## A Study on Financial Product Knowledge, Attitudes and Behaviours Among Malaysian Young Working Adults

Lim Sze Ying<sup>1</sup>, Amer Azlan Abdul Jamal<sup>2</sup>

<sup>1</sup>Financial Management and Banking Program, Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia.

Email: szeying1113@gmail.com

<sup>2</sup>Financial Management and Banking Program, Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia.

Email: amer@ums.edu.my

# CORRESPONDING AUTHOR (\*):

Amer Azlan Abdul Jamal (amer@ums.edu.my)

#### **KEYWORDS:**

Financial products knowledge Financial attitude Financial behaviour

#### **CITATION:**

Lim, S. Y. & Amer Azlan Abdul Jamal. (2023). A Study on Financial Product Knowledge, Attitudes and Behaviours Among Malaysian Young Working Adults. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 8(1), e002079. https://doi.org/10.47405/mjssh.v8i1.2079

#### **ABSTRACT**

The purpose of this study is to assess the level of financial products knowledge and its relation with financial attitude and behaviour among young working adults in Malaysia. A self-administered and structured online survey method was applied involving a total of 384 respondents using the nonprobability convenience sampling technique. Data was evaluated and analysed using Statistical Package for the Social Science (SPSS v.28) software. The findings show that most respondents possessed good level of financial products knowledge particularly on questions pertaining to savings and insurance products, whilst questions on credit card were deemed to be slightly difficult. Apart from that, most respondents perceived to have good attitude on having life insurance for family protection, and also think that they are able to control current and future financial situation. From the perspective of financial behaviour, most respondents perceived to compare prices before buying, prepare a budget for spending and track their spending pattern. However, maintaining an adequate financial records and doing regular savings were the least behaviours that they would practice.

**Contribution/Originality:** This study contributes to the existing literature on personal financial planning and provides a better understanding about the financial product knowledge and behaviour profile of the Malaysian citizens, in particular, the young working adults.

## 1. Introduction

The increase complexity of the financial marketplace requires consumers to be equipped with good financial knowledge. With rising options of financial products and services offered by variety of financial providers, consumers are now fully responsible for their own financial security and well-being. Hence, it is important for consumers to be fully aware the of the existing products and services being offered as it could protect them from being vulnerable to financial risk and become a victim of financial crimes.

Additionally, having inadequate financial awareness could further leads to financial misunderstanding (Equity Scholars, 2015).

However, young people are still facing multiple obstacles today, including minimal financial capital applied to increasing living expenses (Idris et al., 2013). What is more alarming is that between 2015-2019, a total of 299,186 of bankruptcy cases in Malaysia were recorded, with 26 percent of the case were among people aged below 35 years (Malaysian Department of Insolvency, 2020). The main reason to the high bankruptcy case was due to debt management problem and the situation is more apparent among the youth which have high credit card debt (Athirah, 2020). On a similar note, the problem of default payment for educational loans has become a worrying trend worldwide. In Malaysia, about 1.25 million students have benefited from the average total of RM25.89 billion education loan issued by the National Higher Education Fund (PTPTN) since the agency commenced its operation in 1997 (Zolkeplee et. al., 2018). A lot of young people wanting to pursue high education have been focusing at the government for funding support, with a lot of borrowers were not able to pay off their education debts. The repayment issue is massive in size, with higher than 50% of the borrower's default (Zolkeplee et. al., 2018).

To become a high-income developed country, Malaysia needs to invest heavily in human capital, particularly for young people, because this will help improve innovation capabilities and eventually increase gross national income through investing in young people's financial knowledge and skills (Idris et al., 2013). In addition to that, basic financial products knowledge is also essential for helping young adults make the best financial products choices based on their financial capital. This is due to the fact that young working adults will encounter obstacles such as the need for buying insurance for emergency incident savings, child protection (for those who are married), retirement plans, and property management. So, it is very important for young working adults to have at least strong basic financial products knowledge to ensure they are able to make the best decision for their future financial planning. Therefore, in this regard, this study intends to:

- i. Assess the level of financial products knowledge, and the current state of financial attitudes and financial behaviour among young working adults in Malaysia.
- ii. Examine gender and educational background differences in financial product knowledge scores
- iii. Examine the relationship between financial awareness, financial attitudes and financial behaviours.

### 2. Literature Review

## 2.1. Financial Product Knowledge

Knowledge on general financial products is among the important variable in determining peoples' financial awareness. Young working adults should at least equip themselves with some general financial products knowledge in order to understand the uses or function of financial products available in the financial markets. There are financial products that could help young working adults in their savings such as savings account, fixed deposit, debit or credit cards, and insurance. A study by Murugiah (2016) found that Malaysians (in general) have poor knowledge on financial and banking products particularly on capital market investments (such as bonds and shares). On a similar note, financial literacy of a person can also be characterized as knowledge of financial

products and services including the knowledge of financial concepts like credit score, compound interest, inflation, and diversification. The numeracy skills are also included in financial literacy so as to efficiently make financial decisions and participate in other practices like financial planning (Hastings et al., 2013). In a study done by Bhushan (2014), the level of financial literacy of a person influences the awareness on financial products and their investment decisions as the results showed that respondents with strong financial literacy have better awareness on financial products in the financial markets. According to Atkinson and Messy (2013), financial knowledge has positive association with the level of financial products awareness. Consumers have to be aware of the financial market more thoroughly so that they are able to identify appropriate products for themselves.

#### 2.2. Financial Awareness

Financial awareness does not apply only to investors but also to individuals in the economy. Financial awareness can give people the knowledge, skills and confidence to effectively manage their wealth. Ever since the recession in mid-2008, the standard need for financial awareness is significant for each person, from youths to retirees. Everyone have to achieve at least a basic understanding of their impact on the financial world and how finance will affect human life (Dullien et al., 2010). Many people do not have a strong degree of financial knowledge. Apart from that, the inadequate financial awareness among society can lead to financial misunderstandings. In spite of age, a large number of people have been able to display an understanding of how financial market works and whether the consequences on individuals are important. Many people do not know much about finances. In addition, due to the lack of financial awareness among the community, confusion in terms of financial aspects might happen (Equity Scholar, 2015). Guiso and Jappelli (2004) used the Household Income and Wealth survey undertaken by the Bank of Italy in order to examine the determinants of financial awareness. All the survey questions were used to gather information on wealth, both financial and actual, as well as demographic features and income. Based on the findings, a significant number of respondents were aware of the presence of such financial properties, even though they do not invest them. Not unexpectedly, common financial assets are transaction accounts such as deposits, short-term government bonds, and bonds provided by the national postal service. In Malaysia, the government had introduced the National Financial Literacy Strategy for the year 2019 to 2023, which aims at raising financial awareness standards, encouraging prudent financial behaviour, and fostering positive financial management attitudes. It is the intention of the government to see Malaysians live well and contribute to developing a strong and inclusive economy in a positive way. The national strategy supports the government's desire for mutual prosperity by ensuring that Malaysians are provided with the appropriate knowledge and skills to make wise financial choices at all stages of life. It is essential that Malaysians of all ages and life stages can receive financial education, and this can only be accomplished through joint efforts (Bank Negara Malaysia, 2019).

## 2.3. Financial Attitudes

Attitudes related to the way one thinks about one's finances are referred to as financial attitudes. In finance, attitude implies the psychological propensity of determining which one is the best and the second best after weighing the pros and the cons when deciding a particular investment choice, that is to say, it is to approve certain behaviours (Leone, 1995). According to Halim and Astuti (2015), financial attitude refers to a mental state,

viewpoint, and judgment about finance. If a person's financial thoughts are good, he will have a strong feeling of wanting to save, invest and prepare finances for a better future. If one thinks that money is precious and must be considered, then this attitude will enable the person to have a healthy financial situation, thereby improving the quality of life and increasing financial satisfaction.

Financial attitudes play a major role in assessing the success or failure of an individual's financial behaviour. Eagly and Chaiken (1993) stated that financial attitudes demonstrate the level of knowledge that helps a person in handling their finance. The researchers found that when a person have a high financial attitude, the person will tend to be more responsible when using his or her own finances, and so it will give a positive impact on financial behaviour. According to the study conducted by Albeerdy and Gharleghi (2015), they have indicated a strong association between financial attitude and financial awareness. To be specific, the financial attitude is a crucial component in shaping the financial awareness of a person. In addition, they claimed that if an individual can interpret finance differently. If a person has a negative attitude towards money, he or she will have no desire to properly handle their money. It is believed that the behaviours of savings, daring action in investments, spending, and so on could be affected by financial attitude. In line with this belief, the OECD has formed a method to assess the financial attitude. An OECD survey was administered and it was used to attempt to clarify respondents' views towards the two important aspects of consumption and financial planning. Both of the aspects were expressed in the claims, which are consumption tendency, saving tendency, and the degree of confidence in planning.

The survey conducted by Agarwalla et al. (2015) reported that financial awareness among married people in India have a positive relationship with financial attitude. Married people would be more inclined to spend their money more responsibly and make financial planning as opposed to young people. That is because, even though some of the married people were poor in financial knowledge, but most of them had good discipline in financial matters. Thus, usually married people will properly manage their finances. They clarified that, relative to those married persons, young people were more poorly equipped to do financial planning and consume more deliberately. Moreover, relative to financial attitude, the level of education was found to have a larger impact on financial literacy and financial behaviour. On the opposite, financial attitude was having a positive correlation with the level of income. That is to say, a relatively significant percentage of respondents with higher incomes had a constructive financial attitude towards financial planning and consumption in order to meet their future financial objectives. In addition, high financial awareness may influence both financial attitude and financial behaviour. On the other side, bad financial attitudes may contribute to less favourable behaviour.

In the sense of financial self-belief, Serido et al. (2013) found that contextual financial awareness is strongly correlated with financial attitudes. The variables correlated with the financial attitudes of young adults were analysed by Jorgensen and Savla (2010) and a substantial correlation was identified between financial awareness and financial attitudes. Furthermore, the results revealed that the correlation between financial awareness and financial behaviour was driven by financial attitudes. Shim et al. (2009) observed same findings in different research investigating the influences that form the financial attitudes of young adults, where the researchers found that the financial awareness was an important covariate of financial attitudes. Also, Hayhoe et al. (2005) discovered a correlation between financial awareness and financial attitude. However,

Potrich et al. (2016) did not found any correlation between financial awareness and financial attitude.

#### 2.4. Financial Behaviours

Financial behaviour is characterized as how well a person manages its own financial resources such as budget management, insurance, and financial savings. The financial behaviour of an individual can be seen by how well he or she handles cash, debt, investments and other spending. Financial behaviour relates to how an individual personal financial resources are handled, controlled, and utilized. People that have a good financial behaviour will be using his or her own money wisely such as paying bill on time, managing saving, and controlling expenditures (Hasibuan et al., 2018). It has been reported that lack of financial education or financial literacy will result someone into poor financial behaviour. Financial literacy relates to one's ability in making wise financial decisions (Kempson et al., 2013). Financial behaviour has a positive association with financial awareness in terms of money readiness, retirement and wealth management, investing and reduced spending on credit (Lusardi & Mitchell, 2011). Those who are more financially behavioural could be more financially educated. In contrast to adults who are less financially literate, it makes young adults more likely to plan their retirement plans sooner. In other words, young adults with satisfactory financial behaviour will began to prepare for their financial plan, retirement and income growth at an earlier phase. In order to minimise the amount of debt, they will also begin savings and opt to borrow loan with a lower interest rate to ensure their debt level is low.

Perry and Morris (2005) found that financial awareness and behaviour are correlated where people who are more financially savvy are more probably to participate in prescribed financial activities like making bill payment punctually and develop emergency fund management. The researchers investigate the relation between particular financial behaviour and knowledge of these behaviours, and have concluded that financial knowledge may be related to financial practices. In addition, the tendency of people to save, budget and manage expenditure is found to be partly based on their perceived influence of results, financial knowledge and financial capital.

## 2.5. Gender Differences on Financial Attitude and Financial Behaviour

There are several research about financial behaviour and financial attitude can be affected by gender. According to Atkinson and Messy (2013), from their finding, female tend to have a budget and keep track with their own finances than male. This finding is in line with those of Clitheroe (2008) which stated that female seem to be better at short-term money management behaviour and attitude compared to male. The results showed that women are often tend to maintain a budget for their daily finances periodically than men, and incline to consider about solutions to minimize their expenses. On a contrary, study done by Walczak and Kamieniecka (2018), showed that men are better in money management as they use the financial products and services more often than women and men have better financial knowledge. This is supported by Sabri and Zakaria (2015) whereby they found that male is better in handling their money than women as the results show that women inclined to spend more during their retirement life than men due to longer life expectancy. Other than that, prior studies found that financial attitude and financial behaviour are usually lower among the female than male (Atkinson & Messy, 2013; Chen & Volpe, 1998). Lusardi and Scheresberg (2013) discovered that

female who are young, have children and experienced marital conflict tend to encounter financial difficulties. The factors for female's low involvement in financial decision-making may be related to lack of financial education, lack of talks regarding money management with family members, and low awareness about modern or new financial products and services (Roy & Jain, 2018). Furthermore, Kasman et al. (2018) found that working women confront greater strain when they are forced to balance with their job profession and the childbearing duties at the same time. In India, many women have to work and provide their families with financial support, but because of the fear of risk, they show less interest in making investment decisions.

## 3. Methodology

The sample of this study consists of young working adults with the age range between 18 to 40 years old (Department of Statistics Malaysia, 2020). A self-administered and structured online survey method was applied involving a total of 384 respondents (that fully answered all the survey questions) using the non-probability convenience sampling technique. Data was evaluated and analysed using Statistical Package for the Social Science (SPSS v.26) software. The questionnaire consists of four sections and was adapted from various literatures. Each section has different set of measurements. Section A consists of items pertaining to basic demographic information such as gender, age, education, total spending per month, spending pattern and source of financial information. Section B consists of 8 items that measure participants' basic financial product knowledge with the choice of answers were either Yes, No or Do not know. Section C consists of 5 items that measure participant's perceived financial attitudes using five-points likert scale ranging from (1) Strongly Disagree to (5) Strongly Agree. Lastly, section D consists of 5 items that measure participant's perceived financial behaviours using five-points likert scale ranging from (1) Strongly Disagree to (5) Strongly Agree.

#### 4. Results and Discussion

Table 1 depicted the summary of respondents' profile. More than half of the respondents are female (62.5%) with majority are within the age range between 18-29 years old. In terms of educational background, about 34% are from pure business major, whilst almost half (47%) are from non-business background. In terms of spending of monthly allowances, most respondents spent their money on entertainment, transportation and clothing / beauty. However, only 8% of respondents allocated their monthly allowance for saving and investment, which signifies low participation of the young adults in saving and investment activities. According to RinggitPlus (2021), about half (or 51%) of Malaysian save less than RM500 per month and can only survive for less than 3 months if they lose their job. Other than the rise in cost of living and impact from the covid-19 pandemic that limits their ability to save, poor spending habits is also one of the main contributors, with almost half of Malaysians spend more or exactly of what they earn every month (RinggitPlus, 2021). On a different note, about 41% indicate that information received from family members influence their decision to choose financial products offered in the financial marketplace, followed by information received from bankers (22%) and online (14%). This supports the argument that family is an important agent of socialization that can help individuals to make decisions and cultivate positive financial behaviours (Sheng et al., 2022).

Table 1: Summary of Respondents' Profiles

Demographic Variables	Categories	Frequency	Percentage (%)
Gender	Male	144	37.5
	Female	240	62.5
Age	18-23	180	46.9
	24-29	153	39.8
	30-35	36	9.4
	36-40	15	3.9
Major area of study	Business majors	129	33.6
	Non-business majors	255	66.4
Allowance spending	Transportation	277	24.2
	Entertainment	294	25.7
	Clothing / Beauty	201	17.6
	Education	128	11.2
	Saving & Investment	93	8.1
	Living (rental)	152	13.1
Source of information	Bankers	187	22.3
	Online	118	14.0
	Families	346	41.2
	Friends	144	17.1
	Magazine/Newspaper	42	5.0
	Other	3	0.4

Meanwhile, Table 2 below depicts respondents' knowledge on financial products. A total of 8 basic questions were asked which covers respondents' understanding on interest charges, fixed deposit, credit cards and insurance. Majority of the respondents were able to answer most of the questions correctly, with questions pertaining to basic insurance coverage scored the highest correct answer (93.2%), followed with fixed deposit rate (89.6%) and savings account rate (81.3%). However, advance questions on credit card were deemed to be difficult with half of the respondents do not know the answer. About 41.9% do not know if the payWave system of the card could function if it is placed within 4cm from the card reader. Additionally, more than half pointed out that they do not know how financial charges of a credit card are calculated and charged to them as a user.

Table 2: The level of Financial Product Knowledge

Questions	Correct	Incorrect	Don't Know
Interest of saving account will be given yearly.	312	30	42
	(81.3%)	(7.8%)	(10.9%)
Fixed deposits rate is higher than savings account rate.	344	6	34
	(89.6%)	(1.6%)	(8.9%)
Fixed deposits with commercial banks are risk free.	280	50	54
	(72.9%)	(13.0%)	(14.1%)
If cardholders waved their card more than once, would they be charged twice?	281	26	77
	(73.2%)	(6.8%)	(20.1%)
Visa payWave cards work when the card is within 4cm from the card reader.	201	22	161
	(52.3%)	(5.7%)	(41.9%)
Finance charges for credit cards are calculated as a	162	13	209

percentage of the balance outstanding every month.	(42.2%)	(3.4%)	(54.4%)
Buying insurance is cheaper at younger ages.	358	6	20
	(93.2%)	(1.6%)	(5.2%)
The longer you pay the insurance premiums, the higher the cash surrender value.	251	22	111
	(65.4%)	(5.7%)	(28.9%)

Independent sample T-tests were conducted to examine the difference between major area of study and gender based on the score of financial product knowledge. As seen in Table 3, male respondents recorded a slightly higher scores than female. However, the independent sample T-test showed that there was no statistically significant difference between gender and financial product knowledge (at the 95% level of confidence). Interestingly, we found that those who studied business majors recorded higher scores (mean= 4.892) as opposed to those with non-business majors (mean= 4.102). As seen in Table 4, there was a significant difference in financial product knowledge with respect to major area of study (p= .001).

Table 3: Independent sample T-test Between Gender, Education Majors and Financial Product Knowledge

		Mean	SD	T-test (p)
	Male	4.562	1.452	
Gender (Score 0-8)	Female	4.250	1.604	0.062
	Business Major	4.892	1.207	
Education Majors (Score 0-8)	Non-Business Major	4.102	1.642	0.001*

<sup>\*</sup>p<0.05

On a different note, respondents perceived to have good financial attitudes on several aspects of financial management (Table 4).

Table 4: Financial Attitudes

Questions	Mean	Standard Deviation
I feel I have the ability to use my future revenue in achieving my financial goals.	3.86	0.819
I feel that I am capable in controlling my financial situation.	4.04	0.791
I feel that I have the ability to handle my financial future (e.g., investments, buying insurance, etc.).	3.90	0.801
I feel having life insurance is a significant way to protect my loved ones.	4.15	0.734
I enjoy talking to my friends regarding money management issues (e.g., credit cards, taxes, investing, etc.).	3.80	1.017

Insurance coverage was perceived as being the most important, with majority agreed that having life insurance is significant to protect their loved ones (mean=4.15, SD= 0.734). Other than that, respondents seem to have the confidence in managing and controlling current financial situation (mean=4.04, SD= 0.791). However, perceived attitudes in financial planning activities were not really encouraging. Just slightly more than average of the respondents thinks they could handle matters pertaining to future financial planning (mean=3.90, SD= 0.801) and able to use future revenues to achieve financial goals (mean= 3.86, SD=0.819). Similar results can be seen on discussing financial matters with families and friends (mean= 3.80, SD=1.017).

Meanwhile, respondents' perceived ability to control current financial situation seem to be in line with behaviours. As can be seen in Table 5, most respondents practice good spending behaviour by comparing prices before purchasing (mean= 4.40, SD= 0.655) and do budgeting to track their spending (mean= 4.28, SD=0.724). The rise in cost of living in Malaysia is plausible explanation here, which requires consumers to be more responsible in managing daily financials and in order to make ends meet. Another interesting finding is that most respondents agreed that they read to increase their financial knowledge (mean= 4.08, SD= 1.006). Through regular reading and searching for information on financial issues, it helps individual to be more financially literate and contribute to positive financial behaviours (Kadoya & Khan, 2020). Meanwhile, respondents' lack of attitudes on financial planning seems to be in line with behaviours. Just slightly more than average agreed that they plan and implement regular savings/investment program (mean= 3.79, SD= 1.056) and maintain adequate financial records (mean= 3.63, SD= 1.135). Independent sample T-test was conducted to examine the difference between gender, financial attitudes and financial behaviours. As seen in Table 6, there were no statistically significant differences between male and female on perceived financial attitudes (p= 0.570) and financial behaviours (p= 0.452), where the p-value was found to be less than 0.05. In short, this study revealed that gender does not significantly influence people's perception on financial attitudes and behaviours.

Table 5: Financial Behaviours

Questions	Mean	Standard Deviation
I plan and implement a regular savings/investment program.	3.79	1.056
I read to increase my financial knowledge.	4.08	1.006
I maintain adequate financial records.	3.63	1.135
I compare prices when shopping for purchases.	4.40	0.655
I budget and track my spending.	4.28	0.724

Table 6: Independent sample T-test Between Gender, Financial Attitudes and Behaviours

		Mean	SD	T-test (p)
Financial	Male	20.4931	3.54590	
Attitudes	Female	20.0042	3.49117	0.570

Financial	Male	20.7500	3.53899	
Behaviours	Female	19.1583	3.47013	0.452

<sup>\*</sup>p<0.05

The results of the multiple regression analysis (Table 7) indicate that financial awareness and financial attitudes play an important role in shaping financial behaviours. The positive relationship between financial awareness and behaviours signifies the importance to have an understanding about the products, services and transactions in the financial marketplace in order to able to act independently and withstand against financial shocks. On top of that, financial awareness enhances one's ability to make rational judgment and subsequently improve financial making decisions (Dewi et. al., 2020). The result also found positive and significant relationship between financial attitudes and behaviours, and consistent with those of Pandey et al. (2020) who argued that people's tendency to perform certain behaviors (such as investing, spending or savings) is significantly influenced by financial attitude. With higher financial attitudes, a person perceived to have higher motivation, become more responsible towards their financial activities which further lead to positive financial behaviours.

Table 7: Coefficient of Regression Analysis

	В	Beta	Sig.
Financial Awareness	.332	.226	.000*
Financial Attitudes	.547	.513	.000*
	F		131.16
	Sig		0.000
	R		.408
	R <sup>2</sup> adjusted		.405

<sup>\*</sup>p<0.05, Dependent variable: Financial Behaviours

## 5. Conclusion

This study examined the level of financial products knowledge and its relation with financial attitude and behaviour among Malaysian young working adults. In general, the study found that most young working adults possessed good knowledge on basic financial products, particularly on insurance and saving products. Questions pertaining to credit cards were deemed to be difficult and perhaps led to spending priority problem. whereby most of their monthly allowances went into entertainment and clothing/beauty. However, respondents seem to have confidence in managing current financial situation. Comparing prices when shopping and doing self-reading for knowledge improvement are among the regular activities that help them feel content in handling short-term financial affairs. Another important finding from this study is lack of involvement in saving and investment activities and long-term financial planning. About two third of the respondents are still in doubt of having the ability to plan to use their future revenues, and save/invest for the future. The fast and easy access to the credit market has made money management more complex which could jeoperdise their future financial wellbeing. Therefore, this study suggests that awareness on the use of credit cards, spending behavours and financial planning for the young adults should be given priority and embedded in the future financial education programs.

## **Ethics Approval and Consent to Participate**

The researchers used the research ethics provided by the Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah.

## Acknowledgement

Part of this article was extracted from a thesis submitted to Universiti Malaysia Sabah.

## **Funding**

This study received no funding.

#### **Conflict of Interest**

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

#### References

- Atkinson, A., & Messy, F. (2013). Measuring Financial Literacy. *OECD Working Papers on Finance, Insurance and Private Pensions*, 6-57. https://doi.org/10.1787/5k9csfs90fr4-en
- Athirah Mohamad (2020, 13<sup>th</sup> October) Financial literacy among youth alarmingly low, New Strait Times, retrieved from https://www.nst.com.my/opinion/letters/2020/10/631937/financial-literacy-among-youth-alarmingly-low
- Agarwalla, S., Barua, S., Jacob, J., & Varma, J. (2015). Financial Literacy among Working Young in Urban India. *World Development*, 67, 101-109. https://doi.org/10.1016/j.worlddev.2014.10.004
- Albeerdy, M., & Gharleghi, B. (2015). Determinants of the Financial Literacy among College Students in Malaysia. *International Journal of Business Administration*, 6(3), 15-24. https://doi.org/10.5430/ijba.v6n3p15
- Bank Negara Malaysia. (2019). *Malaysia National Strategy for Financial Literacy 2019-2023* (pp. 3-12). Kuala Lumpur: Financial Education Network.
- Bhushan, P. (2014). Relationship between Financial Literacy and Investment Behavior of Salaried Individuals. *Journal of Business Management & Social Sciences Research (JBM&SSR)*, 3(5), 82-87.
- Clitheroe, P. (2008). *Financial Literacy Women Understanding Money* (pp. 57-61). Canberra: Financial Literacy Foundation.
- Chen, H., & Volpe, R. (1998). An Analysis of Personal Financial Literacy among College Students. *Financial Services Review*, 7(2), 107-128. https://doi.org/10.1016/s1057-0810(99)80006-7
- Department of Statistics Malaysia (2020). retrieved from https://www.dosm.gov.my/v1/index.php?r=column/csearch&search\_keyword=y outh&page=4
- Dewi, V. I., Febrian, E., Effendi, N., Anwar, M., & Nidar, S. R. (2020). Financial literacy and its variables: The evidence from Indonesia. *Economics & Sociology*, *13*(3), 133-154.

- Dullien, S., Kotte, D., Márquez, A., & Priewe, J. (2010). *The Financial and Economic Crisis of 2008-2009 and Developing Countries* (pp. 57-69). United Nations.
- Eagly, A., & Chaiken, S. (1993). *The Psychology of Attitudes* (Pp. 459-466). Thomson Wadsworth.
- Equity Scholars (2015) The Importance of Financial Awareness. Retrieved 6 June 2020, from http://www.equityscholar.com/library/the-importance-of-financialawareness/
- Guiso, L., & Jappelli, T. (2004). *Awareness and Stock Market Participant.* (CSEF Working Paper No. 110). Italy, Centre for Studies in Economics and Finance.
- Halim, E.K.Y & Astuti, D. (2015). Financial Stressors, Financial Behaviour, Risk Tolerance, Financial Solvency, Financial Knowledge and Financial Satisfaction. *Journal of Management*, 3(1), 19-23.
- Hasibuan, B., Lubis, Y., & HR, W. (2018). Financial Literacy and Financial Behavior as a Measure of Financial Satisfaction. *Proceedings of the 1St Economics and Business International Conference 2017 (EBIC 2017)*, 46, 503-507. https://doi.org/10.2991/ebic-17.2018.79
- Hayhoe, C., Leach, L., Allen, M., & Edwards, R. (2005). Credit Cards Held by College Students. *Journal of Financial Counseling and Planning*, 16(1), 1-10.
- Hastings, J., Madrian, B., & Skimmyhorn, W. (2013). Financial Literacy, Financial Education and Economic Outcomes. *Annual Review of Economics, Annual Reviews*, *5*(1), 347-373. https://doi.org/10.3386/w18412
- Idris, F., Krishnan, K., & Azmi, N. (2013). Relationship between Financial Literacy and Financial Distress among Youths in Malaysia-An empirical study. Geografia: Malaysian Journal of Society and Space, 9(4), 106-117.
- Jorgensen, B., & Savla, J. (2010). Financial Literacy of Young Adults: The Importance of Parental Socialization. *Family Relations*, *59*(4), 465-478. https://doi.org/10.1111/j.1741-3729.2010.00616.x
- Kadoya, Y., & Khan, M. S. R. (2020). Financial literacy in Japan: New Evidence using financial knowledge, behavior, and attitude. *Sustainability*, *12*(9), 3683.
- Kasman, M., Heuberger, B., & Hammond, R. (2018). *Recommendations for Improving Youth Financial Literacy Education* [Ebook] (pp. 1-13). The Brookings Institution. Retrieved 6 June 2020, from https://www.brookings.edu/wp-content/uploads/2018/10/ES\_20181001\_Financial-Literacy-Recommendations.pdf.
- Kempson, E., Perotti, V., & Scott, K. (2013). *Measuring Financial Capability: A New Instrument and Results from Low-And Middle-Income Countries*. Washington DC: World Bank.
- Leone, C. (1995). A review: Eagly, A. H., & Chaiken, S. (1993). The psychology of attitudes. New York: Harcourt, Brace, & Janovich. *Psychology and Marketing*, 12, 459-466.
- Lusardi, A., & Mitchell, O. (2011). Financial Literacy and Retirement Planning in the United States. *Cambridge University Press*, 10(4), 509–525. https://doi.org/10.3386/w17108
- Lusardi, A., & Scheresberg, C. (2013). Financial Literacy and High-Cost Borrowing in the United States. *SSRN Electronic Journal*, 1-22. https://doi.org/10.2139/ssrn.2585243
- Malaysian Department of Insolvency (2020) retrieved 8 September 2021, from https://www.mdi.gov.my/index.php/legislation/statistics/75-bankruptcy/1786-bankruptcy-statistic-disember-2020

- Murugiah, L. (2016). The Level of Understanding and Strategies to Enhance Financial Literacy among Malaysian. *International Journal of Economics and Financial Issues*, 6(S3), 130-139.
- Pandey, A., Ashta, A., Spiegelman, E., & Sutan, A. (2020). Catch them young: Impact of financial socialization, financial literacy and attitude towards money on financial well-being of young adults. *International Journal of Consumer Studies*, 44(6), 531-541.
- Perry, V., & Morris, M. (2005). Who Is in Control? The Role of Self-Perception, Knowledge, and Income in Explaining Consumer Financial Behavior. *Journal of Consumer Affairs*, 39(2), 299-313. https://doi.org/10.1111/j.1745-6606.2005.00016.x
- Potrich, A., Vieira, K., & Mendes-Da-Silva, W. (2016). Development of a Financial Literacy Model for University Students. *Management Research Review*, *39*(3), 356-376. https://doi.org/10.1108/mrr-06-2014-0143
- RinggitPlus (2021). *Malaysian Financial Literacy Survey 2021*. https://ringgitplus.com/en/blog/wp-content/uploads/2021/10/RinggitPlus-Financial-Literacy-Survey-2021.pdf
- Roy, B., & Jain, D. (2018). A Study on level of Financial Literacy among Indian Women. *Journal of Business and Management*, 20(5), 19-24. https://doi.org/10.9790/487X-2005051924
- Sabri, M., & Zakaria, N. (2015). Financial Well-Being among Young Employees in Malaysia. *Handbook of Research on Behavioural Finance and Investment Strategies*, 221-235. https://doi.org/10.4018/978-1-4666-7484-4.ch013
- Serido, J., Shim, S., & Tang, C. (2013). A Developmental Model of Financial Capability. *International Journal of Behavioral Development*, *37*(4), 287-297. https://doi.org/10.1177/0165025413479476
- Sheng, S. Y., Feng, W., & Spohn, D. (2022). Family Matters: Examine the Role of Family Financial Socialization to Improve Consumer Financial Well-Being. *Journal of Applied Business & Economics*, 24(3).
- Shim, S., Xiao, J., Barber, B., & Lyons, A. (2009). Pathways to Life Success: A Conceptual Model of Financial Well-Being for Young Adults. *Journal of Applied Developmental Psychology*, *30*(6), 708-723. https://doi.org/10.1016/j.appdev.2009.02.003
- Walczak, D., & Kamieniecka, S. (2018). Gender Differences in Financial Behaviours. *Engineering Economics*, 29(1), 123–132. https://doi.org/10.5755/j01.ee.29.1.16400
- Zolkeplee, S., Hamed, A., & Ogunbado, A. (2018). Determinant Factors of Student's Perception toward Educational Loan Repayment. *The Journal of Muamalat and Islamic Finance Research*, 15(1), 73-83.