Influence of Financial Literacy on Financial Satisfaction with Financial Behavior as Moderating Variable

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Abstract

Young people aged around 30s were declared bankrupt due to credit card debts in Malaysia. Department of Insolvency Malaysia released statistics that 19,575 people have been declared bankrupt among Malaysians. From the number, 11,264 people are young workers. This paper aims to investigate the relationship between financial literacy and financial satisfaction. This paper also aims to investigate the role of financial behavior as moderating variable in the relationship between financial literacy and financial satisfaction. The observation unit is young workers aged below 30 years who are working in Putrajaya as government servants. The proposed model in this paper consists of three variables. The variables are financial literacy as an independent variable, moderated by financial behavior which ultimately influences financial satisfaction as dependent variable. This study used quantitative research survey and data was collected from 161 young workers who work at Government Ministry in Putrajaya. Regression analysis was used to analyze the data. The result shows that financial literacy has a positive relationship with financial satisfaction. While hierarchical regression suggests that financial behavior as a moderating variable in the relationship between financial literacy and financial satisfaction. As a result, this finding gives the implication to the concern parties such as Credit Counselling and Debt Management Agency (AKPK) that financial literacy is an important factor that will increase the financial satisfaction. This information is useful in designing the financial program that can enhance the financial satisfaction.

Key words: Financial literacy, Financial satisfaction, Financial behavior, Young workers

1. Introduction

Financial management is very important in life. However, in general, Malaysians are not managing their finance efficiently. This is based on statistic which shows that 50% of credit card holders declared bankruptcy were under the age of 30 (Shuzen Ng 2009). Credit Counselling and Debt Management Agency (AKPK) in its report reported they were the ones who were having trouble to pay their debt. 27% of them stated that they would lose control of their credit card use and 22% stated that they are facing poor management in financing (AKPK, 2013).

According to Nuraini et al. (2013), among the factors that encourage young workers faced bankruptcy problems are due to the increasing cost of living and unstable household income. The scenario of bankruptcy among young workers was not only an issue in Malaysia, but also has become a hot topic discussed around the world. According to statistics released by the Department of Insolvency Malaysia in 2012, a total of 19,575 have been declared bankrupt among Malaysians. From the number, there were 11,264 people consisted of young workers under the age of 40 years. For example, Germany in 2011, a country with the population of 6.4 million has nearly 243,000 of young workers in a high debt position (Zimmermann 2011). This also happened in United Kingdom (UK) and the United States, with the increasing number of debt problems among young workers. Young workers' debts increased almost 100% in the UK and 52% in the United States in 2004. The prolonged increasing in debt in recent years has led to the Global Financial Crisis (Stutchbury 2010).

In Malaysia, anyone aged between 15 and 40 are categorized as young workers. Statistics show the number of young workers covered 49% of the population in Malaysia. According to statistics in 2013, the number of youths in Malaysia now stands at 13.73 million as stated by YB Khairy Jamaluddin in a meeting with the state youth council (Ministry of Youth and Sports, 2014). This means that young workers are the composition of the population in Malaysia and have become a major catalyst for the country to inherit a country's achievements in the future. Accordingly, studies on financial management among young workers are relevant studies to be brought forward in Malaysia.

Our young workers are the backbone that will determine the direction of the country in the future. Therefore, the level of financial satisfaction among them should be considered. According to Kim et al. (2013), the financial satisfaction is
defined as a joy or satisfaction with financial situation. Research on the financial satisfaction among young workers has not been widely done in Malaysia especially in public sector (Zaimah et al. 2014) so this study aims to investigate the influence of financial literacy on financial satisfaction with financial behavior as the moderating variable. Focusing on young workers is in line with the percentage of this group that represents the majority of the population and they are the ones who will be the leader of the country.

Financial behavior refers to the systematic financial management such as make a savings consistently and with written plans and financial goals to be achieved (Titus et al. 1989). Good financial attitude also can be seen as it provides record book and cash flow, plan expenses, paying utility bills, control the use of credit cards and keeps money saving consistently (Gorham et al. 1998). Furthermore, previous studies confirmed that the financial satisfaction of the individuals have a relationship with their financial behaviors (Cliff & Ann 2011; Zaimah et al. 2012). In order to improve the financial satisfaction of individuals, families and communities, related aspects of financial behavior need to be taken seriously; moreover, young workers have an important role in strengthening the economy in the future.

The study conducted by Fazli et al, in 2010 found that the level of financial literacy of students in higher education institutions is low. Accordingly, it is likely to affect their future if there are no initiatives taken to improve their financial knowledge. According to Nuraini et al. (2013), financial literacy is a person's ability to understand and use financial matters. Marzeiah et al. 2013 considers financial literacy including awareness and knowledge and financial instruments and their application in business and personal life. In general, these definitions show that financial literacy includes the ability to balance a bank account, budget preparation, save for the future and learn strategies to manage debt. A person is known as financial literate if he/she is able to manage his/her personal finance in life. The level of financial literacy among young workers should be implemented to help them to manage or handle their finances. In addition, financial literacy is very important to the young workers to control their spending habit and reduce the risk of financial crisis when facing retirement and to prepare contingency planning.

This paper is structured into the following parts. The initial part provides the problem statement. The next part, presents the significance of the study and proposed model. Next, it followed by literature review and proposed methodology. Lastly, it is the conclusion together with the discussion on the implications of the research and future research direction.

2. Problem Statement

Poor financial planning and the lack of knowledge about money management has become a contributor to debt problems. This has led to the debt burden at a young age due to excessive spending. In addition, higher cost of living will cause the community to be depressed. This situation would affect the individuals. Bad and unplanned financial management will lead to inability to repay the debt subsequently it will contribute to the bankruptcy.

Statistics from the Department of Insolvency Malaysia (MDI) shows that from January to June 2014, a total of 12,381 individuals were declared bankrupt for various reasons; thus bankruptcy is an issue in Malaysia. This happens because of serious debt problems such as credit cards, car purchase loans and personal loans. Based on the report from Education and Research Association For Consumers, Malaysia (ERA Consumer Malaysia) and Central Consumer Research and Resource (CRRC), it shows that individuals who had been declared bankrupt are people under the age of 30 years where 50 percent of them are credit card holders, 15 per cent of them have no savings and 37 percent have never thought of preparing for retirement (Paul et al. 2013). This problem should be highlighted because young people represent a group in society that will play an important role in shaping the values and lifestyle of a country in the future. E. Kaviyarasu & Ahmed Razman (2013) mentioned that people below 30 are the leading aged group that has been declared bankrupt because of credit card debts.

Therefore, it is appropriate to conduct a study and investigate the effect of financial literacy on financial satisfaction with financial behavior as a moderating variable, among young workers in Putrajaya, Malaysia.

3. Research Objective

This study is intended to achieve the following objectives:

i. To examine the relationship between financial literacy and financial satisfaction

ii. To examine the moderating effects of financial behavior on the relationship between financial literacy and financial satisfaction.
4. Research Question

Based on the research objectives above, the aims of the study are:

i. Does financial literacy influence the financial satisfaction?
ii. Does financial behavior moderates the relationship between financial literacy and financial satisfaction?

5. Significance of the Study

It was found that approximately 47% of young workers have a serious debt problem, and it is more than 30% of the monthly salary to pay their debts (Paul Selva Raj et. al. 2012). Through the study it is also found that 37% of young workers declared that money they spent had exceeded their ability level. This is one of the main causes that lead to young workers facing problems in their financial management. It is hoped that the results of this study will be used by the parties concerned such as the Ministry of Youth and Sports in the understanding of financial management among the youth. In addition, this study is expected to provide information to other agencies such as AKPK to design strategies and reduce the rate of bankruptcy in this country. It is also hoped that young workers also get benefit from this study to determine the importance of financial literacy and financial management practices. Both of these factors can help individuals to cope with financial difficulties to manage their debt wisely.

6. Theoretical Model

The theoretical model in this study (Figure 1) indicates that financial literacy is expected to increase financial satisfaction. With high financial behavior, financial satisfaction will increase when the young workers have the right financial knowledge. The conceptual framework below shows that financial literacy as an independent variable, financial satisfaction as a dependent variable and financial behavior as a moderator.

![Research model diagram]

7. Literature Review

Financial satisfaction is an individual’s subjective perception of the adequacy of his or her own financial resources (Hira & Mugenda, 1998). As such, financial satisfaction involves a state of being healthy, happy, and free from financial worry (Zimmerman, 1995). Proposed determinants of financial satisfaction include demographic factors such as income, education, ethnicity, and age, as well as financial stressors, financial knowledge, and financial attitudes and behaviors. Higher levels of financial knowledge and financial management practices have been directly related to increased levels of financial satisfaction (Joo & Grable, 2004; Loibl & Hira, 2005). According to Joo and Grable (2004), financial behaviors were found to have more significant and direct effects on financial satisfaction than the level of household income or other demographic factors.

Among the general population, there is evidence that financial literacy and financial behavior may be positively related. Hilgert et al. (2003) examined the correlation between financial knowledge and the actual behavior among the general population in the United States. They measured knowledge using the 28-question Financial IQ measure that is included in the Survey of Consumer Finances, which deals with aspects of cash-flow management, credit management,
savings, investments, mortgage information, and other financial-management topics. The researchers noted significant correlations between credit management scores and scores on the composite measure of financial knowledge.

In addition, a number of researchers have made the case that financial attitudes play an important role to determine a person’s level of financial satisfaction. For example, a person’s subjective perception of his or her cash management, credit management, income adequacy, personal finance management, consumer shopping skills, and relative economic status compared to others can play an important role in shaping an individual’s financial satisfaction. Previous research findings indicate that, generally, those persons with stronger perceptions and proactive financial attitudes tend to be more satisfied. Roza Hazli et al. (2012) in their study discussed the increased bankruptcy issues, mostly among young households. The data is collected through a self-administered survey distributed among urban household in Klang Valley, Malaysia. The findings showed that the most dominant determinant of having a good financial position is responsible of financial behavior, not income. In the study, researchers have found that income, or the perception of an individual self-control and financial behavior determines financial satisfaction. However, indirectly, good financial behavior comes from financial knowledge. Sufficient financial knowledge gives a better effect on the financial satisfaction.

Paul Selva Raj et al. (2013) conducted a study of the behavior and habits of young workers. The study found that younger workers use their income to pay their debt for financing homes, vehicles, education, personal finance and insurance or takaful. At the same time the study found that these young workers were among those who overspent for a more luxurious lifestyle. The study also found that younger workers do not have enough financial knowledge thus contribute them in debt problems.

Research related to financial satisfaction revealed that financial behaviour has a major contribution to satisfaction or dissatisfaction with individual financial situation. More importantly, Leila et al. (2012) found that financial behaviour is affected by other factors such as the level of financial literacy, financial attitude, childhood consumer experiences, influence of primary and secondary socialization agents. Their study was conducted at six Public and five private universities in Malaysia. Their purpose of study was to assess factors predict financial satisfaction. Results indicated that financial attitude, childhood consumer socialization, socialization agents, financial literacy, financial behaviour and financial strain contribute to predict financial satisfaction. Furthermore, the mediation effect of financial behaviour was examined.

Financial management practices have a positive relationship with the financial satisfaction (Zaimah et al. 2012). Good financial behavior can reduce financial stress thus reducing the negative impact such as trying to reduce personal debt, budget compliance, reduce living expenses, financial planning, and savings for retirement, making and increase savings, reduce the financial pressure and have a direct influence on financial satisfaction.

In conclusion, those who have a high level of financial literacy will typically have high degree of financial satisfaction (Nuraini et al. 2013). Similarly, those who practice good financial behavior, also have a good level of financial satisfaction (Zaimah et al. 2012).

8. Methodology

8.1 Sample and Procedure

The sample of this study was 161 young workers from Putrajaya who worked with Government. (From a total of 300 questionnaires given, only 161 returned and useable questionnaires for analysis).

The survey questionnaire comprised of 4 sections with items. There were 5 questions in Section A on general information and was designed to get the demographic characteristics (gender, age, ethnic, education level and monthly income) of the respondents. There were 35 questions related to three variables and there were:

1. Section B - Financial Literacy (12 Item)
2. Section C - Financial Satisfaction (15 items)

All items used in Section B, C and D were measured using a five-point Likert type rating scale. Thus, the respondents were asked to choose and circle the number of the scale that represented their level of agreements for each question.

SPSS Version 21 was used to analyze the data. Four stages of analysis were conducted. The first stage was a descriptive analysis to obtain information related to respondents’ background. The second stage was to test the consistency of responses for each question in the questionnaire (reliability test). This test was done by looking at the value of Cronbach alpha. The third stage was to test the Pearson Correlation. In this stage, we looked at the strength of the linear relationship between the dependent variable and independent variables. The fourth stage was to test the research objective. Simple regression analysis was used to test objective 1, while hierarchical regression analysis was used to test objective 2.
9. Results

Table 1 presents the profile of respondents. Most respondents characteristics are female (64.6%), aged between 21-25 years (45.3%), malay who hold diploma certificate (60.2%) and income between RM2,001 – RM3,000 (46.6%).

Table 1: Profil Respondents Profile (N=161)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Sub-Profile</th>
<th>Frequency</th>
<th>Percentage(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>57</td>
<td>35.4</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>104</td>
<td>64.6</td>
</tr>
<tr>
<td>Age</td>
<td>15 - 20 years</td>
<td>46</td>
<td>28.6</td>
</tr>
<tr>
<td></td>
<td>21 - 25 years</td>
<td>73</td>
<td>45.3</td>
</tr>
<tr>
<td></td>
<td>26 - 30 years</td>
<td>42</td>
<td>26.1</td>
</tr>
<tr>
<td>Ethnic</td>
<td>Malay</td>
<td>133</td>
<td>82.6</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
<td>17</td>
<td>10.6</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>11</td>
<td>6.8</td>
</tr>
<tr>
<td>Education</td>
<td>SPM / STPM</td>
<td>43</td>
<td>26.7</td>
</tr>
<tr>
<td></td>
<td>Certificate / Diploma</td>
<td>97</td>
<td>60.2</td>
</tr>
<tr>
<td></td>
<td>Degree</td>
<td>21</td>
<td>13.0</td>
</tr>
<tr>
<td>Income</td>
<td>&lt;RM1,000</td>
<td>5</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>RM1,000 – RM2,000</td>
<td>56</td>
<td>34.8</td>
</tr>
<tr>
<td></td>
<td>RM2,001 – RM3,000</td>
<td>75</td>
<td>46.6</td>
</tr>
<tr>
<td></td>
<td>RM3,001 – RM4,000</td>
<td>22</td>
<td>13.7</td>
</tr>
<tr>
<td></td>
<td>RM4,001 – RM5,000</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>&gt;RM5001</td>
<td>1</td>
<td>0.6</td>
</tr>
</tbody>
</table>

9.1 Reliability Analysis

Reliability test for the variables are presented in Table 2. Cronbach Alphas of the variables under study are (1) Financial Literacy 0.889; (2) Financial satisfaction 0.694 and (3) Financial Behavior 0.866. The Cronbach Alphas values obtained are more than 0.6 which indicate high internal consistency (Hair et al. 2010).

Table 2: Reliability Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of Items</th>
<th>Cronbach alphas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Literacy</td>
<td>12</td>
<td>0.889</td>
</tr>
<tr>
<td>Financial Satisfaction</td>
<td>15</td>
<td>0.694</td>
</tr>
<tr>
<td>Financial Behavior</td>
<td>8</td>
<td>0.866</td>
</tr>
</tbody>
</table>

9.2 Correlation Matrix Analysis

Table 3 below shows the mean value for non demographic variables that is ranging from 3.1941 to 3.4891. This involves the independent variable (Financial Literacy), financial behavior as a moderator and dependent variable (Financial Satisfaction).
Table 3: Correlation Matrix Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Pearson Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FL</td>
<td>FS</td>
<td>FB</td>
</tr>
<tr>
<td>Financial Literacy (FL)</td>
<td>3.4891</td>
<td>0.47980</td>
<td>1</td>
</tr>
<tr>
<td>Financial Satisfaction (FS)</td>
<td>3.4028</td>
<td>0.77029</td>
<td>.497**</td>
</tr>
<tr>
<td>Financial Behavior (FB)</td>
<td>3.1941</td>
<td>0.77191</td>
<td>.441**</td>
</tr>
</tbody>
</table>

**Correlation value is significant at ** p < 0.01

The average mean score for financial literacy, financial satisfaction and financial behavior was found to be between 3.1 and 3.5. According to Najib (2003) all three variables show the mean value at a medium level. Mean value for financial literacy was at 3.4891, financial satisfaction at 3.4028 and training motivation behavior at 3.1941.

Significant correlations were found between financial literacy and financial satisfaction (r = 0.497, p<0.01) as well as between financial behavior and financial satisfaction (r = 0.648, p<0.01). In addition, correlation between financial literacy and financial behavior was found to be positive and significant (r = 0.441, p<0.01). Specifically, to increase financial satisfaction, individuals should have well enough financial literacy. If individual perceive good financial literacy and good financial behavior, finally the more financial satisfaction they will achieve.

9.3 Relationship between Financial Literacy and Financial Satisfaction.

The result of the relationship between financial literacy and financial satisfaction is presented in Table 4. Simple regression model was used to analyze the data. It was predicted that financial literacy would be positively associated with financial satisfaction. The mathematical model presented below was used to test the data:

\[ Y = \alpha + \beta_1 FL + e \]

where,
- \( Y \) = Financial Satisfaction;
- \( FL \) = Financial Literacy;
- \( \alpha \) = intercept
- \( \beta_1 \) = the slopes of the population regression line

Table 3 shows the result that indicates \( R^2 \) is 0.247. It can be explained that financial literacy influenced financial satisfaction 24.7%. The result also indicates that coefficient is significant (value = 0.497; p < 0.01). The \( \beta \) value which refers to the impact of financial literacy on financial satisfaction is positively associated and it is the same as predicted.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient (( \beta ))</th>
<th>t-value</th>
<th>p-value (sig.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Literacy</td>
<td>0.497</td>
<td>7.230</td>
<td>0.000</td>
</tr>
</tbody>
</table>

\( R^2 = 0.247, \) Adjusted \( R^2 = 0.243, \) n = 161, (p=0.000)

9.4 The moderating effects of financial behavior on the relationship between financial literacy and financial satisfaction.

It is predicted that financial behavior is positively associated with the relationship between financial literacy and financial satisfaction. The mathematical model presented below was used:

- Step 1 \[ Y = \alpha + \beta_1 FL + e \]
- Step 2 \[ Y = \alpha + \beta_1 FL + \beta_2 FB + e \]
- Step 3 \[ Y = \alpha + \beta_1 FL + \beta_2 FB + \beta_3 FLFB + e \]
where, 
\[
\begin{align*}
Y &= \text{financial satisfaction} \\
FL &= \text{financial literacy} \\
FB &= \text{financial behavior} \\
FLFB &= FL \times FB \\
\beta_{13} &= \text{the population’s y-intercept}
\end{align*}
\]

Table 4 shows the result of hierarchical regression that has been summarized in 3 models. The first model shows that the financial literacy significantly influenced financial satisfaction. The involvement of this variable explained 24.7% improvement in the dependent variable (financial literacy). Meanwhile the second model shows that financial behavior has a positive correlation and significant with financial satisfaction (\( \beta = 0.532, p<0.01 \)). The involvement of these variables explained that 47.5% improvement in dependent variable. Model three shows more conclusive result that financial behavior moderates the relationship between financial literacy and financial satisfaction. The result shows that interaction between financial literacy and financial behavior improve financial satisfaction where \( \beta = 0.010, p<0.01 \). In conclusion, we can see that every model shows an increasing value in \( R^2 \). The overall result also significant as shown in Table 4 [\( F_{3,161} = 0.308, p < 0.01 \)]. It can be concluded that financial behavior moderates the relationship between financial literacy and financial satisfaction.

<table>
<thead>
<tr>
<th>Table 4 : Hierarchical Regression Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1</strong></td>
</tr>
<tr>
<td>Independent Variable: Financial Literacy (FL)</td>
</tr>
<tr>
<td>Moderating Variable: Financial behavior (FB)</td>
</tr>
<tr>
<td>Interaction: FL x FB</td>
</tr>
<tr>
<td>( R^2 )</td>
</tr>
<tr>
<td>Changes in ( R^2 )</td>
</tr>
<tr>
<td>Changes in F</td>
</tr>
<tr>
<td>Significant Changes in F</td>
</tr>
</tbody>
</table>

** : significant at 0.01
* : significant at 0.05

10. Discussion

This study may explain the relationship between financial literacy and financial satisfaction. The results of this study show that financial literacy is an important contributing factor to the financial satisfaction.

A simple regression analysis found that financial literacy is positively associates with financial satisfaction. This shows financial literacy with the understanding of basic money management skills such as living within a budget and handling credit and debt is very important, and it is a factor that increases the financial satisfaction among young workers (influenced by 24.7%). This finding is compatible with Expectancy Theory (Vroom 1964). This theory assumes that behavior results from conscious choices among alternatives whose purpose is to maximize pleasure and to minimize pain. Vroom realized that an individual satisfaction based on individual factors such as personality, skills, knowledge, experience and abilities. He stated that effort, performance and motivation are linked in a person’s satisfaction. “Expectancy” is the belief that increased knowledge (literacy) will lead to increased satisfaction i.e. if I work harder then this will be better.

Within this study, it is expected that individual who have understand basic money management skills would be more satisfied with their current financial situation. These findings support the study by Nuraini et al. (2013), where they found that those who have a high level of financial literacy will typically have high degree of financial satisfaction. Similarly, those who practice good financial behavior, also have a good level of financial satisfaction (Zaimah et al. 2012). This study confirms that financial literacy has a positive relationship to the financial satisfaction. In the context of these studies,
majority of respondents feel that the financial literacy and financial behavior could increase the satisfaction of their current financial situation.

The result also shows that financial behavior moderates the relationship between financial literacy and financial satisfaction. It clarifies the correlation between financial literacy and financial satisfaction would be increased if the moderating variable (financial behavior) is accompanied with financial literacy. The tendency for young workers to satisfy with their current financial management is increased (34.8%). Therefore, the role of financial behavior as a moderator is accepted. This study supports the findings by Leila et. al (2012) that factor financial literacy alone does not influence the financial satisfaction for individuals. If they have basic money management skills (financial literacy), and manage their financial with good habit (financial behavior), and finally the more satisfaction outcomes they would achieve.

11. Conclusion

Financial management among the young workers is one of the interesting aspects to be studied. With the implementation of this study, the respective ministry, such as Ministry of Youth and Sports could find out the level of financial literacy and financial behavior among youth in which this information can help youths to be free of bankrupt symptoms. In addition, the objective of this study is to obtain empirical evidence, which is related to the effects of the financial literacy and financial behavior among the young workers towards their financial satisfaction. Therefore, it is expected that the results of studies will be able to benefit the young workers in terms of their current financial situation. If the management of debt is well managed, it is likely to avoid bankruptcy scenario. From the findings, it is found that with the increasingly complex financial systems, we can conclude that everyone should manage and plan their financial activities well ahead because people will face many differing financial commitments at certain points in their lives.

12. References


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