

Young Single Chinese Adults' Financial Literacy in Sibul, Sarawak

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Abstract

The prominence of financial literacy among young adults is essential in determining their prospective standard of living, particularly as the shift to digital financial services has increased the complexity of performing transactions. In this research, financial literacy is defined as having three components, namely financial skills, financial knowledge, and financial attitude. Financial literacy is the integration of financial, credit and debt management, and the knowledge that is used to comprehend and negotiate financial matters, in order to reduce financial risks exposure, as well as minimise chances of facing financial hurdles. This study intends to investigate the level of financial literacy among young adults in Sibul, Sarawak. This study employed quantitative method using the convenience sampling technique. A total of 110 questionnaires were received through online surveys via Google Forms and face-to-face distribution. A performance assessment was adapted from United States National Financial Capability Study in 2009 to assist the respondents in determining their competency level of financial knowledge and skills. Statistical analysis such as descriptive analysis, correlation, and ordinary least square were employed in order to answer the research questions. The results revealed that young adults have low financial literacy, particularly in solving basic mathematical computations such as compounding effect on savings and debt management. Financial skills is the most significant variable in affecting one's financial literacy. The data obtained could be applied to formulate appropriate policies and education programmes for the government, regulators (e.g., Bank Negara Malaysia, Securities Commission Malaysia), and other agencies (e.g., Malaysian Financial Planning Council) to strengthen the knowledge and skills of young adults.

Keywords: Financial Literacy, Young Adults

Introduction

Personal financial management involves decision-making that influences an individual's financial capability and financial wellbeing, particularly in the fields of savings, budgeting, investments, and retirement (Bernanke, 2010). In order to make such decisions, a person is required to possess a certain level of financial literacy. Financial literacy is the combination of financial, credit and debt management, and the specific knowledge that is used to comprehend and negotiate financial matters in order to reduce financial risks exposure, as well as minimise chances of facing financial hurdles (Xu & Zia, 2012). Irrefutably, the prominence of financial savvy among young adults is essential to determine their prospective standard of living (Lusardi, 2019), particularly as the shift to digital financial services has increased the

complexity in performing transactions (Dewi, Febrian, Effendi, Anwar, & Nidar, 2020). Job market shifts have affected individuals as well (Lusardi, 2019). The importance of skills is thriving, resulting in a widening salary gap between those with higher education qualifications and those with lesser educational attainment. Financial markets are also rapidly evolving as a result of technological breakthroughs and the introduction of increasingly complicated financial products. Consumers nowadays have access to a considerably greater variety of financial products than they had in the past, and their choices about these products may have a significant impact on an individual's wealth. With the heightening of economic uncertainties and diminishing of job security, young adults may experience hardship in managing the repayment of their student loans, hence making imprudent decisions which may jeopardise their well-being (Lusardi & Mitchel, 2011).

In 2016, the Financial Education Network (FEN) was founded with the purpose of facilitating and developing a national financial education programme in Malaysia. FEN announced the Malaysia National Strategy for Financial Literacy 2019-2023 in January 2019. Increasing financial literacy in Malaysia is one of the primary goals set forward by the National Strategy, which acts by coordinating and leveraging synergies across all initiatives within FEN in order to achieve its main purpose of enhancing Malaysians' financial well-being (Financial Education Network, 2022). In term of readiness for any unforeseen life circumstances, the Malaysian Financial Literacy Survey 2020 has revealed that approximately half of Malaysians have struggled to raise RM1000 in case they need cash for their emergency uses (Md Taff & Mohd Noor, 2021). In the incidents of being laid off or losing the main source of income, merely 24% of Malaysians were able to sustain their living expenses for three months or more (Md Taff & Mohd Noor, 2021). Furthermore, the survey also disclosed that almost one-third of Malaysians claimed that they were inferiorly lacking adequate financial knowledge. Correspondingly, the Insolvency Department announced 84,805 Malaysians were declared bankrupt between 2015 and 2019, with individuals below 34 making up 26% of the cases.

Henceforth, it is irrefutable for Malaysian government to further emphasise the importance of financial literacy among young adults in making wise decision especially with the advancement of financial technologies which allows them to make purchases immediately but postponing their payments later. Young generation plays an important role in fostering economic development and promoting societal welfare, subject to that they are not experiencing financial hardships which could hinder their abilities to fully leverage their talent. Correspondingly, this study aims to investigate the level of financial literacy among young adults in Sibul, Sarawak. The research objective is to examine the relationship between the dependent variable (i.e., financial literacy) and independent variables (i.e., financial knowledge, financial skills, and financial attitudes). Based on the proposed research model, the research questions are as follows: (i) "What is the level of financial literacy of young adults in Sibul, Sarawak?"; (ii) "How does financial knowledge relate to the level of financial literacy?"; (iii) "How do financial skills relate to the level of financial literacy?" and (iv) "How does financial attitude relate to the level of financial literacy?".

Literature Review

Financial Literacy

Financial literacy is defined as the knowledge and comprehension of financial concepts and risks, and subsequently possessing relevant skills, motivation, and confidence in order to make effective decisions across a range of financial context (OECD, 2014). Lantara and Kartini (2015) denotes that a financially literate economic agent will be able to prepare his personal

budget while contemplating other financial matter, for instance, capability to do estimation repayment on interest expenses of loans (e.g., mortgages), conscientiously using their credit and debit cards, and diligently dealing with sophisticated financial products for specific personal wealth goal (specifically for protection purposes such as insurance, retirement plans, etc.) and investment (shares, bonds, financial derivatives, private equity).

Earlier researchers measure the level of financial literacy using multifaceted variables in which financial knowledge has long been contemplated as the most reliable variable (Stella, Filotto, & Cervellati, 2020). However, one should not neglect the constraint of this variable in explaining the reason why a knowledgeable economic agent would still be making unwise decisions (Allgood & Walstad, 2016). Therefore, inserting supplementary variables, such as financial skills and attitude, to conjecture a person's financial literacy is noteworthy as they help in minimising estimation errors or biases that may occur due to omitted variables (Bucher-Koenen & Lusardi, 2011) and endogeneity issue (Stolper & Walter, 2017). This study adopted the research instruments designed by Stella, Filotto, and Cervellati (2020), as this set of items follows the OECD's guideline that interpolates other demographic variables, for example, age, gender, ethnic, education level, and marital status. Three fundamental questions (also known as "Big Three") were used to measure financial literacy, and the outcomes have been widely documented in developed countries, such as the USA and Japan (Lusardi, 2019). However, less evidences are found in developing nations.

Financial Knowledge

A financially literate individual ought to possess a capacity to apply his or her knowledge and abilities to make appropriate financial decisions for effective financial resource management (Sanderson, 2015). Although the terms 'financial knowledge' and 'financial literacy' are frequently used interchangeably by earlier publications, they are not synonymous. As stated by Huston (2010), financial knowledge merely refers to the theoretical comprehension of financial concepts, whereas financial literacy encompasses two dimensions, i.e., theoretical and application. Earlier investigation reveals that financial knowledge has a positive influence on financial literacy (Lusardi & Mitchell, 2014). Robb and Woodyard (2011) highlighted that financial literacy and decision-making abilities are determined in part by one's financial knowledge. Additionally, other authors added that adopting the appropriate financial behaviour is highly dependent on one's financial knowledge (Mountain et al., 2020; Allgood & Walstad, 2016). All these researches seem to suggest that a person who is financially knowledgeable is more financially literate. However, a previous research found that regardless of gender, university affiliation, financial activity, or influence, financial knowledge differs depending on respondents' income, age, educational background, and attitude (Bangco, Dimatulac, Sanchez, & Cabauatan, 2022). Henceforth, the hypothesis is developed as follows:

H1: Financial knowledge has a positive influence on financial literacy.

Financial Skills

Financial skills is defined as the competence to apply relevant knowledge and comprehension to manage both expected and unanticipated circumstances in order to solve financial issue and turn it into a benefit and opportunity for one's gains (Tezel, 2015). Previous evidence indicates that a person who has poor financial skills is more likely to encounter financial mismanagement (Lusardi & Mitchell, 2011) in four key areas, explicitly budgeting, savings, borrowings, and investment (Gal, Grotluschen, Tout, & Kaiser, 2020). A financially literate individual possesses skills to work with numbers and is more skilful when it comes to negotiating with

financial institutions and navigating investment websites in order to manage his financial resources effectively (Hung, Parker, & Yoong, 2009). Among the questionnaire items that are selected to attest respondents' financial skills include the capabilities to comprehend how inflation would impact their purchasing power, significance of preliminary financial decisions (e.g., buying insurance), the relationship between risk and return, how different level of risk tolerance would influence one's investment decisions, and lastly how macroeconomic situation affects one's money management. In light of the aforementioned deliberations, the research suggests the following hypothesis:

H2: Financial skills has a positive influence on financial literacy.

Financial Attitude

Financial attitude is defined as personal tendency toward financial matters. What is important is the capacity to plan ahead and keep a savings account (Rai, Dua, & Yadav, 2019). Bhushan and Medury (2014) found that the focus should be on building positive financial attitudes among the people of the country in order to improve financial literacy among generations. Previous research in Japan revealed that age is favourably connected to financial knowledge but negatively related to financial attitude, implying that middle-aged Japanese people are more financially knowledgeable, whereas younger and older people are more positive in terms of financial attitude (Kadoya & Rahim Khan, 2020). Other authors also found that working women's financial literacy is strongly linked to their financial attitude and behaviour rather than their financial knowledge. In addition, working women's financial attitudes are strongly linked to their level of financial literacy. As a result of the above considerations, this study proposed that:

H3: Financial attitude has a positive influence on financial literacy.

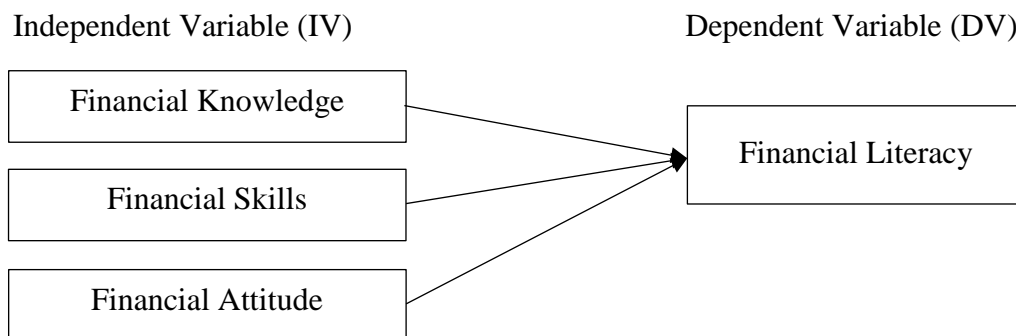


Figure 1: Conceptual Model

Source: Authors (2022)

Methodology

This study employs quantitative method with convenience sampling technique. Convenience sampling is a non-probabilistic sampling method used to collect responses. For practical deliberations, the researchers contemplate some constraint factors such as time, budget, and resources that would hold back the whole data gathering process. Hence, convenience sampling technique is adopted in this study due to its low-cost, speedier, effective, and simple execution (Bornstein, Jager, & Putnick, 2013). The key disadvantage of convenience sampling is that the

sample lacks clear generalisability. However, Jager, Putnick, and Bornstein (2017) prove that a sample which consists of homogeneous sociodemographic factors, for instance, specific age range could generate more vivid generalisability, and the findings would be more accurate, precise, and reliable. As reported by the Administrative District of Sibul, the overall population of young people (aged 15 to 29) in Sibul, Sarawak is 69,500 in 2020, with 34,200 (i.e., 49.2%) males and 35,300 (i.e., 50.8%) females. The age range is consistent with the Act 668 under Youth Societies and Youth Development Act (Amendment) 2019 (Yunus & Landau, 2019). Since only metropolitan regions and Mandarin interviewees will be polled, the suggested sample size is 110 (Raosoft Inc, 2004), with a 95% confidence level and a margin of error of 5%. Sibul has the third-highest percentage of Chinese ethnicity among all Malaysian cities, as indicated by the statistic obtained from the 2020 Population and Housing Census of Malaysia. This study used both online (using Google Forms) and physical (face-to-face) method to administer data collection. The data was collected through distributing questionnaires in higher education institutions and public places such as exhibitions. Although online surveys are easy and free to administer, Andrade (2020) has pointed out some problems with them, such as sampling bias, which can happen because only people who can read and use the internet can fill them out. But empirical evidence reveals that researchers should conduct online surveys, particularly with the potential respondents who are young adults living in urban areas and also the most active Internet users (Alsriddi, 2018). Therefore, this study adopts both methods in order to minimise the selection biases.

For the data collection, the researcher will adopt the construct of questionnaire items that are proposed by Stella, Filotto, and Cervellati (2020). The construct will cover three main areas as discussed in the literature reviews, namely financial knowledge, financial skills, and financial attitude. In order to measure financial knowledge, a list of questions provided by the United States National Financial Capability Study (NFCS) (2009) is adapted. Although a majority of earlier investigations uses self-report method to measure a person's level of financial knowledge and skills, yet previous research has pointed out that such methods might induce unnecessary biasness due to overconfidence of respondents towards their level of financial literacy (OECD, 2005). The questions adapted cover various aspects of finance such as interest rate, inflation rate, mortgage, insurance, financial assets (e.g., bonds, stock, and derivatives), risk, returns, and macroeconomic.

The Stata software was used for statistical analysis. While the dependent variable, financial literacy, is continuous data, the independent variables (financial knowledge, financial skills and financial attitude) are categorical data and interval data respectively. Therefore, an ordinary least square (OLS) was conducted to find out how strongly independent variables are correlated to financial literacy. The analysis also can show the relative contribution of each variable. Additionally, correlations will be examined to ensure the correlations among independent variables are not too high. In order to prepare data for analysis, the categorical variables with 3 levels or higher, such as financial knowledge and financial skills, were encoded into separate, dichotomous variables with dummy coding. The financial attitude variable is interval and consists of seven-point Likert scale where the score ranged from "1" for Strongly Disagree, "2" for Disagree, "3" for Slightly Disagree, "4" for Neither Disagree nor Agree, "5" for Slightly Agree, "6" for Agree and "7" for Strongly Agree. This study employs the estimation found in Chen and Volpe (1998) to determine the level of financial literacy, categorising respondents according to their scores: low level of literacy (below 60%), moderate level of literacy (score 60% to 79%), and high level of financial literacy (above 79%).

Results and Discussion

This section presents the results of data to address the research questions. A summary of demographic profile of respondents is shown in Table 1. 55.45% of respondents were female, compared to 44.55% of respondents who were men. In terms of education, 74.55% respondents had a bachelor's degree, 13.64% had only secondary school and below education, 6.36% had a diploma and 5.45% had a master's degree. The majority of the respondents are students (76.36%), followed by salaried employees in private sector and government sector at 18.18% and 3.64% respectively. Only 1.82% of the respondents are self-employed. Since students made up majority of the respondents, 90.91% of them had incomes of RM3,000 and below. However, just 2 of the total 110 respondents had incomes of RM12,001 and above.

Table 1: Demographic Profile of Respondents

Demographic	Frequency	Percentage
Gender		
Male	49	44.55
Female	61	55.45
Education:		
Secondary school and below	15	13.64
Diploma	7	6.36
Bachelor degree	82	74.55
Master	6	5.45
Occupation:		
Government sector employee	4	3.64
Private sector employee	20	18.18
Self employed	2	1.82
Student	84	76.36
Income:		
RM3,000 and below	100	90.91
RM3,000 – RM6,000	8	7.27
RM6001 – RM9,000	0	0.00
RM9,001 – RM12,000	0	0.00
RM12,001 and above	2	1.82

Source: Author (2023)

As can be seen from Table 2 as part of the statistical descriptive analysis, the mean scores of respective variables range from 0.476 to 5.718, while the scores for standard deviation fall between 0.242 and 0.993. The third dependent variable, FA, has the highest mean and standard deviation scores at 0.476 and 0.242. The second dependent variable, FS, has the lowest mean and standard deviation scores at 0.476 and 0.242, respectively. The highest mean indicates that most of the respondents concur that financial literacy and FA are strongly correlated. FA is more dispersed from the average whereas financial skills (FS) is concentrated close to it.

Table 2: Descriptive analysis for DV and IVs

Variables	Mean	Std. Dev.	Range of data
Financial literacy (FL)	0.6757576	0.3332082	0 - 1
Financial knowledge (FK)	0.5409091	0.377895	0 - 1
Financial skills (FS)	0.4763636	0.2422855	0 - 1
Financial attitude (FA)	5.707955	0.9931355	1 - 7

Source: Author (2023)

As for the statement shown in Table 3, they represent the mean and standard deviation of the responses from the perspective of financial attitude. The average score for each statement is higher than 5.00. This reveals that majority of the respondents consider financial attitude and financial literacy as closely related. This means that the level of financial literacy will rise along with the right financial attitude. On average, it can be seen that respondents generated greater agreement for statements that include evaluating prices before making a purchase (5.900), ensuring there is enough money saved up before making a significant purchase to pay for any unforeseen expenses (5.764), and thoroughly reviewing a financial contract before signing it (5.709).

With regards to financial literacy, approximately 85.45% of the respondents answered the first multiple-choices question correctly, which is “*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? A. More than RM102; B. Exactly RM102; C. Less than RM102; D. Do not know*”. Meanwhile, 58.18% successfully attempted question two which is “*Imagine that the interest rate on your savings account 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? A. More than today; B. Exactly the same; C. Less than today; D. Do not know.*” Approximately 59% answered the third question correctly which is about debt management with the statement of “*A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest over the loan will be less. A. True; B. False; C. Do not know*”. The results brought into view that being financially illiterate would lead to inability to make both short-term and long-term financial decisions which range from an individual’s ineffective financial planning and spending habits to widening the gaps of wealth equality in one country (Lusardi, 2019).

Table 3: Descriptive Analysis of Financial Attitude (FA)

No	Statement	Mean	Std. Dev.
1.	Before buying something, I ask myself if I have paid my necessary expenses.	5.663636	1.250888
2.	Before buying something, I compare prices.	5.900000	1.255812
3.	Before signing a financial contract, I carefully read its contents.	5.709091	1.294629
4.	I am careful to distinguish between necessary and unnecessary expenses.	5.581818	1.266229
5.	Before making a major purchase, I make sure that my savings are sufficient to cover any sudden expense.	5.763636	1.218566
6.	The first thought I have when I borrow money is that I want to return the money on time.	5.690909	1.373040
7.	If I know the costs I will have to incur tomorrow, I will think about it today.	5.700000	1.200535
8.	Before making online payments, I am concerned about the security of my data.	5.654545	1.288170

Source: Author (2023)

As evident from Table 4, there are more respondents with high financial literacy levels among women (47%) than among men (39%). Additionally, about 34% of the respondents, regardless of educational attainment, had low levels of financial literacy. However, the proportion of respondents with high financial literacy levels increases along with their education levels. When compared to working adults, students has lower level of financial literacy. In terms of income, the lower income group has high level of financial literacy. In other respects, the findings are in line with prior studies that reveal women have higher inclination to confess their ignorance when asked a question they do not know the answer to, in contrast to men who are more likely to be overconfident and unaware of their own illiteracy (Kalmi & Ruuskanen, 2017). Correspondingly, the results are consistent with life-cycle theory which distinguishing between the inclinations to consume and save at different phases of an

individual's lifespan (Penrose, 1952). In accordance to the theory, an individual's consumption and savings behaviours undergo substantial changes in response to both objective factors such as income, rate of returns, wealth, as well as subjective variables such as age, marital status, and socioeconomic conditions, across different stages of their life.

To assess model performance, the adjusted R-Squared value (i.e., 0.40) is detected, which indicates that all explanatory variables explain approximately 40 percent of the variation in the financial literacy level among Chinese and single young adults (as per Table 5). The modelling of research model is shown as follows: Financial literacy = 0.1648 + 0.1362418 (Financial knowledge) + 0.790254 (Financial skills) + 0.0106476 (Financial attitude) The OLS result indicates that financial skills is the only explanatory variable that significantly influences financial literacy (coef: 0.790254***; std. err: 0.1083723) amongst young adults in Sibuluan, Sarawak. The result is in line with a recent global study that pointed out financial skills as the basic yet crucial intellectual skills of accessing the right information to perform function such as comparing, contrasting, extrapolating, and evaluating, particularly when it pertains to a specific financial context like global pandemic outbreak issues (OECD, 2020). Past evidence signifies the importance for good numerical skills (such as being able to calculate a percentage and perform basic mathematical operations) to develop financial skills in order for one to understand credit, compare packages offered by the utility firms, and even undertake more complex long-term financial decisions for retirement (Gal et al, 2020).

Table 4: Tabulation Table for Financial Literacy over Demographic Variables

	Low financial literacy (Score<60%)	Moderate financial literacy (60≥score<79%)	High financial literacy (Score>79%)
Gender:			
Female	16	16	29
Male	21	9	19
Education:			
Secondary school and lower	6	4	5
Diploma	4	1	2
Bachelor Degree	26	19	37
Master	1	1	4
Occupation:			
Government sector employees	3	0	1
Private sector employees	2	7	11
Self-employed	1	0	1
Students	31	18	35
Income:			
RM3,000 and below	35	22	43
RM3,000 - RM6,000	1	2	5
RM12,000 and above	1	1	0

Source: Author (2023)

In addition, there is a positive and marginally significant relationship between financial knowledge and financial literacy (coef: 0.1362418*; std. err: 0.0695067) which is consistent with previous research (Mountain et al, 2021; Lusardi & Mitchell, 2014). A person's financial knowledge affects his or her ability to make informed and efficient money management decisions. Hogarth and Hilgert (2002) presumed that financially knowledgeable individuals are more likely to respond judiciously when confronted with financial encumbrances as well as being more effective in their retirement planning. On the other hand, the result indicates that financial attitude has a negligible and insignificant impact on the youth's financial literacy

which is consistent with a former study (Syaliha et al, 2022). Negative financial attitude among young adults could result in squandering and unnecessary borrowings, resulting in bankruptcy. To put it another way, individuals who do not prioritise matters pertaining to their finances in a responsible way are thus more likely to mistreat their financial planning in terms of expenditures, savings, emergency funds, budgeting, etc.

Table 5: Summary of OLS Results

Financial Literacy	Coefficients	Standard Error	t	P-value	VIF
Financial attitude	0.0106476	0.024923	0.43	0.670	1.00
Financial knowledge	0.1362418	0.0695067	1.96	0.053	1.13
Financial skills	0.790254	0.1083723	7.29	0.000	1.13
R-squared	0.4165				
Adjusted R-squared	0.4000				
F-value	25.22202				
Number of observations	110				

Source: Author (2023)

Conclusion

In this study, financial literacy comprises of three components, namely financial skills, financial knowledge, and financial attitude. Financial literacy is an integration of knowledge, attitudes, behaviours, cognizance and skills in making the right decisions for an individual's wealth accumulation. Financial illiteracy results in costly financial mistakes particularly pertaining to risk and returns relationship of rather complicated financial assets such as bonds and stocks. To answer the first research question, the result revealed that the level of financial literacy is considered low as only approximately 44% respondents were able to correctly answer the Big Three questions. Financial skills are the most significant variable in affecting one's financial literacy. Nevertheless, poor level of financial literacy is usually linked with low financial knowledge. Proper financial knowledge is usually obtained through financial education. Despite the specific attributes of this investigation, this study manages to delve into the level of financial literacy amongst young Chinese adults and provide local authorities with insightful inputs to formulate effective policies that will enhance their level of literacy. For instance, even though this study is coherent with the notion that the majority of Chinese adults have superior numerical skills, failure to inculcate the proper attitudes when making financial decisions may jeopardize one's financial well beings. Therefore, the regulators could implement campaigns, public talks, and exhibitions to cultivate right financial attitudes. Nevertheless, the utilization of homogeneous targeted sample may hinder the generalization of findings, hence future studies should get wider coverage of population embracing diverse socioeconomic factors such as gender, age, ethnic, occupation, and income.

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