

World Bank (2013). Why financial literacy is important and how surveys can help. *The World Bank.*

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