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FINANCIAL LITERACY OF SCHOOL LEADERS IN NATIONAL SECONDARY SCHOOLS IN KUALA LUMPUR, MALAYSIA

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ABSTRACT

Financial literacy is known for its importance in shielding the public from financial mismanagement. For the school leaders' population, this topic is hampered partly by the lack of empirical evidence on this particular population, a shortcoming this study addresses. This study aims to identify the level of the school leaders' financial literacy through their understanding of matters related to financial knowledge, financial behaviour and financial attitude; differentiate the levels of financial literacy among them, and ascertain the factors that can determine their financial literacy. It hopes to provide policymakers and school leaders to understand the implications of financial illiteracy. 274 samples were selected randomly from Kuala Lumpur's national secondary schools to answer an online questionnaire. Quantitative analysis using inferential statistical analysis of independent samples t-test and multiple regression analysis was employed in finding answers to research problem. The findings show that the level of financial literacy of school leaders was moderate (M=0.717, SD= 0.301) based on the means of financial knowledge (M=0.58, SD=0.211, high level), financial behaviour (M=0.74, SD=0.245, high level) and financial attitude (M=5.88, SD=0.703, moderate level). Inferential statistical analysis of independent samples t-test indicated a significant difference between top and middle leaders, with top leaders' mean financial score was greater than the middle leaders' (M=54.5, SD = 5.689 vs M=52.67, SD=6.155, p=0.011). The study revealed that working experience (β=.331, t=2.593, p=.010) and financial education (β=.202, t=3.456, p=.001) were statistically significant factors that determined the school leaders' financial literacy through multiple regression analysis. Overall, this study highlights that although the respondents' financial knowledge and financial behaviour levels are high, it is not translated similarly through their financial attitude. These findings imply that the financial attitude is still at a moderate level. Thus, policymakers need to provide more exposure to school leaders in terms of financial attitude since financial attitude will affect their everyday financial decisions. This study highlights the importance of working experience and financial education which could be strengthened by imposing workplace financial education for the current and future school leaders of the nation.

Keywords: **Financial Literacy, School Leaders, Financial Education**

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INTRODUCTION

Financial literacy becomes an important skill that need to be possessed by each individual. Covid-19 pandemic has taught us to be more prepared for financial emergencies when many businesses have to be closed and people had to depend on their saving for survival. Thus, it is important to equip each individual with financial literacy skills. This is because exposure towards financial risks can avoid indebtedness, financial fraud, scam, and bankruptcies. Teachers, being a large civil servant force in this nation, should be financially literate. By having the desired level of financial literacy, it is hoped that teachers can be well prepared for planning their finances and also share their skills with students who are future leaders (Surendar & Subramanya Sarma, 2018).

In the current market where people are presented with a multitude of financial information that may present great challenges, financial literacy may help avoid financial difficulties and later attain economic stability. As reported by Perimbanayagam (2020) and Abd Rahman (2020), cases of retirees, schoolteachers and lecturers who have fallen prey to scams and financial mismanagements involving the loss of hundreds of millions of life savings are a worrying trend. Abd Rahman (2020) further asserted that for scammers to gain success, they have indeed studied the profiles of the victims before scheming to defraud them.

It is not surprising to note that most Malaysians, including teachers, are not equipped with the awareness of personal financial knowledge (Murugiah, 2016). Despite the various government and private sectors' efforts in educating people, there is still evidence of financial knowledge scarcity in society (Jay, 2017). Due to this paucity, research has shown that people succumb to indebtedness, financial fraud, bankruptcies, poor use of credit and other financial problems (Dewi et al., 2020; Fernandes et al., 2014; Murugiah, 2016). Despite ongoing awareness campaigns by the relevant authorities and media coverage of the plight of financial fraud victims, there are still many who are consciously or unconsciously becoming the statistic to fraudsters' victims (*Avoid Being A Victim*, n.d.).

Even with financial knowledge acquired through education, research has shown that some Malaysians still experience financial difficulties despite their high level of financial knowledge (Yong et al., 2018). It could be postulated that either financial literacy has not been fully understood or there is an absence of incorporating financial knowledge and financial behaviour among these people. As this discussion is on the Malaysian public in general, it serves as a stark reminder that both teachers and school leaders could be among those who fall prey to fraud and financial mismanagements too.

Although there are extensive studies on teachers' financial literacy, there is not much focus explicitly given on school leaders. The studies on the financial literacy of school leaders in Malaysia are lacking. Chaulagain (2018) emphasises that measuring individuals' financial literacy is important to research attention as it has behavioural implications and effects on their financial well-being. The financial situation of school leaders is vital as it affects many individuals, both the students they teach and the other teachers they lead. As a whole, school leaders' literacy can signal whether they are heading towards beneficial or detrimental effects to society. Thus, the school leaders' financial literacy should be determined first to reflect the organisation they are leading.

This study undertakes a close examination of school leaders serving in Malaysia's national capital, Kuala Lumpur. Being the largest urban area in Malaysia and the centre of numerous activities, including economic, financial, and educational fields (Britannica, 2022), it may pose financial challenges bigger than other states in the country. Although studies had shown higher levels of financial literacy among the urban teachers than the rural ones (Kenayathulla & Jupri, 2016), those with higher financial knowledge still face financial difficulties (Yong et al., 2018). Thus, ensuring the financial literacy levels of school leaders in Kuala Lumpur to equip them with essential interventions is imperative.

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LITERATURE REVIEW

Financial Literacy

Literacy in the broadest sense is displayed as having both the ability to understand and use any acquired knowledge (Huston, 2012). Combining this primary definition with the focus on finance, financial literacy is defined as having the knowledge of economic and financial concepts and the ability to use that knowledge and other financial skills to manage financial resources effectively (Hung et al., 2009). Wagner (2019) further regards financial literacy as important a skill as reading, writing and maths skills are to survive the complexity of the financial world.

There is a myriad of definitions on what and how financial literacy should be defined. Hung and Parker (2009) consider knowledge, skills, perceived knowledge, and financial behaviour interactions upon defining financial literacy. In more recent studies, researchers propose a multidimensional concept with a broad range of knowledge, attitudes and skills in measuring financial literacy (Morgan & Long, 2020; Paolo Stella et al., 2020).

Potrich et al. (2015) assert three dimensions that are commonly approved as financial literacy determinants: financial knowledge, financial behaviour and financial attitude. Financial knowledge is defined as the knowledge and skills acquired to better manage financial activities such as revenues, expenses and savings (Delavande et al., 2011; Hung et al., 2009). Financial behaviour is defined as human actions in making financial decisions and money management such as budgeting, bill-paying, saving, investing and other expenditures (Arofah et al., 2018; Bhushan & Medury, 2014; Memba, 2015). Rai et al. (2019) referred financial attitude as a personal inclination towards financial matters.

Previous Studies

Primarily, studies on teachers' financial literacy have revolved around the level of financial literacy of school teachers and their readiness to provide financial education at school (De Beckker et al., 2019; Henning & Lucey, 2017). Researchers worldwide, too, focus on the teachers' level of financial literacy and its relation to other select variables such as financial knowledge, financial behaviour and financial attitude (Hagos & Singh, 2019; Widyastuti et al., 2016; Zulaihati et al., 2019). The findings come as no surprise that these teachers are not excluded from having a low level of financial literacy, although some of them are at the very centre of the financial education itself (CM et al., 2017; De Beckker et al., 2019; Hagos & Singh, 2019). Although teachers are members of an educated society, being financially literate renders different types of difficulty, mainly depending on the stage of their lifecycles (Lee, 2010). The impact of different lifecycles was extensively studied, with the younger and older age groups were posited as having low financial literacy level, and the middle-age group had been associated with higher level (Bashir et al., 2013; Hayei & Khalid, 2019; Mohd Aziz & Kassim, 2020; Rajapakse, 2017). Conforming to the impact of lifecycle theory as postulated in the studies will mean that these teachers require regular financial management interventions. Like teachers, school leaders, too, are included in this focus of discussion. School leaders should not be left assumed to be financially educated just because of their job roles. Neither should they be blamed for the financial literacy level that they currently have.

Gender has been debated to be a general factor in determining the level of financial literacy. Women are considered to have lower levels than men (Ergün, 2018; Mitchell & Lusardi, 2015; Mustapha & Jeyaram, 2015). It is indeed a notable sign as the Malaysian teaching force is female-dominated (MOE, 2018). As discussed earlier, if gender is a factor in determining financial literacy, a serious implication of low financial literacy is expected on female teachers' personal and professional roles. A more severe impact may affect female school leaders' personal and professional roles as their influence in society is more extensive than other teachers of lower positions.

In understanding school leaders' financial literacy levels in different positions, research has shown that financial literacy increases with more education (Wagner, 2019). It is primarily understood, for school leaders to secure their positions, they need to obtain a specific academic qualification or serve in the teaching field for a certain number of years. Thus, as they are more academically knowledgeable or more senior than other teachers, they are expected to be more financially knowledgeable too. Working experience, or seniority, plays a role in determining the relevance of point of reference for financial topics, practices and products (Kovarova-Simecek & Aubram, 2018). The school leaders in higher positions should understand and use financial knowledge more confidently than other leaders in lower positions. Consequently, they become a good point of reference in financial topics. Nevertheless, despite those theories on educated and seniority impacts on individuals' financial literacy, the prevalence of facing financial exploitation to the point of financial abuse is increasing at an alarming rate among older adults (Burnes et al., 2017). Senior teachers could be among those older adults mentioned, who might happen to be school leaders and might have been adversely affected by financial frauds, which they should be aware of in the first place.

Malaysian financial education is another predicament identified. Kenayathulla and Jupri (2016) highlighted that financial education is not an academic subject offered at schools despite many efforts highlighting its importance. Identifying the level of financial literacy of school leaders and its correlation to their financial education experience may reinforce the need to have this subject being compulsorily taught at schools or teacher-training institutions. It might also serve as a proxy or a mandatory term in taking the managerial posts at schools, which is not currently implemented (Filipović & Popović, 2019).

Consequently, this study seeks to extend the findings of financial literacy by addressing the gaps in the population segment. This study investigates the relationship of demographic factors of age, gender, working experience, professional status, educational level, and financial education experience with the school leaders' financial literacy. After many years of educating people, it is pivotal to discover whether these school leaders possess high financial literacy to help them have long-lasting economic stability.

Theoretical Foundations

This study is guided based on two theoretical foundations: the Theory of Life-Cycle of saving and investing, and the Theory of Planned Behaviour. The theory of life-cycle saving and investing was developed by Franco Modigliani and Richard Brumberg in 1954 (Deaton, 2005). The life-cycle hypothesis postulates that individuals save very little or nothing in the early stage of their lives in the prospect of future income, save when their income is high and spend on their savings when they are older or retired. They dissave when income is lower and consumption is higher than before (Warneyrd, 1999). The original theory offered a specific account on consumption and saving, but it could be stretched on to investigate a wide range of issues related to economic and finance (Deaton, 2005). As school leaders are postulated to be at the peak of their career, understanding how much financial knowledge they endogenously possess and measuring their financial behaviour in saving and spending may lead to finding the level of financial literacy this study intends to seek.

The Theory of Planned Behaviour by Icek Ajzen (1985) serves as the basis of reference in this study for it provides an understanding of the financial literacy process from a behavioural perspective (Xiao, 2008). This theory shows one of the behavioural rooms within financial behaviour in showing how individuals execute their financial activities (Chaulagain, 2018). As financial literacy revolves around knowledge, skill, attitude and behaviour to make sound financial judgments (OECD-INFE, 2011), understanding an individual's financial behaviour is prominently essential. It highlights intentions to determine specific behaviour's performance, and intentions are viewed as dependent on three latent behaviours: attitudes, subjective norms, and perceived behaviour control.

The demographic factors that are most relevant in this study are age and gender. The respondents' age is analysed to determine whether it relates to life-cycle saving and investing theory. In theory, people start to save or invest during the peak of their career, usually in the middle of their life-cycle (Deaton, 2005). The school leaders have

spent a significant number of years working in the teaching sector and are at the pinnacle of their careers. They might not be among the younger generation teachers aged below 30 years old, which are postulated to have low financial literacy (Loke, 2015; Mandell, 2009). They may belong in the middle-aged or older group of people hypothesized to be more financially literate (Beverly et al., 2003).

It is interesting to discover the current proportion of school leaders according to gender. It is shown in the data that female teachers consist of a larger proportion than male teachers. Focusing on gender will help prove or disprove the many findings that women have about having lower financial literacy levels than men (Chen & Volpe, 2002; Eckel & Grossman, 2002; Goldsmith & Goldsmith, 2016; Hasler & Lusardi, 2017). Even in a society of equality in terms of gender like Finland, 44% of men can answer financial literacy questions correctly to only 27% of women (Lusardi, 2019). However, according to research conducted by Fazli Sabri and Tze Juen (2014) on women working in Malaysia's public sector, female respondents reported having a moderate degree of financial literacy. Thus, it is pivotal to discover the aspect of school leaders' financial literacy according to gender.

In terms of working experience, it is vital to have this information to discover the answer to the research question on having different financial literacy levels among the different posts the school leaders hold. As suggested by Filipović and Popović (2019), teachers in different career stages might have different financial knowledge and skills. Thus, it is crucial to discover whether these school leaders of different posts and different working experiences have varying scores in their answers.

Other independent variables of educational levels and financial education are deemed essential in finding these variables' relations to the respondents' financial literacy level. Combining the theories mentioned, Figure 1 shows this study's conceptual framework in explaining the relationships between the independent variables towards the study's dependent variable.

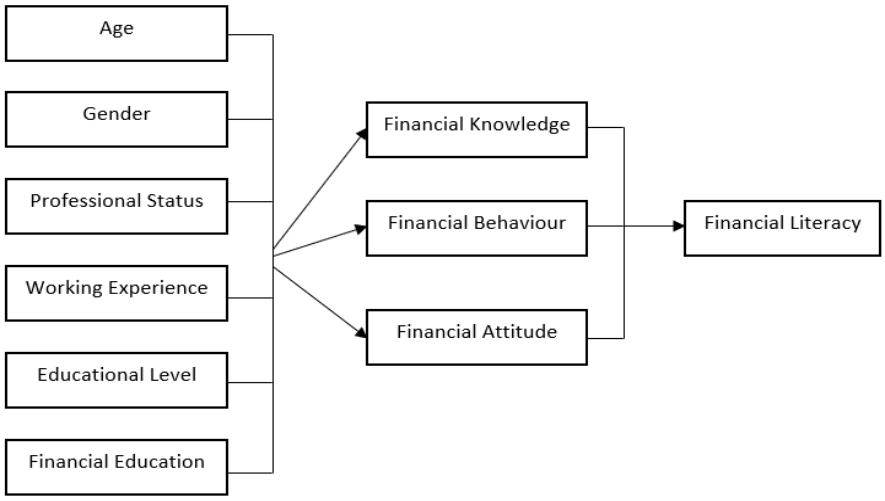

Figure 1. Conceptual Framework

METHOD

This current study fully employs quantitative analysis through a survey questionnaire in finding answers to the research problem. The quantitative findings provide a sufficient explanatory view to research questions (Creswell, 2014).

Instruments of The Study

This study deployed a self-administered questionnaire to collect the primary data from the target population. The researcher uses a standardised online questionnaire, using both closed-ended and Likert scale questions in the Google Forms format. There are five sections in the questionnaire. The first section collects the socio-demographic data of respondents. These are the essential factors to be investigated concerning the school leaders' financial literacy. This study seeks to understand whether school leaders' demographic factors have any relation with their financial literacy. This section uses closed-ended questions where the respondents choose one of the options given as their response. The questions for the next four sections were adapted from Lusardi (2012) and Paolo Stella et al. (2020), of which closed-ended and Likert scales were used. Section 2 focuses on questions measuring the respondents' financial knowledge, Section 3 on financial behaviour, Section 4 on financial attitude and the last section is questions asking about the respondents' financial satisfaction. Financial knowledge and financial behaviour questions comprise five closed-ended questions each, measuring the respondents' knowledge and behaviour in dispersing financial decisions. Meanwhile, financial attitude questions comprise of 7-point scale from 1 (strongly disagree) to 7 (strongly agree), measuring respondents' attitude in their financial management.

Samples

There are 89 national secondary schools in Kuala Lumpur, and a total of 7,163 teachers are in service (*Maklumat Asas Pendidikan JPWPKL*, 2020). The study's target population is estimated to stand roughly around 1780 school leaders. The estimation is based on the general organisational structure that a national secondary school normally has.

Top leaders of each school consist of the principal, the senior assistant of administration and curriculum, the senior assistant of student affairs, the senior assistant of sports and co-curricular activities, and the afternoon session's senior assistant (or also known as the afternoon supervisors, if applicable). Other than that, there are four department heads in any national secondary school: head of the language department, head of the science and mathematics department, head of the technical and vocational department and head of humanities department (Darusalam, 2014). The heads of panels in national secondary schools are considered as middle leaders of the schools (Ganon-Shilon & Schechter, 2017). At least 12 heads of panels in national secondary schools are there, depending on the subjects offered at schools.

Thus, the target population of school leaders in Kuala Lumpur's national secondary schools will be around 1780 school leaders based on the following estimation:

Target population = Number of national secondary schools in Kuala Lumpur **x**
(top leaders + middle leaders)
Target population = 89 **x** (8+12)
= 1780 school leaders

Based on Krejcie and Morgan's (1970) calculation table, for a population of 1780 respondents, there are 316 respondents needed among the school leaders in Kuala Lumpur to represent the cross-section of the population. To achieve 316 respondents, invitations to answer the questionnaire were sent to eight national secondary schools in each Kuala Lumpur district. Thus, there were 32 schools randomly chosen to participate in the study across Kuala Lumpur, with an estimation of ten randomly chosen respondents for each school.

Procedures to Perform Data Collection

The whole process of finding the data for this study was done by distributing an online questionnaire via Google form to the respondents from June to July 2021. The respondents were selected by using the systematic random sampling method. Emails with the link of the form were sent to 32 schools in Kuala Lumpur, requesting the

selected random school leaders to answer the questionnaire. 274 final respondents had taken part in the study, comprising 86.7% of target respondents.

Measurement

The financial knowledge section consists of five close-ended questions. These questions measure respondents' financial literacy knowledge by testing them on five basic financial calculation skills and financial instruments (Kadoya & Khan, 2017). Correct answers were coded 1, and incorrect answers were coded 0. This provided a measure for a total overall score from 0 to 5. Detailed questions are highlighted in Table 7.

The financial behaviour section also consists of five closed-ended questions. As financial behaviour is defined as human actions in making financial decisions and money management such as budgeting, bill-paying, saving, investing, and other expenditures (Arofah et al., 2018; Bhushan & Medury, 2014; Memba, 2015), the way the respondents display their financial skills can determine the respondents' financial behaviour. Correct answers were coded 1, and incorrect answers were coded 0. This provided a measure for a total overall score from 0 to 5. Detailed questions are highlighted in Table 8.

The financial attitude section uses 7-point Likert scale questions measuring respondents' attitudes in handling their financial management. Financial attitude section is divided into two dimensions: one measuring the attitude of respondents towards their financial management, the other is on their satisfaction towards their financial management and capabilities. These financial satisfaction questions are also categorized as the respondents' financial attitude and not as an independent variable of satisfaction as it highlights the "state of mind, opinion, and judgment of a person about finances" (Pankow, 2003). For every item in this section, the respondents need to choose one particular degree of agreement. Answers range on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree), which carries a range of 1 to 7 marks for each question asked. There are eight questions asked, five questions measuring respondents' financial attitude and the other three are about their financial satisfaction. Thus, this section provided a measure for a total overall score from 8 to 56. Detailed questions are highlighted in Table 9.

The financial literacy marks for all sections are totaled to the sum of 66, which comes from 5 marks of financial knowledge section, 5 marks of financial behaviour section and 56 marks of financial attitude section.

Data Analysis

This research applies both descriptive and inferential statistical analysis. Descriptive statistical analysis of data describes the profile of respondents according to socio-demographic factors, which is done by calculating the percentages of the responses. Descriptive statistical analysis of mean and standard deviation is used to find the respondents' financial literacy levels.

In the inferential statistical analysis, the independent samples t-test procedure is used to compare the means for the financial literacy scores of the top and middle leaders. The financial literacy marks for all sections are totaled to the sum of 66, which comes from 5 marks of financial knowledge section, 5 marks of financial behaviour section and 56 marks of financial attitude section. Each respondent, thus, carries total marks up to 66 full marks and categorised as total scores/marks of top leaders or middle leaders. Then, multiple linear regression is used to test several demographic factors that are significant in determining the respondents' financial literacy. Detailed discussions on the inferential statistical analysis are highlighted in Table 15 and Table 16.

Validity and Reliability

The instrument was adapted with permission from two previous studies on financial literacy by Paolo Stella et al. (2020) and Lusardi (2012). A thorough study on the choice of questions was done by an internal expert. The content of the questionnaire was validated by an external expert in the financial literacy field from the University Malaysia Sabah (UMS), while the construct validity was checked by two external experts in the language field.

Cronbach's Alpha Coefficients was used to analyse whether the items were reliable and correctly used to measure the construct. The value of Cronbach's α 0.701 was achieved for the construct that used the Likert scale.

RESULTS

Demographics

Table 1
Demographic Factors

Characteristics		N	%
Gender	Male	45	16.4
	Female	229	83.6
Age	<25 years old	0	0.0
	25 - 29 years old	6	2.2
	30 - 34 years old	11	4.0
	35 - 39 years old	31	11.3
	40 - 44 years old	49	17.9
	45 - 49 years old	55	20.1
	50 - 54 years old	66	24.1
	55 - 59 years old	56	20.4
	≥60 years old	0	0.0
Professional Status	Head of Panel	135	49.3
	Head of Department	68	24.8
	Senior Assistant	57	20.8
	Principal	14	5.1
Teaching Experience	Less than a year	1	0.4
	1 to 5 years	7	2.6
	6 to 10 years	16	5.8
	11 to 15 years	40	14.6
	16 to 20 years	45	16.4
	21 to 25 years	72	26.3
	26 to 30 years	65	23.7
	31 to 35 years	23	8.4
	More than 35 years	5	1.8
Highest Qualification Attained	High School	4	1.5
	Diploma	1	0.4
	Bachelor's Degree	217	79.1
	Master's Degree	51	18.6
	Doctorate	1	0.4
	Never	55	20.1

Ever Attended Financial Education Course	Once	48	17.5
	2 to 5 times	114	41.6
	6 to 10 times	26	9.5
	More than 10 times	31	11.3
	Total number of respondents	**274**	**100**

Table 1 shows that there are a total of two hundred and seventy-four respondents (274) as the sample of the study, where 45 (16.4%) of them are male school leaders and 229 (83.6%) are female school leaders.

The age of respondents varies from the age of 25 and above and up to the age of 59 years old. The top three majorities of respondents belong in the senior age of 50 to 54 years old (24.1%), followed by 55 to 59 years old (20.4%) and 45 to 49 years old (20.1%), showing that the majority of school leaders are among the elders.

The professional status or managerial level of the target respondents consists of 135 heads of the panel (49.3%), 68 heads of department (24.8%), 57 senior assistants (20.8%) and 14 principals (5.1%). For working experience, most of the respondents are highly experienced teachers, with 76.6% of them having more than 15 years of teaching experience. Only one (0.4%) of the respondents is a newly experienced teacher with less than one working year.

The majority of the respondents are highly educated with 97.7% of them possessing either a bachelor's or a master's degree. In terms of their financial education experience, 79.9% of them or 219 respondents have attended a seminar, talk, or workshop related to financial education. Among these 274 respondents, 20.1% of them reported they had never attended any financial education talk, seminar, or workshop.

Responses on Financial Literacy Questions

Table 2
Financial Knowledge Questions

Responses	Correct		Wrong	
	N	%	N	%
Questions on:				
Interest	242	88.3	32	11.7
Inflation	167	60.9	107	39.1
Bond prices	65	23.7	209	76.3
Mortgage	233	85.1	41	14.9
Stock	81	29.6	193	70.4

Note. N = 274.

The second section measured the respondents' financial knowledge through multiple-choice questions with one correct answer for each question. Table 2 shows the number of respondents with correct and wrong answers. Only 65 (23.7%) of the respondents answered the question on bond prices correctly, and 81 (29.6%) answered correctly on stock questions, showing their unfamiliarity with the two concepts of finance. 167 (60.9%) respondents answered the question on inflation correctly. Questions on interest and mortgage showed the highest correct answers by the respondents, with 242 (88.3%) and 233 (85.1%) correct answers, respectively.

Table 3
Financial Behaviour Questions

Responses	Correct	Wrong

	N	%	N	%
Questions on:				
Savings ratio	196	71.5	78	28.5
Saving solution	211	77.0	63	23.0
Asset investment	179	65.3	95	34.7
Risk-averse investment	172	62.8	102	37.2
Financial plan	252	92.0	22	8.0

Note. N = 274.

Table 3 shows respondents' answers to multiple-choice questions measuring their financial behaviour. There is one most suitable option deemed as the correct answer for each question. Most respondents showed sound future financial planning when they included a supplementary pension plan and savings, alongside their expenditure if they won some money in a competition. 252 (92.0%) respondents made this choice compared to other options, showing that they were aware of the importance of a future financial plan.

Respondents showed good behaviour in terms of saving when 196 (71.5%) of them knew how to make the savings ratio constant in a change of cost of living. Meanwhile, 211 (77.0%) of them chose the most suitable method in finding the economical solution in case of future misfortune. However, in choosing asset investment, only 179 (65.3%) of them chose the correct investment type, and only 172 (62.8%) chose the correct risk-averse investment.

Table 4
Financial Attitude Questions

Responses	Strongly disagree		Disagree		Partially Disagree		Neutral		Partially Agree		Agree		Strongly Agree	
Question on:	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Prioritise expenses	0	0	0	0	0	0	8	2.9	35	12.8	89	32.5	142	51.8
Distinguish expenses	0	0	0	0	0	0	6	2.2	39	14.2	88	32.1	141	51.5
Sufficient saving	0	0	0	0	1	0.4	2	0.7	31	11.3	64	23.4	176	64.2
Future costs	1	0.4	0	0	1	0.4	9	3.3	31	11.3	90	32.8	142	51.8
Data security	0	0	0	0	1	0.4	3	1.1	25	9.1	69	25.2	176	64.2

Note. N = 274.

Table 4 highlights respondents' self-assessment on their financial attitude, measured through a 7-point Likert scale showing their level of agreement towards five basic statements.

The responses recorded complete agreement on the respondents' ability to prioritise essential expenses before buying something. The respondents, too, can distinguish between needs and wants in their expenses. More than half of the respondents (51.8% and 51.5%, respectively) strongly agreed to both statements, showing their confidence in their ability to exercise an excellent financial attitude.

All other statements recorded a small percentage of disagreements and neutral responses. Only a few

respondents were unable to exercise the following actions: ensure sufficient saving before making a major purchase, think about the future costs that will incur in their expenses and ensure the security of their data before making online payments.

Table 5
Financial Satisfaction Questions

Response	Not satisfied at all		Not satisfied		Partially not satisfied		Neutral		Partially satisfied		Satisfied		Very satisfied	
Question on:	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Assets	2	0.7	6	2.2	17	6.2	37	13.5	103	37.6	79	28.8	30	11
Debts	3	1.1	10	3.6	34	12.4	34	12.4	98	35.8	63	23	32	11.7
Savings	4	1.5	12	4.4	32	11.7	41	15	76	27.7	74	27	35	12.7

Note. N = 274.

Table 5 shows the respondents' satisfaction levels towards their assets, debts and savings. Respondents' satisfaction with their assets, debts and savings was measured as their attitude, as their perspective on their current personal financial condition was as much as personal assessment as financial attitude questions. The responses varied from being not at all satisfied through to very satisfied. However, most of the respondents showed they were satisfied with the assets, debts, and savings. 212 (77.4%) of them were satisfied with their assets, 193 (70.4%) were satisfied with their debts, and 185 (67.5%) of them were satisfied with the savings they had, although they somehow belonged in different levels of satisfaction.

EMPIRICAL EVIDENCE

Financial Literacy Level

This study observed the mean scores and standard deviation values for financial knowledge, financial behaviour and financial attitude to identify the overall level of financial literacy of the respondents. The researcher classified the value of each financial dimension (financial knowledge, financial behaviour and financial attitude) into three categories of low, moderate and high. Although questions on financial knowledge and financial behaviour come with similar measurement and number of questions, the types of questions asked and the responses given, are not similar to each other. Thus, responses generate different cumulative percentages that brings different interpretation.

The approach of *trichotomising* the data (dividing into three categories) concurred with De Vaus (2002), where this approach gives an advantage of letting the data define the level, rather than letting the researchers simply impose an unrealistic interpretation.

In trichotomising the data, De Vaus (2002) advocates dividing the samples into three categories and uses cumulative percentage as the cutting points. This approach divides the sample rather than the scores to avoid leaving the categories (i.e. low, moderate and high) with very few cases or respondents.

Therefore, this study divided the mean value of each financial dimension into three categories and used the cutting points that corresponded to the 33% and 67% cumulative percentage. On that account, each financial dimension

has a different range of cutting points that require separate interpretation.

Table 6
Range of Cutting Points and Levels of Categories

Financial Dimension	Range	Level
Financial Knowledge	0.000 – 0.200	Low
	0.201 - 0.400	Moderate
	0.401 – 1.000	High
Financial Behaviour	0.000 to 0.400	Low
	0.401 to 0.600	Moderate
	0.601 to 1.000	High
Financial Attitude	1.000 – 5.500	Low
	5.510 – 6.125	Moderate
	6.126 – 7.000	High
Overall Financial Literacy	0.000 to 0.667	Low
	0.668 to 0.776	Moderate
	0.777 to 1.000	High

Table 7
Mean of Financial Knowledge Scores

Question:	Mean
Suppose you had RM100 in a savings account, and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?	0.88
Imagine that your savings account's interest rate was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?	0.61
If interest rates rise, what will typically happen to bond prices?	0.24
Please state whether this statement is true or false. A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less.	0.85
Please state whether this statement is true or false. Buying a single company's stock usually provides a safer return than a mutual fund.	0.30
Overall Mean	**0.58**

Table 7 shows the average score for each item of respondents' financial knowledge. The overall mean of financial knowledge was 0.58 out of 1, indicating that the respondents, on average, scored high in terms of their finance.

Table 8
Mean of Financial Behaviour Scores

Question	Mean
You moved to a city where the cost of living is one-third higher than where you used to live. For the same salary, how will you be able to keep your savings ratio constant?	0.72
You have recently become a parent. You would like to find a solution that would allow your family to have more economic peace of mind in case something happens to you; what would you do?	0.77
You have decided to invest RM 10,000 in financial assets. You are offered three different funds; which fund would you choose? [Level 1 indicate low risk, level 5 medium risk and level 9 high risk]	0.65
You have the opportunity to invest RM 20,000. You are a risk-averse person and have a long-term investment horizon. Which investment do you think is the closest to your needs?	0.63
Imagine that you have just turned 42, and your company is in a bad economic condition. Fortunately, you won RM200,000 prize money in a competition you participated in. How will you use this figure?	0.92
Overall Mean	**0.74**

Table 8 indicates a higher overall mean in terms of respondents' financial behaviour than their financial knowledge. The overall mean calculated was 0.74. In the scale range from zero to one, the results indicated that the respondents displayed a high level of financial behaviour - their choice of answers reflecting their knowledgeable skills in personal financial management.

Table 9
Mean Score of Financial Attitude Dimension

Question:	Mean
Before buying something, I ask myself if I have paid my necessary expenses.	6.33
I am careful to distinguish between necessary (need) and unnecessary (want) expenses.	6.33
Before making a major purchase, I make sure that my savings are sufficient to cover any sudden expense.	6.50
If I know the costs I will have to incur tomorrow, I will think about it today.	6.31
Before making online payments, I concern about the security of my data.	6.52
Overall, thinking of your assets, how satisfied are you with your current personal financial condition?	5.15
Overall, thinking of your debts, how satisfied are you with your current personal financial condition?	4.94
Overall, thinking of your savings, how satisfied are you with your current personal financial condition?	4.95

Overall Mean	**5.87**

Hence, scholars found the skill mismatch as the primary reason for unemployment in Malaysia (Jamaludin et al., 2019; Teng et al., 2019). According to Nazron, Lim and Nga (2017), lack of soft skills such as self-confidence, time management, communication, problem-solving abilities, critical thinking, originality, behaviour, interaction, and leadership abilities is the main reason for unemployment while Jamaludin et al. (2019) and Azmi et al. (2018) emphasised skills mismatch as the main reason for unemployment in Malaysia. Hence, this research investigates the reasons for unemployment in Malaysia with a special focus on the skill set that is required of graduates based on the industry for Industrial Revolution 4.0 (IR4.0).

Table 9 displays the mean for each item in measuring the attitude of the respondents regarding their personal finance. This self-assessment indicator shows that on the scale of one to seven, the respondents scored above six for all items regarding their attitude in executing financial decisions, indicating a high level of self-assessment in determining their financial view. The attitude in perceiving their satisfaction towards their assets, debts and savings, however, as indicated by Table 9 at the lowest level of the scale ranging in between 4.94 to 5.15. The overall mean of financial attitude showed that the respondents scored a moderate level in this particular measurement with a mean of 5.87.

Overall Financial Literacy Level

Table 10
Mean Score for Different Financial Dimensions

	N	Mean	Standard Deviation	Level
Financial Knowledge	274	0.58	0.211	High
Financial Behaviour	274	0.74	0.245	High
Financial Attitude	274	5.87	0.703	Moderate

Table 10 sums up the overall mean and standard deviation of all areas of financial knowledge, financial behaviour, and financial attitude. For the financial knowledge, the mean is (*M = 0.58, SD = 0.211*). Since the mean is greater than 0.400, it falls under a high level. For the financial behaviour, the mean is (*M = 0.74, SD = 0.245*). As the mean is greater than 0.600, it is also of a high level. Note that different scale is used for financial attitude, hence, different interpretation of mean scores. The mean of financial attitude is (*M = 5.87, SD = 0.703*). As the mean is greater than 5.500 and lower than 6.126, it indicates the respondents' financial attitude is of moderate level.

Table 11
Overall Financial Literacy Level

	N	Mean	Standard Deviation	Level
Financial Literacy	274	0.717	0.130	Moderate

To conclude the overall financial literacy level of the respondents, the researcher calculated the ratio of financial attitude scores together with the ratio of financial knowledge and financial behaviour. Again, the data was divided into three categories of low, moderate and high levels that corresponded to 33% and 67% cumulative percentage. Table 11 indicates the overall financial literacy of the respondents is at a moderate level, using the approach proposed by De Vaus (2002).

The Different Levels of Financial Literacy

In ensuring whether there is a different level of financial literacy between the top and middle leaders, the

respondents were divided into two independent sample groups of school leaders, which are top school leaders and middle school leaders. Independent Samples t-Test was conducted to determine whether there is statistical evidence that the financial literacy means for top leaders and middle leaders are significantly different. This study presents an alternative hypothesis that there is a significant difference between top leaders and middle leaders' financial literacy levels.

Table 12
Independent Samples t-Test

				Levene's Test for Equality of Variances		t-test for Equality of Means						
		Mean	SD								95% Confidence Interval of the Difference	
				F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
FL Marks	Top Ldrs	54.5	5.689	2.427	0.120	2.566	272	0.011	1.837	0.716	0.428	3.246
	Mid Ldrs	52.67	6.155									

Table 12 shows that there were significant differences (t (272) = 2.566, p=0.01, Cohen's d =.310) in the scores with the mean score for the top leaders (*M=54.5, SD = 5.689*) was higher than the middle leaders (*M=52.67, SD=6.155*). The magnitude of the differences in the means (mean difference = 1.837, 95% Cl= 0.428 to 3.246) was significant. To arrive at the said conclusion, the researcher had first interpreted the Levene's Test in SPSS and referred to the p-value of 0.120 and interpreted the bottom row of results for *t.* It indicated the variances were significantly different.

Cohen's d, or standardized mean difference, was measured to quantify the effect size between these two groups, by calculating the difference of two means and expressing it in standard deviation units. A common interpretation refers the effect size using Cohen's d as small (d = 0.2), medium (d = 0.5) and large (d = 0.8) (Glen, 2021). Although the interpretation should not be taken rigidly, to avoid the results from being trivial, the means of the two groups should differ by at least 0.2 standard deviations (Glen, 2021). The findings indicated that the means of these two groups were d = .310, making the effect size small but significant.

Hence, the results of running the independent samples t-test supported the alternative hypothesis that statistical evidence shows a significant difference in financial literacy between top school leaders and middle leaders.

Factors That Help Determine the Level of Financial Literacy of School Leaders

In finding the factors that help determine the financial literacy of school leaders, the research question comprises six hypotheses which refer to six variables: age (H_1), gender (H_2), professional status at school (H_3), working experience (H_4), educational level (H_5) and financial education (H_6). Multiple linear regression was calculated to determine if these factors can influence school leaders' financial literacy likelihood. It was hypothesised that those variables would positively predict the financial literacy of school leaders.

In conducting multiple linear regression, several diagnostic tests were conducted to ensure the robustness and validity of the chosen multiple linear regression method. The tests were: the test to assess linearity, independence

of residuals, multicollinearity, homoscedasticity, normality of residuals of errors and the test of the presence of outliers. This method crucially depends on fulfilling the validity of these assumptions.

In assessing linearity, the linearity between the dependent and independent variables collectively was assessed using the scatterplot, while the linear relationship between the dependent variable with each independent variable in the model was assessed using the P-P Plot. The dots were scattered in the scatterplot are without any obvious pattern, indicating the data met the assumption that the errors were normally distributed. The dots were generally following the diagonal line on the normal P-P Plot, showing that the assumption of normally distributed error was met.

The Durbin-Watson test was carried out in ensuring that the data did not indicate autocorrelation. Successive residuals should be independent and are not highly correlated for regression analysis to be valid. The data does not indicate autocorrelation if the Durbin-Watson value is between 1.5 and 2.5 (Marshall & Karadimitriou, 2018). The result of this test indicates no independence of residuals as assessed by the Durbin-Watson statistic of 1.901, which is between 1.5 and 2.5. Thus, the assumption of independence of residuals was met.

In multiple regression analysis, heteroscedasticity should be avoided as it creates biased errors, resulting in incorrect conclusions about the significant regression coefficients (Statistics Solutions, 2021). The assumption of homoscedasticity was met as assessed by the visual inspection of a plot of studentised residuals versus unstandardised predicted values.

In identifying outliers, the interquartile range (IQR) 2.2 was used to calculate extreme or influential outliers according to the outlier labelling method suggested by Hoaglin, Iglewicz and Tukey (1986). The decision to manage the outliers depends on whether or not the outliers might affect the regression coefficient. Further investigation of the casewise diagnostics in identifying outliers outside three standard deviations proved no significant outliers listed in the dataset. Thus, the assumption of outliers was met.

To assess multicollinearity, the Variance Inflation Factor (VIF) in collinearity statistics was utilised. VIF is the reciprocal of tolerance, and it reveals the extent to which standard errors are inflated due to collinearity levels. (Statistics Solutions, 2021). The values of 10 or greater are often indicating problematic collinearity (Franke, 2010). There is no evidence of multicollinearity as assessed by tolerance values greater than 0.1 and VIF values lower than 10. Thus, the assumption of multicollinearity was met.

After fulfilling all assumptions, the regression model was run using the data from 32 schools with 274 respondents of school leaders. The regression model was as follows:

$$y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \varepsilon$$

where

y = the predicted value of the dependent variable

β_0 = the y-intercept (value of y when all other parameters are set to 0)

$\beta_{1...}\ \beta_6$ = the regression coefficient of each independent variable

$X_{1...}\ X_6$ = first independent variable until the last independent variable

ε = error term

Table 13

Model Summary

Model Summary[b]

Std. Error of the Estimate
5.646

a. Predictors: (Constant), 6. Financial workshop/ seminar/ talk attended, 1. Gender, 5. Educational qualification, 2. Age, 3. Professional status at school, 4. Working experience
b. Dependent Variable: Total FL Marks

Table 14
ANOVA Summary Table

ANOVA[a]

df	Mean Square	F	Sig.
6	210.288	6.596	.000[b]
267	31.881		
273			

a. Dependent Variable: Total FL Marks b. Predictors: (Constant), 6. Financial workshop/ seminar/ talk attended, 1. Gender, 5. Educational qualification, 2. Age, 3. Professional status at school, 4. Working experience

Table 13 and Table 14 show that a significant regression equation was found and can be accounted for by those six predictors, collectively ($F(6,267)= 6.596$, $p<.000$) with an R^2 of .129, demonstrating that the predictors of the variables explain twelve and nine-tenths of the variation (R Square.129*100 = 12.9%). The total model's R2 was 12.9%, with an adjusted R2 of 11%, indicating a minor size effect, according to the model of changes in financial literacy. It was explained by a linear combination of the predicted factors of gender, age, professional status in school, teaching experience, educational qualification, and financial education received.

Table 15
Coefficients Table

Coefficients[a]

Model		Unstandardised Coefficients		Standardised Coefficients			Correlations		
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part
1	(Constant)	47.610	3.239		14.700	.000			
	1. Gender	-.160	.944	-.010	-.170	.865	.013	-.010	-.010
	2. Age	-.380	.482	-.099	-.788	.431	.246	-.048	-.045
	3. Professional status	.241	.440	.038	.547	.585	.195	.033	.031
	4. Working exp	1.269	.490	.331	2.593	.010	.291	.157	.148
	5. Edu. qualification	-.447	.619	-.042	-.722	.471	-.040	-.044	-.041
	6. Financial education	1.001	.289	.202	3.456	.001	.238	.207	.197

a. Dependent Variable: Total FL Marks

Table 15 shows the predicted financial literacy is equal to 47.160 + (-.160) gender + (-.380) age + (.241) professional status + (1.269) working experience + (-.447) educational qualification + (1.001) financial education experience, per one unit increase in each factor. Describing the mathematical relationship between each independent variable and the dependent variable highlights the nature of relationships between those variables. A positive coefficient of the beta weights indicates that as the value of the independent variable increases, the mean of the dependent variable also tends to increase, and the negative coefficient suggests that as the independent variable increases, the dependent variable tends to decrease. The coefficient value represents how much the mean of the dependent variable changes when the independent variable is changed by one unit while the other variables in the model remain constant.

Meanwhile, the *p* values in this regression table determines the predicted independent variables' correlation with the dependent variable. Measuring the unique individual contributions of the predictive variables, the results of the beta weights showed only two of the six predictive variables showed significance. In this model, only predictive variables of working experience (β=.331*, t*=2.593*, p*=.010) and financial education (β=.202*, t*=3.456*, p*=.001) are statistically significant predictors of financial literacy. This analysis revealed that predictor variables of gender, age, professional status, and educational experience are not statistically significant predictors of financial literacy.
The results suggest that working experience and financial education experience of attending financial workshops, seminars, and talks help determine school leaders' financial literacy. The study finds that financial literacy tends to increase as working experience and financial education increase. All other factors studied (gender, age, professional status at school and educational qualification) showed a non-significant effect on the financial literacy of school leaders.

DISCUSSION

Financial Literacy Levels of School Leaders in Kuala Lumpur's National Secondary Schools

The results indicate the school leaders in Kuala Lumpur's national secondary schools have moderate financial literacy levels (*M* = 0.717, *SD* = 0.130). This finding is inconsistent with previous studies by Surendar and Subramanya Sarma (2018), Kenayathulla and Jupri (2016) and Zaimah et al. (2013). The past studies had concluded that Malaysian teachers, in general, have had high financial literacy. Nevertheless, financial knowledge and financial behaviour areas produced similar findings with the past studies, where the levels appeared to be of high level. As the population of the studies were different, thus the difference in the findings was expected.

As the finding in financial attitude affects the overall financial literacy of this study, there is an aspect of the assessment worth discussing. As the financial attitude area uses self-assessment questions, there is a tendency for the respondents to over-evaluate their insights in that area. The respondents' scores on the level of satisfaction towards their savings, assets and debts appeared to be low, contradicting their perception of the ability to execute daily financial decisions, which they perceived as high. This contradiction might be due to the over-evaluating their non-satisfaction towards their wealth accumulation.

This study reflects similarly with other studies done by Huston (2012) and Hung et al. (2009), where their financial knowledge did not determine individuals' financial behaviour. Other latent determinants may influence their financial attitude, such as other people's perceptions of their financial behaviour. The high financial literacy scores were not reflected by their financial knowledge but rather by other financial areas, such as financial behaviour and financial attitude. Similarly, although the respondents scored highly in both financial knowledge and financial behaviour areas, the overall financial literacy of the respondents were not reflected in their financial attitude. Particularly on financial satisfaction, other factors might influence the respondents' attitude in perceiving satisfaction towards savings, assets and debts.

This study believes that the respondents' understanding of financial concepts should also be projected in their financial attitude. Their moderate financial literacy level indicates the need to improve their financial knowledge area that can actually affect their behaviour and attitude in financial matters as mastering financial knowledge should help them to meaningfully engage in financial markets (Murugiah et al., 2018), and not the otherwise.

The Difference in Financial Literacy Between the Top and Middle School Leaders

The results indicate a significant difference between the mean of school leaders of top and middle leaders in this study. The top leaders (*M=54.5, SD=5.689*) were found to have a higher level of financial literacy than the middle leaders (*M=52.67, SD=6.155*), with a mean difference of 1.837. With a 95% degree of freedom and p-value smaller than 0.05, the null hypothesis was rejected.

This study proposes that the higher the positions showed the better their understanding of financial knowledge. This study agrees with Lusardi et al. (2013) that financial knowledge is acquired endogenously over some time and individuals do not readily have their financial knowledge but rather accumulate it throughout their economic lives. Thus, this study advocates that after having experienced working and dealing with financial matters over some time, the top leaders appear to have better financial scores than the middle leaders. The top leaders become a better point of reference in financial topics than the middle leaders.

Working Experience and Financial Education Are Significant Factors That Determine the School Leaders' Financial Literacy

There are six demographic factors examined, with only the factors of working experience and financial education being significant.

a) Working experience

The working experience was a significant factor that determines the financial literacy of school leaders in this study. Table 15 shows that for every year increase in working experience, the respondents' financial literacy increases by 1.269 units. Thus, the result implies that the longer the school leaders serve in the service, the higher their financial literacy level.

The finding broadly concurs with the previous studies done by Zaimah et al. (2012, 2013) on Selangor teachers, indicating working experience correlates with good financial behaviour. Similarly, their studies showed that teachers with an average of 15 years of working displayed good financial management. Mitchell and Lusardi (2015) showed similar findings. They posited that respondents who stayed working for longer years displayed better knowledge regarding financial matters than those who have just started their careers.

Working experience as a factor in determining financial literacy might be because financial literacy can be easily acquired via social interactions at workplaces (Lusardi & Mitchell, 2014). Workers can observe and interact with each other regarding daily financial matters. Working for a certain period might also expose the workers to financial management at workplaces.

In educating the workers, some workplaces, too, offered seminars and workshops related to financial management (Mohd Aziz & Kassim, 2020). The objectives of these arranged financial workshops and seminars were manifold; for organisational, social and personal values. Thus, those who stay longer in the service increased their financial literacy for all the mentioned benefits.

b) Financial education

This study finds that financial education is a significant factor in determining the financial literacy of school leaders. Table 15 shows that for every increase in financial education attended by respondents, financial literacy increases by 1.001 units. Thus, the result indicates that financial education received by the respondents helps determine their financial literacy.

Financial education is a pertinent factor that determines financial literacy, as advocated by many researchers such as Kadoya and Khan (2020), Wagner (2019), Lusardi (2019), Selvadurai, Kenayathulla and Siraj (2018), Murugiah (2018) and Xiao and O'Neill (2016). For example, Prawitz and Cohart's (2014) studies showed the positive significance of financial education and financial behaviours. Those who participated in workplace financial education seminars were more likely to do budgeting, asset allocation assessment, and retirement contributions than the non-participants.

This study believes that the respondents who received any financial education are likely to have higher financial literacy scores than those without financial education. This finding was in good agreement with Wagner (2019) in highlighting the benefits of financial education. The respondents familiarise themselves with financial concepts such as investments, risk, risk diversification, and inflation through their financial education. Those without any financial education might find themselves struggling with the concepts even at the elementary level.

Respondents who had completed financial modules more than once were believed to have displayed better financial knowledge, encouraged positive financial behaviours and enhanced confidence in their financial attitude. This study's findings concurred with Xiao and O'Neill's (2016) findings on the effects of financial education on their respondents.

Conclusively, financial education provides individuals with the necessary skills and habits to meaningfully engage in financial markets (Murugiah, 2018). The respondents with financial education had proven their understanding and ability in managing their financial resources well (Selvadurai et al., 2018).

Implications and Suggestions

Policymakers

The findings of this study showed that it is fundamental to ensure the members of the teaching profession are equipped with a substantial amount of financial knowledge that can help sustain their participation in these challenging financial markets. Findings have proven that school leaders' knowledge and behaviour in financial management do not coincide with their financial attitude. The study's findings imply that their financial literacy is at a moderate level. Thus, policymakers ought to ensure the school leaders are first and foremost to undergo regular financial education seminars, workshops or talks, before enforcing on other teachers in the nation.

Policymakers, too, should expose the school leaders to current financial trends that are useful for their daily financial management. Convenient, brief, and relevant seminars, workshops or talks might be favourable as long as these financial courses do not interfere with the school leaders' core teaching responsibility. Effective financial education that offers interventions should be tailored to the school leaders' specific needs. Familiarising them with basic and advanced financial concepts useful in their daily affairs will help them see the importance of such education.

Current and Future School Leaders

The findings of this study accentuate the absolute importance of having financial education to increase financial literacy. The many benefits of financial education have been discussed thoroughly. They should serve as a direct reminder for the school leaders, both the current and future ones, to constantly master the financial topics. As the combined financial education and working experience matter in financial literacy, attending workplace financial education is a fundamental answer to ensure the school leaders familiarise themselves with the current financial topics throughout their career. By attending financial seminars, workshops or talks regularly, and not a one-time effort, the school leaders may develop valuable skills and confidence in conquering their financial management.

CONCLUSION

The financial literacy of school leaders was found moderate by the findings of this study. The specific area of financial attitude is moderate, despite other assuring qualities such as a high educational level and vast experience in working and being the top leaders of the learning organisation. This study has speculated the possibility of non-satisfaction towards savings, assets and debts is in fact from other latent factors which contribute to the moderate level of financial literacy, rather than lacking in the understanding of solid knowledge on financial

matters. Nevertheless, with the high level of financial knowledge and financial behaviour, the respondents ought to have known how to manage their financial matters in order to arrive at a satisfactory level. Sadly, this is not reflected in the findings of this study.

Other than that, the current study proves the importance of financial education in determining the financial literacy of these school leaders. However, 20% of the respondents do not have any financial education throughout their economic lives. If this percentage represents the whole teaching population, we are faced with almost 40,000 teachers (MOE, 2018) in the secondary level alone, without any proper knowledge of financial matters. Thus, we might have risked many secondary school teachers, including the school leaders, suffering from the financial predicament of being scammed. The lack of knowledge on financial matters might also risk them to other financial mismanagements such as indebtedness, bankruptcies, poor use of credit and poor retirement planning.

Moreover, the study proves that the combination of financial education and substantial working experience determines these school leaders' financial literacy. As workplace financial education has multiple positive impacts, the study supports workplace financial education to facilitate school leaders' financial literacy.

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