RESEARCH PAPER

Financial Literacy among Working Women: A Study on University Staff in Kedah

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Abstract

The involvement of women in the employment sector has helped boost the Malaysian economy. Therefore, it is imperative for our economy to consider the fact that where and how women work to spend or invest their funds. In this case, for the proper use of funds, working women need to be financially literate. This study to determine the relationship between the factors towards financial literacy among working women and to investigate the risk of financial literacy among working women. Sample data were gathered using self-administered questionnaire among working women in government university in Kedah and later analyzed using statistical software namely, Statistical Package for Social Science (SPSS) version 25.0 and Analysis of Moment Structure (AMOS) version 25.0. Confirmatory Factor Analysis (CFA) together with Structural Equation Modeling (SEM) approach was used both to access the model fit and identify the significant direct influence financial literacy among working women. As a result, five factors that influence financial management have been highlighted which are financial attitude, financial knowledge, financial education, financial behavior and financial literacy. The result indicates that only financial attitudes significant towards financial literacy among working women as supported by the previous study. However, other factors are also important in assessing the level of financial literacy of an individual because each of these factors plays a role in ensuring an individual's financial management and avoid yourself from financial risk.

Keywords: Financial literacy; Financial management; Financial risk; Structural Equation Modelling (SEM); Working women

INTRODUCTION

Financial literacy is the focus of financial, credit and debt management and the knowledge needed to make responsible financial decisions. A lack of financial literacy is not only an issue in developing economies but also people in developed or advanced economic countries fail to demonstrate a strong knowledge of financial principles in order to understand and negotiate the financial matters, manage financial risks effectively and avoid financial difficulties (Xu & Zia, 2012). There are four things that highlighted as a key of financial literacy which are financial education, knowledge, attitudes and behavior. These four things are important to help solving financial problems and making informed decisions (Adriana & Valenzuela, 2017).

Lusardi & Mitchell (2007) state that men have a higher level of financial literacy than women. This will make women more vulnerable to financial problems than men. It is proved that women, especially working women does not have enough time to manage their finances. Working women facing a large financial challenge related to long-term debt and short-term financial weaknesses. Working women have difficulty in saving short-term and planning to retire. These challenges are associated with and may be compounded by the fact that working women have low financial literacy and use professional financial advice with care (Stages, 2014). In other words, poor financial literacy among women might put them at a higher risk of suffering from poor retirement confidence than men. Therefore, as we are in the growing global economy of the world, financial literacy is essential to everyone, especially for working women even though they have their own income and retirement. Thus, this study was designed to determine the relationship between the factors towards financial literacy among working women and to investigate the risk of financial literacy among working women.

METHODOLOGY

The purpose of this study is to determine the relationship between the factors towards financial literacy and to investigate the risk of financial literacy among working women. For this study, the primary data were used and 241 female staff of government university in Kedah that consist of academic and non-academic staff have been selected using proportionate stratified random sampling. Semantic Differential Scale were used in order to formulated the questionnaire. The questionnaires consisted of 25 financial literacy items. The statement on the five-point scale from 1 which is strongly agree after 5 which is strongly disagree were use in order to working women express their extent to which they agree with that statement. These scales allow us to transform qualitative information about the attitudes and opinions of respondents into quantitative form. The data collected were analyzed using statistical software namely, Statistical Package for Social Science (SPSS) version 25.0 and Analysis of Moment Structure (AMOS) version 25.0. Confirmatory Factor Analysis (CFA) together with Structural Equation Modeling (SEM) approach was used both to access the model fit and identify the significant direct influence financial literacy among working women.

RESULTS AND DISCUSSION

Demographic information

Table 1 shows the profiles of the respondent in this study. Based on Table 1, 45.64% of the working women who answered the questionnaire mostly were age between 30 until 39 years old ($n = 110$) followed by the working women who age 40 until 49 years old with 35.69% ($n = 86$), 59 years old with 9.96% ($n = 24$) and 20 until 29 years old with 8.71% ($n = 21$). It is seen that 17.4% of the 241 respondents are single ($n = 42$) and 82.6% married ($n = 199$). The table also shows that 95% of the respondents are Malay ($n = 229$), while Chinese and Indian have the same percentage of respondent which is 2.5% ($n = 6$) of the respondents for each race. For position part, 30.3% ($n = 73$) of the respondents were academic staff while 69.7% ($n = 168$) of the respondents were non-academic staff. In addition, 94 of the

respondents is already working in university sector more than 12 years. Followed by less than 1 year (*n* = 12), 1 until 4 years (*n* = 37), 5 until 8 years (*n* = 52) and 9 until 12 years (*n* = 46). The results are displayed in Table 1.

Table 1. Demographic characteristics of respondents.

Element	Status	Frequency	Percentage (%)
Age	20 – 29 years old	21	8.71
	30 – 39 years old	110	45.64
	40 – 49 years old	86	35.69
	50 –59 years old	24	9.96
Status	Single	42	17.4
	Married	199	82.6
Race	Malay	229	95.0
	Chinese	6	2.5
	Indian	6	2.5
Position	Academic	73	30.3
	Non-Academic	168	69.7
Years of Working	Less than 1 year	12	5.0
	1 – 4 years	37	15.4
	5- 8 years	52	21.6
	9 – 12 years	46	19.1
	More than 12 years	94	39.0

Reliability statistics

Tavakol and Dennick (2011) suggest the researcher need to use Cronbach Alpha to increase the validity and accuracy of their decisions. Cronbach's alpha is the best summary measure for testing the content validity (Altman and Bland, 2002). Cronbach's alpha normally ranges between 0 and 1. Joseph and Rosemary (2003) suggest that the Cronbach's alpha value above 0.7 is considered as a good value to carry forward. Based on Table 2, the questionnaire can be considered as reliable since the Cronbach's alpha value is 0.872 which is greater than 0.7. *N* is the number of financial literacy items.

Table 2. Reliability statistics.

Reliability Statistics	
Cronbach's Alpha	N of Items
0.872	25

Confirmatory factor analysis

Confirmatory factor analysis (CFA) is the next step after exploratory factor analysis to determine the factor structure of the data set. In the exploratory factor analysis, it is exploring the factor structure (how the variables relate and group based on inter-variable correlations), while in the confirmatory factor analysis is to confirm the factor structure that extracted in the exploratory factor analysis. Before proceed with a confirmatory factor analysis, the exploratory factor analysis has been done. The exploratory factor analysis for 25 items of financial literacy had reduced to four factors of financial literacy using principal component analysis method. Factor 1 is name financial attitude; factor 2, financial knowledge; factor 3, financial education; factor 4, financial behavior.

Structured equation model (SEM) has been done to perform the confirmatory factor analysis. In performing the procedure of structured equation model, several criteria have to be fulfilled. There are three criteria that need to be fulfilled in order to make sure the model of structured equation model is fit which are absolute model fit, incremental fit and parsimonious fit. The model is consider fit which is acceptable when the model fulfilled all the criteria. The modification is needed if the model of structure equation is not fit.
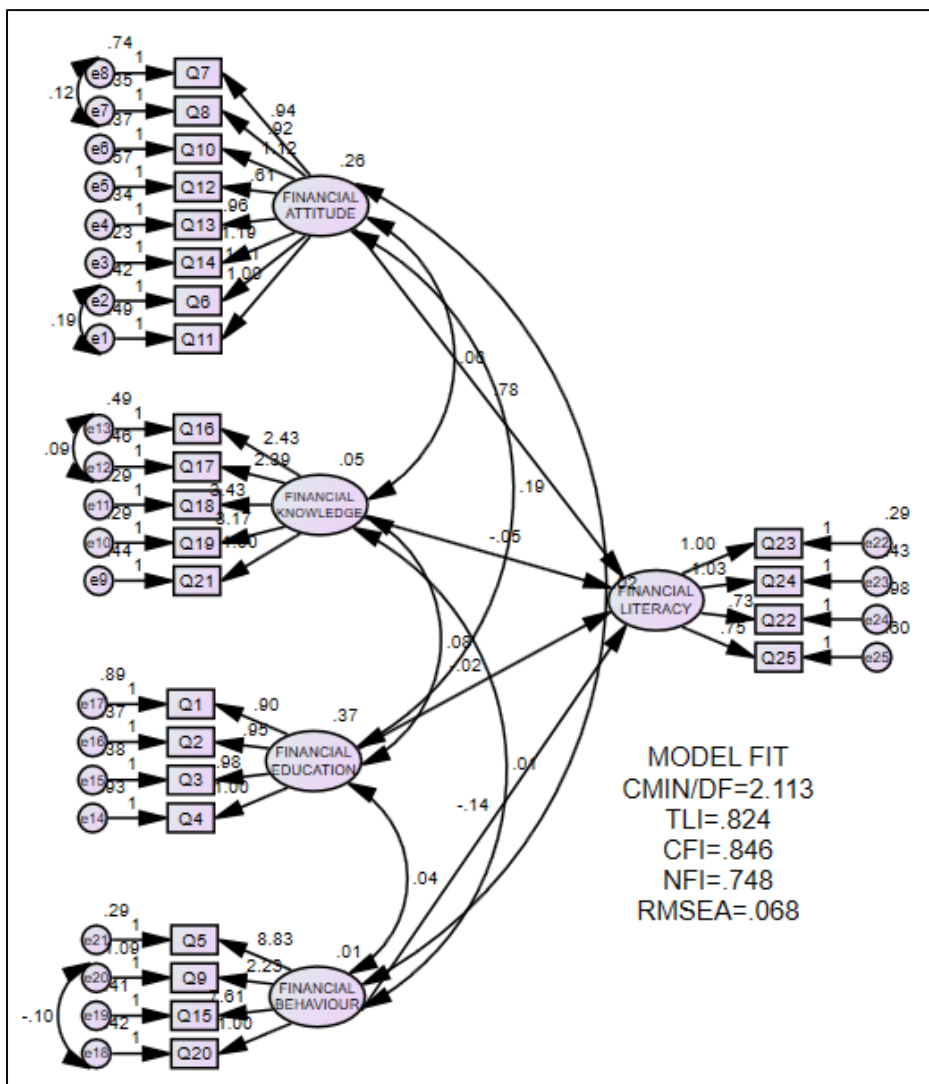

Figure 1. Before modification of overall model.

According to the Figure 1, the summary result provided on the fit measures shows that the value TLI, CFI and NFI are little bit low from the cut-off value 0.9 respectively. For the absolute model fit and parsimonious fit index provides an acceptable value but seems need to do the improvement on incremental fit to make sure the model is fit.
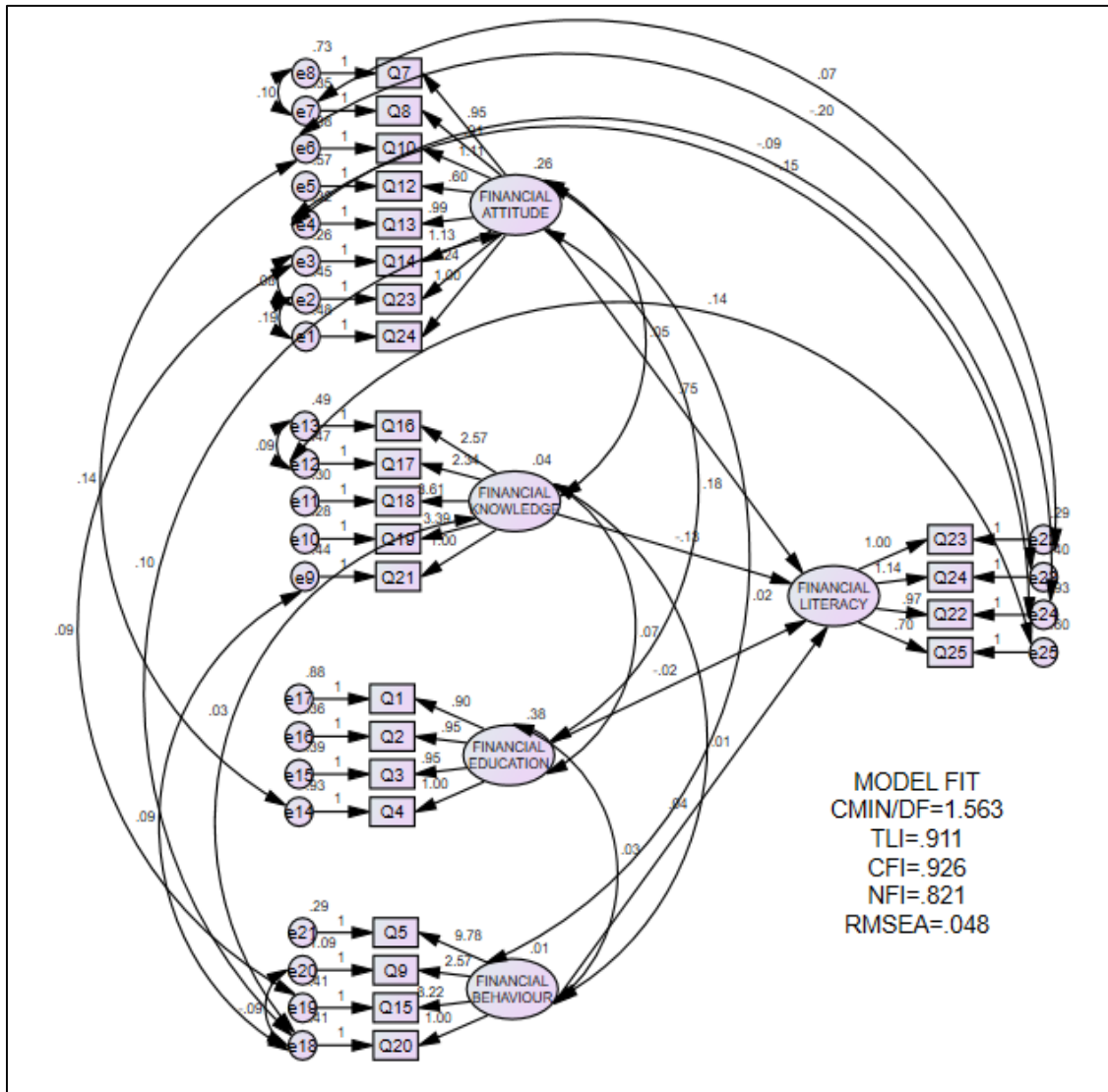

Figure 2. After modification of overall model.

Table 3. Overall model fit assessment.

	Fit Indices	Fit Statistics	Recommended Fit Criteria
	CMIN/DF	1.563	< 5.0
	TLI	0.911	> 0.9
Overall Model Fit	CFI	0.926	> 0.9
	NFI	0.821	> 0.9
	RMSEA	0.048	< 0 .08

According to Table 3 the assessment on the overall model fit indicate an acceptable fit since all the fir indices under consideration are well above the recommendations value. Even though the NFI index is a bit low, but it is much better improvement from the initial model. The TLI and CFI indices also have shown improvement above the cut-off value 0.9 respectively. Thus, the overall model fit is considered to be adequate and acceptable for further analysis to test of the hypothesis.

Hypothesis Testing

In this section, a summary of the research findings is provided in relation to the four hypotheses of this study. Table 4 shows the summary result of the hypothesis testing.

Table 4. Summary result of hypothesis testing.

Hypothesis	P-value	Results
Financial Attitude has a significant relationship with Financial Literacy	0.000	Supported
Financial Knowledge has a significant relationship with Financial Literacy	0.920	Not Supported
Financial Education has a significant relationship with Financial Literacy	0.847	Not Supported
Financial Behavior has a significant relationship with Financial Literacy	0.474	Not Supported

Hypothesis 1: Financial Attitude has a significant relationship with Financial Literacy

The result indicates that Financial Attitude of working women in Universiti Utara Malaysia were significantly positively ($p < 0.05$) related to Financial Literacy. This result supported by Jorgensen (2007) research that personality characteristic which is financial attitude has a significant effect on financial literacy. Ibrahim, Harun & Isa (2009) also revealed that the characteristics of personnel as financial attitudes significantly affect to financial literacy. Therefore, the way working women spend their money can affect their financial literacy either poor or good.

Hypothesis 2: Financial Knowledge has a significant relationship with Financial Literacy

The results indicate that after accounting for the relationship between Financial Knowledge and Financial Literacy among working women, Financial Knowledge was found to be not significantly ($p > 0.05$) related to Financial Literacy. Therefore, the second hypothesis of this study can't be achieved. The findings of this study supported by the research of Agarwalla, Barua, Jacob & Varma (2013), reported that working youth of India performed poor on financial knowledge dimension of financial literacy by displaying lack of basic numeracy, inability to understand the basic money-related principles and inability to assess the impact of inflation on rate of return.

Hypothesis 3: Financial Education has a significant relationship with Financial Literacy

The results indicated that the two variables were not significantly ($p > 0.05$) related to each other. According to Lusardi and Mitchell (2014), even though educational attainment is positively correlated with financial literacy, it is not sufficient. Even well-educated people are not necessarily savvy about money. Even though the quarter of the respondent from academic background, it does not guarantee that the respondent has a good financial literacy.

Hypothesis 4: Financial Behavior has a significant relationship with Financial Literacy

The results revealed that there is no significant relationship between Financial Behavior and Financial Literacy ($p > 0.05$). Carlo (2013) revealed that the respondents who display higher financial literacy of higher confidence in math or personal finance knowledge are less likely to use high-cost borrowing and more likely to plan for retirement or to have set aside savings for emergencies. It proves that financial behavior has a negative relationship with financial literacy.

Financial risk assessment

This section will discuss the financial risks to individuals based on the analysis of exploratory data on the collected data and then answered the second objective of this study which is to investigate the risk of financial literacy among working women.
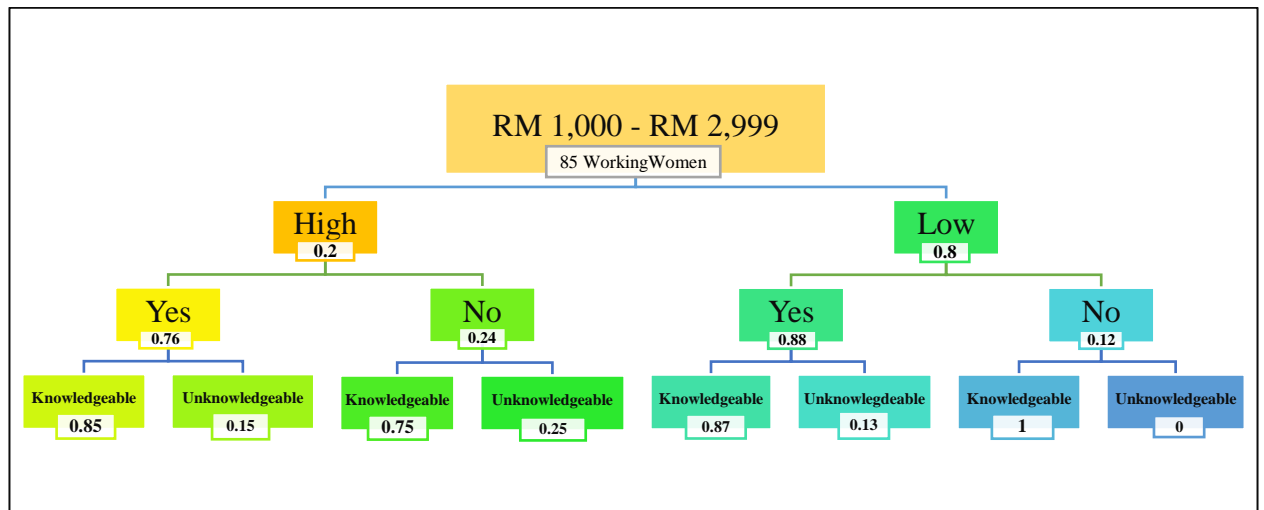

Figure 3. Tree diagram of financial risk assessment.

Figure 3 shows the tree diagram of financial risk assessment. The top level of tree diagram is the salary of the respondent which is between RM 1,000 until RM 2,999. The second level shows the level of debt either high or low. In this case, question on having a saving or not was asked at the third level of tree diagram to know either the respondent have their own saving or not. The last level is about the knowledge on importance of savings.

From the tree diagram, 20% of the respondent that received the salary between RM 1,000 until RM 2,999 have a high debt. According to Mercadante (2019), the cost of living and debt level are based on the current income, the lower income could result in a serious debt problem. In 20% of the respondent that have a high debt, 24% did not have a personal saving and this is alarming as it exposes the respondent to the bankruptcy. Things got worse when 25% of the them did not know the importance of savings. This is the main reason why the respondent is in a risky situation and supported by the findings in hypothesis testing where financial knowledge and financial education was found to be significantly negatively related to financial literacy.

CONCLUSION

There are four factors that influence financial literacy among working women were successfully constructed using factor analysis which are financial knowledge, financial education, financial behavior and financial attitude. Based on confirmatory factor analysis, only financial attitude has significant relationship with the financial literacy. Financial knowledge, financial education and financial behavior actually important to financial literacy even though only financial attitude has a positive relationship with financial literacy. Financial knowledge, financial education and financial behavior has their own advantages in ensuring that every working women is aware of importance of financial literacy. For developing countries like Malaysia, educating the new generation in financial literacy provides a very real possibility to eradicate negative development in society especially on financial.

The current approach to financial literacy is still ad-hoc, without leadership or strategic direction. Federation of Malaysian Consumer Associations (FOMCA) called on the government to give priority to financial literacy for all, especially those most in need. As of June 2015, 62 countries around the world have implemented some form of national financial education plan. Malaysia desperately needs a national financial education strategy to provide clear leadership and strategic direction in empowering consumers through financial education.

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