

Gender Differences in Financial Awareness and Financial Knowledge Among Tertiary Students in Malaysia

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Abstract

A low level of financial literacy and the increasing trend of the young generation's bankruptcy rate has become a significant issue in Malaysia. Hence, this study aims to examine the level of financial knowledge and financial awareness among tertiary students in Malaysia. A total of 1,800 respondents were selected based on gender and location. There are from the Northern Region (Perlis, Kedah, Penang, and Perak), East Coast Region (Kelantan, Terengganu, and Pahang), Central Region (Selangor, Kuala Lumpur, and Putrajaya), and Southern Region (Negeri Sembilan, Melaka, and Johor). In this study, most respondents reported low financial knowledge but moderate financial awareness toward financial products. However, a factor of gender among the respondents shows a minor difference in financial knowledge and awareness which suggests that both indicators do not influence their low-level literacy and moderate awareness of finance products in Malaysia. To this extent, this study recommends that tertiary students raise their financial literacy before graduation. Tertiary students are encouraged to attend talks, webinar or seminars relevant to financial management to improve their financial knowledge and enhance their financial awareness toward financial products in Malaysia especially related to credit cards, car loans, personal loans, insurance, and mortgage. Educators and policymakers are urged to implement various financial education programs to improve literacy and awareness. In conclusion, this study contributed to Malaysia's literature on financial literacy.

Keywords:

Financial Knowledge, Financial Awareness, Financial Literacy, Gender Difference

INTRODUCTION

According to Matias et al. (2020), food, water, and shelter are considered to be the fundamental necessities of humans in Maslow's Hierarchy of Needs (1943). Even with the impacts of Covid-19, Malaysia's population grew yearly, reaching 33,199,193 residents in 2020 and 33,573,874 residents in 2021. A nation's price level (inflation) will grow due to the rising demand for necessities brought on by an expanding population. According to Worthington (2006), as the cost of necessities rises, people will face more financial burdens because most individuals must raise debt to own a home or a private vehicle (Bank Negara Malaysia, 2021). Since 2013, Bank Negara Malaysia has highlighted that Malaysia is one of the countries with a significant household debt that exceeds 80% of its gross domestic product (GDP). In 2021, Malaysia's household debt increased to RM 1.34 trillion, and these household debt structures contributed to the issue of mortgage delinquency due to housing loan borrowers facing challenges in

making their monthly mortgage repayment (Seah, 2021). One of the causes contributing to excessive household debt may be overspending and impulse purchasing (Yue & Abdul Razak, 2022).

Manage debt or make daily financial decisions, financial proficiency extends to the area of decision-making is needed. A good understanding of finances will assist the decision-makers in understanding how they spend their money, the return with a given level of financial risk, the cost of financing, and how to deal with future financial challenges (OECD, 2020). However, when financial awareness of a product is low, the probability of making a sound financial decision will become lower (OECD, 2014; OECD, 2020). Financial literacy is a set of skills and knowledge that allows individuals to make informed and effective financial decisions with their available financial resources (Tahir & Ahmed, 2021). Thus, the main objective of this study is to examine the level of financial knowledge and financial awareness among tertiary students in Malaysia. Furthermore, this study's second objective is to examine the gender difference in financial knowledge and financial awareness among tertiary students in Malaysia.

Meanwhile, it is limited study related to gender differences towards financial knowledge and financial awareness on financial products among tertiary students in Malaysia. Thus, the finding of this study provides valuable insightful information to tertiary students, educators, and policy maker that they may use to voice their concerns about the problems with inadequate financial literacy that present in Malaysia. In next section provides some literature review. Section three to four, discussing the methodology part and data descriptions, including the differential between females and males toward financial knowledge and financial awareness related to financial products in Malaysia. Moreover, section five discussing the empirical findings and conclusion.

LITERATURE REVIEW

The theory of reasoned action being selected in this study that individual attitude can be derived from personal beliefs and evaluation outcomes (Glanz et al., 2008). Furthermore, the environmental condition will influence the behavior of a person and the decision making are rational for the most part. The degree of financial literacy has been observed to increase along with education, which enhances awareness of risk, insurance, retirement, credit cards, and investment plans (Harrison et al., 2015; Kaiser et al., 2022). Education level and financial knowledge level are often significantly correlated. Nevertheless, despite having a poor level of schooling, some respondents could obtain a high degree of financial understanding (OECD, 2014; OECD, 2020). In the United States, about half of the states presently require their students to complete financial education before graduation by including some form of personal financial management program as part of the school curriculum. This is because most of their children lack self-control and awareness about the impact of financial knowledge on finance-related decisions in their future (Urban et al., 2020).

Concerned about financial illiteracy, policymakers highlighted programs such as Economic Transformation Plan (EPT) 2010-2020, which emphasizes e-payment, insurance, and pension to ensure the financial services sector could help Malaysia become a high-income nation, and the Financial Sector Blueprint 2011-2020, which suggests incorporating financial education into a formal curriculum. Additionally, because of the course syllabus, students with backgrounds in business, management, economics, accounting, or finance are exposed to financial information more frequently than students without such backgrounds, who may be exposed to less financial information due to the course structure's design (Bank Negara Malaysia, 2013; Bank Negara Malaysia, 2021).

According to Beal and Delphachitra (2003), financial literacy is a collection of abilities and attitudes that enable a person to enjoy a variety of talents and attitudes to make wise and productive financial decisions with their available financial resources. As in Malaysia, Fazli et al. (2012) assessed financial literacy by counting the number of questions on a 25-item quiz that covered topics like setting financial goals, keeping financial records, saving money, investing it, retiring, banking, the time value of money, wills, insurance, student loans, and general personal finance knowledge. In this study, financial literacy is divided into financial knowledge and financial awareness. In extent, according to OECD (2014), Estonia, Hungary, Ireland, Czech Republic, and Malaysia exhibit no significant gender differences, while in Albania, Armenia, Germany, Norway, Poland, South Africa, and the United Kingdom, it is shown that males scored significantly higher than female in the financial literacy quiz. Thus, it is essential to investigate the gender differences toward financial knowledge and financial awareness among tertiary students in Malaysia.

METHODS

Due to the impact of the Covid-19 pandemic, the targeted sample size will be selected from eight universities who came from four regions which are Northern Region (Perlis, Kedah, Penang, and Perak); East Coast Region (Kelantan, Terengganu, and Pahang); Central Region (Selangor, Kuala Lumpur, and Putrajaya) and Southern Region (Negeri Sembilan, Melaka, and Johor). Due to the impact of Covid-19 and the movement control order, Google Forms were used for data collection. In each region, 450 respondents were selected. Thus, this study used a non-probability sampling technique - snowball sampling (chain sampling, chain-referral sampling, referral sampling) (Kennedy-Shaffer et al., 2021).

An email will be sent to all academic staff in several faculties between eight targeted universities to request to share the email with their students. Descriptive analysis and cross-tabulation analysis are implemented in this study to identify the trends and relationship. In this study, nominal scale has been used to collect the data for demographic factors and financial knowledge variables while Likert-scale has been used to collect the data for financial awareness.

Generally, data filtering is needed to ensure that the sample size can represent the population. The age of the respondents was the first filtering criterion, and respondents must be between 18 to 24 years old. After that, to fulfil the research objective, gender was the second criterion for filtering the data. To further examine the level of financial knowledge, it is based on a count of correct answers on a 10-items quiz about the time value of money, risk and return, interest rate, inflation rate, diversification, insurance, stock market, hire purchase, credit card, mortgage loan, and credit scoring. Meanwhile, there is another 10-item question to examine the level of financial awareness on credit cards, life insurance, medical and health insurance, mortgage, hire purchase, pension fund, fixed deposit, share investment, bond investment, and mutual fund investment in this study.

RESULT AND DISCUSSION

According to Table 1, the gender distribution in this study is equal, which is 900 respondents from female and 900 respondents from male. This is because, in this study, the second research objective are to identify the difference between gender toward financial knowledge and financial awareness among tertiary students in Malaysia.

Table 1: Gender distribution

Gender	Frequency	Percentage	Cumulative Percentage
Female	900	50	50
Male	900	50	100
Total	1,800	100	

Moreover, in Table 2, the location in this study is equal distribution according to the Northern Region, the East Coast Region, the Central Region, and the Southern Region. Thus, the result of the study can represent the population of tertiary students from West Malaysia.

Table 2: Location distribution

Location	Frequency	Percentage	Cumulative Percentage
Northern Region	450	25	25
East Coast Region	450	25	50
Central Region	450	25	75
Southern Region	450	25	100
Total	1,800	100	

Table 3 shows the age distribution among respondents in this study. The age range of respondents falls from 18 to 24 years old. Those below or above the age range were removed from the data set.

Table 3: Age distribution

Age	Frequency	Percentage	Cumulative Percentage
18 years old	28	1.6	1.6
19 years old	149	8.3	9.8
20 years old	351	19.5	29.3
21 years old	499	27.7	57.1
22 years old	321	17.8	74.9
23 years old	223	12.4	87.3
24 years old	229	12.7	100.0
Total	1,800	100.0	

The information in Figure 1 displays the sources for gaining financial knowledge among tertiary students in this study. The results show that the top three selections are from parents, university, and social media. Additionally, 69.78%, or 1,256 respondents, reported that their parents play a role in transforming financial knowledge. Meanwhile, 56.94%, or 1,025 respondents, declared they are learning financial knowledge from universities, formally or informally. Moreover, 55.6%, or 1,001 respondents, stated they are gaining financial knowledge from social media.

The financial awareness variable’s Cronbach’s alpha, composite reliability and average variance extracted are, respectively, 0.937, 0.946 and, 0.639. Based on Table 4, most respondents (75.67%) scored 21 to 40 points on financial awareness of credit cards, life insurance, medical and health insurance, mortgage, hire purchase, pension fund, fixed deposit, share investment, bond investment, and mutual fund investment. It shows that most respondents fall into the category of moderate financial awareness. The measurement of the score is based on a five-point Likert scale. The questionnaire has ten questions to verify the degree of financial awareness. Those who selected five are considered to have high financial

awareness. While those who selected three to four had moderate financial awareness, and those who selected one to two had low financial awareness.

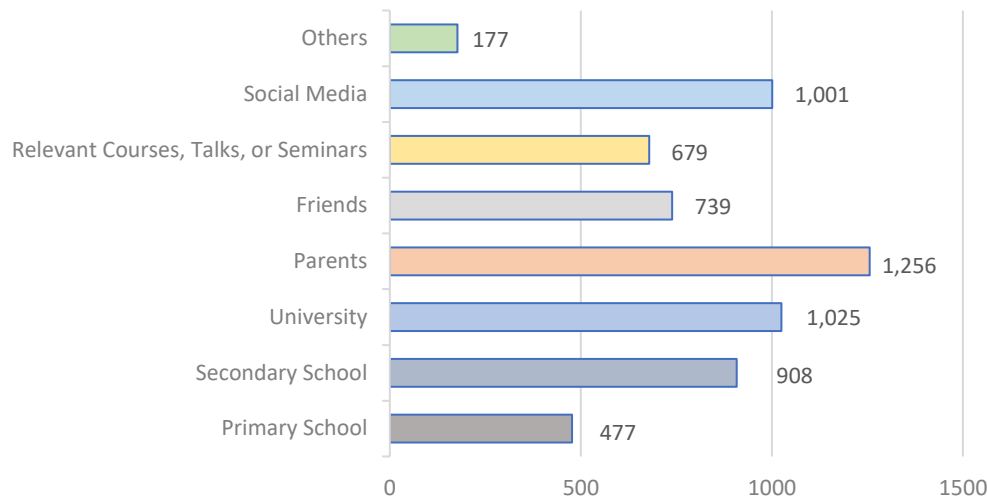


Figure 1: Sources of financial knowledge

Table 4: Level of financial awareness

Points	Frequency	Percentage	Cumulative Percentage
0 to 10	25	1.4	1.4
11 to 20	200	11.1	12.5
21 to 30	679	37.7	50.2
31 to 40	683	37.9	88.1
41 to 50	213	11.9	100
Total	1,800	100.0	

In addition, refer to Table 5, more male respondents (132) than female respondents (81) reported high financial awareness in this study. Meanwhile, 688 female respondents, compared to 674 male respondents, stated moderate financial awareness, while more female respondents (131) than male respondents (94) stated a low financial awareness. As a result, it shows that, in general, male respondents achieve a higher financial awareness toward financial products compared to female respondents among tertiary students in West Malaysia.

Table 5: Gender difference in financial awareness

Gender	Frequency					Total
	0 to 10 (Low)	11 to 20 (Low)	21 to 30 (Moderate)	31 to 40 (Moderate)	41 to 50 (High)	
Female	15	116	372	316	81	900
Male	10	84	307	367	132	900
Total	25	200	679	683	213	1800

For further analysis, Table 6 shows that in financial awareness, more male respondents compared to female respondents had a high level of financial awareness for credit cards (18% versus 12.2%), life insurance (14.3% versus 11.4%), medical and health insurance (16.2% versus 11.6%); mortgage (housing loan) (9.7% versus 7%); hire purchase (car loan) (11.4% versus 7.6%); pension funds (KWSP) (11.4% versus 7.8%); fixed deposits (19.8% versus 12.3%); share investment (14.8% versus 6.8%); bond investment (0.1% versus 0%); and mutual funds investment (10.4% versus 6.4%). Overall, more male respondents achieve a high level of financial awareness than female respondents (14.7% versus 9%).

Table 6: Gender difference analysis on financial awareness

Variables	The question has been tested, or overall	Performance (High Level)	Frequency	Percentage (%)
Financial Awareness	Credit Card	Male > Female	162 > 110	18 > 12.2
	Life Insurance	Male > Female	129 > 103	14.3 > 11.4
	Medical and Health Insurance	Male > Female	146 > 104	16.2 > 11.6
	Mortgage (Housing Loan)	Male > Female	87 > 63	9.7 > 7.0
	Hire Purchase (Car Loan)	Male > Female	103 > 68	11.4 > 7.6
	Pension Fund (KWSP)	Male > Female	103 > 70	11.4 > 7.8
	Fixed Deposit	Male > Female	178 > 111	19.8 > 12.3
	Share Investment	Male > Female	133 > 61	14.8 > 6.8
	Bond Investment	Male > Female	1 > 0	0.1 > 0
	Mutual Fund Investment	Male > Female	94 > 58	10.4 > 6.4
	Overall	Male > Female	132 > 81	14.7 > 9

The result shows that male respondents outperform female respondents in this study toward financial awareness of credit cards, life insurance, medical and health insurance, mortgage, hire purchase, pension funds, fixed deposits, share investment, bond investment, and mutual funds investment. The result is supported by Chen and Volpe (1998) and Worthington (2006), that females are identified as right-brain thinkers who focus on three-dimensional, creative, and artistic senses, while males are recognized as left-brain thinkers who focus on reading, writing, calculation, and logical thinking. In short, females perform better as homemakers rather than making financial decisions. However, females have an increasing role in handling financial matters due to greater longevity and increasing divorce rates (Faff et al., 2011). Thus, enhancing financial awareness of financial products among female tertiary students is crucial. It is because they might be involved in more financial decision-making.

With more financial information or high financial awareness, they had, it can help to make sound financial decisions.

Furthermore, refer to Table 7, in deep to examine the gender difference with cross-table analysis, 20 respondents achieved outstanding, 31 respondents achieved very good, 89 respondents achieved good in financial knowledge, and 172 achieved above average in the financial knowledge test. In total, 17.3%, or 312 respondents in this study, achieved better or above average on the financial knowledge test. Moreover, 16.5% or 297 respondents achieved fair financial knowledge compared to 66.17% or 1191 respondents who scored weak or below on the financial knowledge test.

As a result, most tertiary students in this survey receive weak to very poor ratings for their financial knowledge. Financial Education Network (2019) and OECD (2020) claimed that Malaysians have low financial knowledge, which results in support. Eventually, the government, educators, associations, and parents will need to help improve tertiary students' low financial knowledge level. It is because household debt and bankruptcy rates are rising in Malaysia, and one of the top three reasons people file for bankruptcy is a lack of financial knowledge.

Table 7: Level of financial knowledge

Point Range	Frequency	Percentage	Classification
100	12	0.7	Outstanding
90	8	1.4	Outstanding
80	31	1.7	Very Good
70	89	4.9	Good
60	172	9.6	Above Average
50	297	16.5	Fair
40	382	21.2	Weak
30	315	17.5	Poor
20	264	14.7	Very Poor
10	154	8.6	Very Poor
0	76	4.2	Very Poor
Total	1,800	100.0	

Figure 2 shows an extremely low rate for male and female respondents who achieved 100 points (0.7%, respectively). The percentage of male respondents who scored 50 and above is 35.9% compared to female respondents, which is 31.8%. Furthermore, 64.4% of male respondents scored below 50 points compared to 68.2% of female respondents in this study. It shows a minor gap in gender differences toward low financial knowledge among those who score below 50 points (3.8%). As a result, male respondents outperform female respondents regarding the financial knowledge point score. This result is supported by Financial Education Network (2019) and OECD (2020), that Malaysian have low financial knowledge. However, male and female tertiary students are encouraged to improve their financial knowledge before graduating. Once they graduate and enter the work field, little time will be left for further study.

Meanwhile, referring to Table 8, in deep to examine the gender difference with cross-tabulation analysis, it is showing a minor gap between gender variables. For financial knowledge, the male is performed than female for the time value of money (56.7% versus 54.5%); risk, return, and diversification (47% versus 39.4%); stock market (8.6% versus 6.1%); and inflation (6.4% versus 5.9%); credit card (5.7% versus 4.4%). Meanwhile, females performed better than males for life insurance (52.4% versus 48.4%); savings account (9.6%

versus 8.4%); hire purchase (5.7% versus 5.4%); and credit rating (69.4% versus 67.7%). Moreover, there is zero correction for both male and female respondents for mortgage questions.

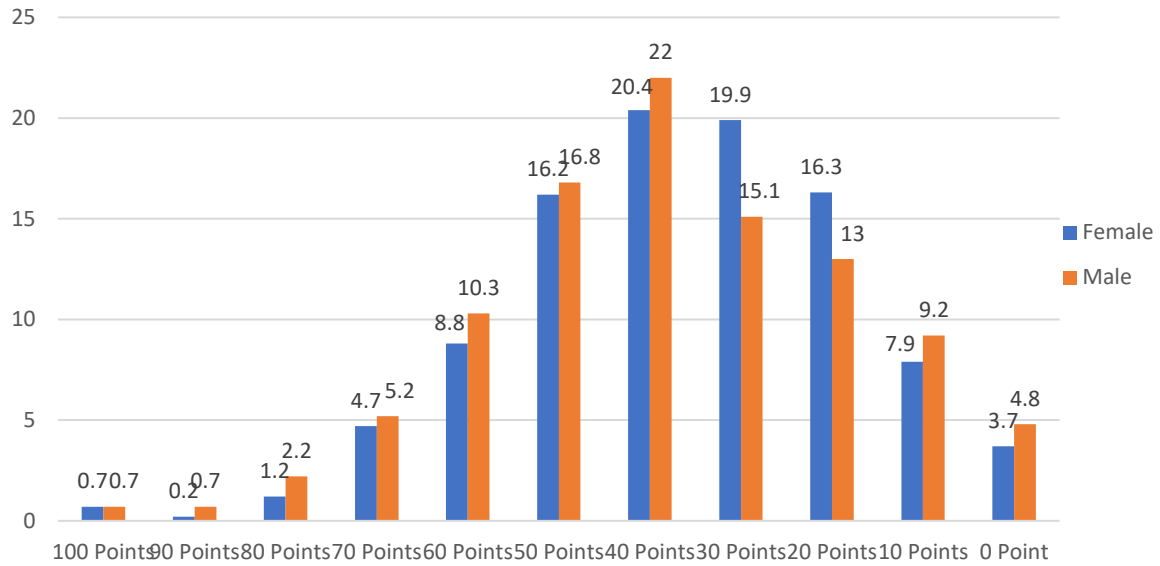


Figure 2: Gender difference in the level of financial knowledge among tertiary students

Table 8: Gender difference analysis

Variables	The question has been tested, or overall	Performance (Correction Rate)	Frequency	Percentage (%)
Financial Knowledge	Time Value of Money	Male > Female	510 > 491	56.7 > 54.6
	Risk, Return, Diversification	Male > Female	428 > 355	47.0 > 39.4
	Stock Market	Male > Female	77 > 55	8.6 > 6.1
	Life Insurance	Female > Male	472 > 436	52.4 > 48.4
	Savings Account	Female > Male	86 > 76	9.6 > 8.4
	Inflation	Male > Female	58 > 53	6.4 > 5.9
	Hire Purchase	Female > Male	51 > 49	5.7 > 5.4
	Credit Card	Male > Female	51 > 40	5.7 > 4.4
	Mortgage	Male = Female	0 = 0	0 = 0
	Credit Rating	Female > Male	625 > 609	69.4 > 67.7

CONCLUSION

This study aimed to examine the level of financial knowledge and awareness among tertiary students in Malaysia, focusing on factors such as gender and regional differences. In comparison to 68.2% of female respondents, 64.1% of male respondents scored 40 points or below on the financial knowledge quiz related to time value of money, risk, return, and diversification, stock market, inflation, credit card, life insurance, hire purchase, saving account, mortgage, and credit rating. According to the finding, male respondents had slightly higher financial knowledge than female respondents. In the meanwhile, Malaysian tertiary students' financial literacy must be improved. The development of self-exploration of pertinent financial knowledge is required among tertiary students since it is a lifelong learning endeavour owing to the change economic climate and environment, such as the introduction of new financial products or the challenging of the financial management issues. Eventually, the government, educators, associations, and parents will need to help improve tertiary students' low financial knowledge level. It is because household debt and bankruptcy rates are rising in Malaysia, and one of the top three reasons people file for bankruptcy is a lack of financial knowledge. As a result, it is encouraging tertiary students to attend talks, webinar, or seminars on financial management organised by Bank Negara Malaysia or Agensi Kaunseling dan Pengurusan Kredit (AKPK). In order to close the knowledge gap, tertiary students are urged to enlighten them on facts regarding financial knowledge before graduating.

For an educator, understanding the level of financial knowledge and financial awareness among students is crucial because it can delight the educator improve students' financial knowledge. To improve financial knowledge, raise financial awareness, and educate students on the repercussions of poor financial products, formal lectures, discussions, workshops, webinars, or seminars may help students become more financially literate. Additionally, while teaching courses on personal financial management, educators can think about using case studies and sharing the latest financial product information with students. Furthermore, educators may assist tertiary students to develop short, medium and long-term financial goals and explore the methods to achieve its. It is advisable that tertiary students have the chance to create their own saving and spending plans, including when to buy their own car, house, and even the age of which they think to get married and have children. Regardless of gender, everyone should have a lifelong objective and a strategy for achieving it.

In order to ensure that tertiary students have explored relevant financial knowledge and management skills, policy makers in Malaysia may consider about making personal financial management a prerequisite for all tertiary programs in Malaysia. This is because students who are financially literate and financially conscious will be better prepared to handle their limited resources to avoid overspending. Therefore, developing an income, savings, and spending strategy is essential. Consequently, it is crucial to have a well-developed formal and informal financial management programs to ensure the tertiary students are exploring relevant information to establish their lifelong plans and developing strategies to attain them. In order to increase tertiary students' financial literacy, the government and the Ministry of Education must review and revise the current financial management syllabus to ensure it is efficient educational programs and skills implemented in Malaysia.

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