

Financial Literacy in the Military: A Study on Financial Knowledge, Financial Attitude and Financial Behaviour

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Abstract

Purpose

Financial literacy is very crucial to a soldier, especially in securing life, after retirement from the military service. This is because a soldier's level of financial literacy will determine the level of financial planning that one needs to plan from the beginning. The main purpose of this study is to examine financial literacy in the military.

Methodology

This study examines financial literacy in soldiers using three main variables namely financial knowledge, financial behaviour and financial attitude. The study applied a quantitative method using survey questionnaires gathered from a total of 251 military personnel, selected based on a simple random sampling method. Data were analyzed using SPSS 25.0 in the form of descriptive analysis and Pearson correlation test.

Findings

Results found that the level of financial literacy in soldiers is moderate and low and positive relationship among the variables of financial knowledge, financial attitude and financial behaviour.

Originality

A study on financial literacy in the military is essential to their retirement plan as limited study has been offered in our uniform body. This study helps military to prepare their members towards better financial planning pre and post retirement.

Keywords: Financial Literacy, financial knowledge, financial behaviours, financial attitude,

Introduction

Financial literacy is very important as it guides people to plan their financial needs pre and post retirement (Nuradibah, Thinagaran, Fazli & Catherine, 2018). It can prevent individuals from becoming victims of financial fraud (Mahathir, 2019). Financial literacy would increase the



purchasing power of households, at the same time, it becomes the first line of defense for consumers to protect their rights in the face of unfair market practices (Mahathir, 2019).

Challenges in life may lead to the needs to increase financial literacy among individuals. Individual's livelihood can be improved by increasing the level of financial literacy. According to Taft, Hosein and Mehrizi (2013), a person with financial knowledge has less stress and fewer financial disputes within the family. An individual can also make better financial decisions and increase purchasing power if they have a good financial literacy (Sabri & Zakaria, 2015).

Even though most of people know about the importance of personal financial planning, however, many of them are still lack in understanding and unaware of the benefits of financial planning (Citi, 2008). Those with financial management problems were mostly having low productivity which affect their job performance (Marican, Roza & Asmak, 2012). This situation will indirectly cause persons to suffer financial stress. If this is the case with the military personnel, it would increase the risk of accidents as the military often undergoes risky trainings such as shooting, duty as a guard, weapons storekeeper, front-line operations and et cetera.

Furthermore, fail to plan financially will result in failing to meet minimum living standards in the future. Given the considerable impacts of mismanagement of personal financial planning, thererefore, this study seeks to examine the financial literacy among soldiers in the armed forces with specific objectives to determine the level and relationship between financial knowledge, financial attitude and financial behaviour among soldiers.

Literature Review

Financial Literacy

There are many conceptual deliberations about the topics of financial literacy. It is defined as having sufficient knowledge of the facts about personal finance and considered financial literacy as the key to personal financial management (Garman, 1997). Financial literacy is 'understanding and knowledge of financial concepts' (Fox, Bartholomae and Lee (2005). On the other persepctive, Moore (2003) and Huston (2010) noted that a person is considered financially literate or competent if he or she can integrate the knowledge of financial matters. Alternatively, Organisation for Economic Co-operation and Development- OECD (2017) has outlined financial literacy as necessary to make sound financial decisions and ultimately ensure one's happiness and financial wellbeing.

In terms of measurements, Lusardi and Mitchell (2011) used three financial concepts to measure the financial literacy; namely 'interest rate', 'inflation' and 'risk diversification'. Leora, Lusardi and Peter (2014) measure financial literacy using the same fundamental concepts in financial decision-making with additional measure of interest compounding. Alternatively, Sabri, MacDonald, Hira and Masud (2010) used various measurements in their questionnaire which include all issues in relation with personnel finance such as saving and investment planning.

Indisputably, financial planning and management for personal and professional purposes is a continuous process of life. Learning and acquiring the skills required in financial management is invaluable. However, personal financial planning is still far from scratch in Malaysia (Gan, 2008). It is due to the level of financial capability and financial literacy of Malaysians is very



low. Leora et al. (2014) found that Malaysia has only 36% of the adult who is financially literate. Mahdzan and Tabiani (2013) found that less than half of respondents achieved high scores in research conducted. This illustrates the level of financial knowledge among Malaysians is moderately low.

Further, low level of financial literacy among Malaysian has been related to many negative consequences. For example, the number of Malaysian youths who suffered bankruptcy caused by card credits increased from 2.10 per cent in 2006 to 7.63 per cent in 2007 (Goi and Nee (2008) and increase from year to year even though the average income per person in Malaysia has increased from RM 5,156 in 2013 to RM 5,860 in 2016 (DOSM, 2017). This lack of financial literacy led to low level of savings among Malaysian. Bank Negara Malaysia (BNM) (2015) proved in the survey that 75% of Malaysians found it difficult to save RM1,000 for an emergency. The survey also showed that most Malaysian is tended to spend for their short-term satisfaction instead of planning for their future.

A study done by OECD (2013) has found that financial literacy in Malaysia is above average. For the financial knowledge component, Malaysia gets a high score in some of the questions in relation to personnel financial management such as the question on time value of money. As for the financial behaviour component, Malaysia achieved the highest score in the management of household budget and investment and achieved the second-lowest score in the management of debt and liabilities including personnel bill. Overall, Malaysia is in second place who achieved a high score in financial behaviour share with Germany. For the financial attitude component, Malaysia achieved a lower average score compared to the other countries surveyed.

Arceo and Villagomez (2017) have conducted a survey among Mexican high school teenagers using the same instruments developed by OECD. On average, only 4.3 points were scored correctly out of 8 total scores for financial knowledge. For financial behaviour, average respondents answered the questions correctly with a point score of 5.3 out of 8. Meanwhile, in financial attitudes, students answered 1.76 of the total 3-point score positively. Using Atkinson and Messy (2012) measurement, the research found that only 18.3% of the respondents achieved a high score in financial knowledge whereby 57.3% and 69.4% in financial behaviour and attitudes respectively.

Apart from a study by OECD, there are some study conducted in Malaysia to measure financial literacy. For example, Sawandi, Abu, Shaari, Saad and Amran (2018) gathered research data of households around Malaysia specifically to determine financial knowledge. The study uses a random sampling technique and is descriptively analysed. With a total of 451 respondents, less than 50% of the respondents achieved a high score in financial knowledge.

Mason and Wilson Model

The model of financial literacy developed by Mason and Wilson (2000) shows in Figure 1. The model indicates that an individual needs to use a combination of skill/technology, resources and contextual knowledge as a condition for understanding a sufficient amount of financial information. Based on this financial information, one will be able to make financial decisions in light of the consequences. Although these terms are generally accepted, they are not attempting to explain and identify the form and level of skill required to influence one's financial literacy.



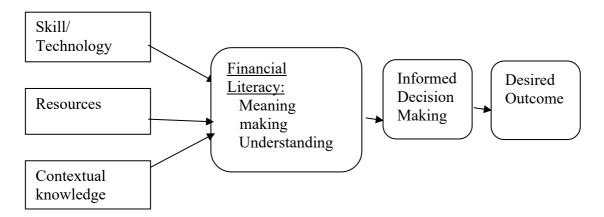


Figure 1 Mason and Wilson Model

Financial Knowledge

The definition of financial knowledge is frequently used same as financial literacy or financial education. However, financial literacy is conceptually different compare to financial knowledge which is a deeper meaning. Huston (2010) derived financial literacy in two ways namely understanding and application of knowledge via the concept of use. The understanding of the financial matter is called financial knowledge while the application (use) refers to the application of personal financial knowledge. For example, to be considered someone is financial literate, a person should have the capacity and confidence in personnel finance application.

Norvilitis & Maclean, (2010) and Xiao et al., (2011) found that to have effective management of finance, an individual should have the financial knowledge and good behaviour which is measure through financial attitudes. Financial knowledge can be achieved through learning process and experiences when individual involve in managing their personnel finance of income and expenditure. For OECD, financial knowledge can be measured using the related question consists of simple and compound interest, risk and return and inflation (Atkinson & Messy, 2012). Consequently, it was evidenced that an individual with good financial knowledge has fewer financial problem (Taft, Hosein, & Mehrizi, 2013).

Financial Behaviour

There are many definitions of how to describe financial behaviour. Lusardi, Olivia and Curto (2010) explained that financial behaviour related to the ability of individual to guide its own finance towards planned direction with positive outcome. Meanwhile, Kasmir (2010) noted that financial behaviour is related to financial management activity at the individual level which includes planning, management and supervision of his or her funds. Tezel (2015) describes financial behaviour as "the ability to capture the impact of financial decisions and to make accurate decisions on cash management, precautionary measures and opportunity for budget planning."

Many studies relate financial behaviour with other elements. The relationship that financial behaviour positively correlated with financial well-being is found by Joo and Grable (2004), Kim and Garman (2004), Kim et al. (2003) and others. Additionally, Joo and Grable (2004)



found that financial well-being is closely linked to financial behaviour, financial level, financial knowledge, cash flow, income, financial tolerance and education. On the other, it had found that financial behaviour also has a similar correlation with the level of life satisfaction (Xiao & Shim, 2009). Besides that, Zaimah et al. (2013) has researched female teachers in Malaysia and found that good financial behaviour will have good saving practice and credit card usage whereby the good financial behaviour itself was influenced the high level of education and higher income.

An individual with positive financial behaviour also showed that he or she is capable to reduce financial stress and consequently increase financial well-being (Sorhaindo & Garman, 2002). The study also shows the characteristic of positive financial behaviour which are having a personal loan in less amount, fix within budget, reduce life expenditure and having financial planning.

Financial Attitudes

Attitude is considered as a person's tendency to value something in a certain way, including judgment, problem, object or event (Bahsin & Thenmozhi, 2014). Meanwhile, Pankow (2012) defined financial attitude as a state of mind, opinion, and judgment about finance.

In Australia, financial attitudes and financial behaviour is surveyed among adult by Australian Securities and Investments Commission (ASIC). They have also been informed about financial literacy programs and initiatives. Under segment of attitudes towards managing money, there is more than 60% of Australians are confident about managing their money. Anyhow, a lot of them find dealing with money stressful and overwhelming (ASIC, 2018). Besides that, it also found that those who were professionals were more interested to deal with money thought consequently stay informed about their money matters and finance.

A theoretical framework for this study is shown below:

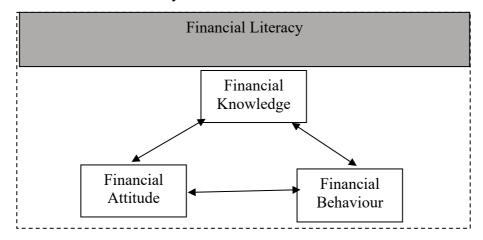


Figure 2 Theoretical Framework



Hypothesis Development

Relationship between financial knowledge with financial behaviour

The following three studies supported that an individual who has more knowledge will have better financial behaviour. A study by OECD (2013) indicates that there is a positive relationship between knowledge and behaviour where the higher knowledge scores also have a high score in behaviour. Sobesh et al., (2015) found a correlation between financial knowledge and financial behaviour is positive and strongly significant in the study conducted in urban India. Meanwhile, Arifin, Agus and Zainul (2017) also found that there is a positive and significant effect of financial knowledge on financial behaviour.

Relationship between financial knowledge with financial attitude

Dwiastanti (2017) found that financial attitude has a significant influence on financial management behaviour in a study conducted in Kanjuruhan University Malang. Meanwhile, Amanah, Dadan and Aldila (2016) found that a person who has an attitude of no interest in saving, will be a difficult behaviour to change.

Relationship between financial behaviour with financial attitude

Arceo & Villagomez (2017) found financial behaviour is positively correlated to financial attitudes in a study among Mexican high school teenagers. This result was supported by the finding by Arceo-Gomez and Villagomez (2017). However, Sobhesh et al. (2015) found a significant negative correlation between financial behaviour and financial attitude.

Therefore, it is hypothesised that:

H1: Financial knowledge has a positive and significant relationship with financial attitude and financial behaviour

Methods

This study used a quantitative method using questionnaire adapted from OECD (2013). Respondents for this study were randomly selected from a small size of military organization. The data for this study were analysed using SPSS 25.0. The results of the analysis was interpreted and discussed so that the results of the research can be concluded.

Results

Level of Financial Literacy

The level of financial literacy is measured based on the three categories of classification namely low, moderate and high with scores of 0 - 0.32 is low level of financial literacy, scores ranging 0.33-0.65 (Moderate) and 0.66-1 (High). The result shown that, 56.6% of the respondents were moderate level of financial literacy, 39.4% representing a high level of financial literacy and 10.0% of the respondents showed a relatively low level of financial literacy. The frequencies mean and standard deviations of financial literacy is shown in Table 1. Based on the result it can be concluded that, relatively, level of financial literacy of the respondents was moderate.



Level/Categories	Frequency	Percentage
Low level (score from 0 to 0.32)	10	4.0
Moderate level (score from 0.33 to 0.65)	142	56.6
High level (score from 0.66 to 1)	99	39.4
Mean= 0.59 SD= 0.14		

SD= Standard deviations

Table 1: Levels of Financial Literacy

Level of Financial Knowledge

Similar to financial literacy, the approach to measure the level of financial knowledge is categorised into three classification namely, low, moderate and high with scores of 0 - 0.32 is low level of financial knowledge, scores ranging 0.33-0.65 (Moderate) and 0.66-1 (High). Based on the results, 50.2% of the respondents showed a moderate level of financial knowledge, while 44.2% of them showed a high level of financial knowledge. Only 5.6% of the respondents showed a low level of financial knowledge. Table 2 shows the frequencies, mean and standard deviations of financial knowledge. In general, it can be concluded that majority of the respondent were shown to be at moderate category.

Level	Frequency	Percentage
Low level (score from 0 to 0.32)	14	5.6
Moderate level (score from 0.33 to 0.65)	126	50.2
High level (score from 0.66 to 1)	111	44.2
Mean= 0.63 SD= 0.91		

SD= Standard deviations

Table 2: Levels of Financial Knowledge

Level of Financial Attitude

Level of financial attitude is measured using a 5-point scale, ranging from 1= 'strongly agree' to 5= 'strongly disagree' and the data were classified into three categories. Scores ranging from 3.65 to 5.00 is grouped into low level of financial attitude, scores ranging from 2.33 - 3.65 (moderate) and scores ranging from 1.00 - 2.32 (High). Table 3 displays the frequencies, means and standard deviations of financial attitude. The results show that 53.8% of the respondents indicated a low level of financial attitude, while 40.6% indicated a moderate level of financial attitude and only 5.6% of the respondents indicated a high level of financial attitude.

Level	Frequency	Percentage
Low level (score from 3.65 to 5.00)	135	53.8
Moderate level (score from 2.33 to 3.65)	102	40.6
High level (score from 1.00 to 2.32)	14	5.6
Mean= 3.55 SD= 0.82		

SD: Standard deviations

Table 3: Frequencies, means and standard deviations of financial attitude



Level of Financial Behaviour

The overall mean of financial behaviour was 1.90 with a standard deviation of 0.64. Based on the results, 68.9% of the respondents showed a high level of financial behaviour, while 29.9% of them showed a moderate level of financial behaviour. Only 1.2% of the respondents showed a low level of financial behaviour. Table 4 shows the frequencies, mean and standard deviations of financial behaviour. In general, it be concluded that majority of the respondents were in high level of financial behaviour.

Level	Frequency	Percentage
Low level (score from 3.65 to 5.00)	3	1.2
Moderate level (score from 2.33 to 3.65)	75	29.9
High level (score from 1.00 to 2.32)	173	68.9
Mean= 1.90 SD= .64		

SD: Standard deviations

Table 4: Frequencies, means and standard deviations of financial behaviour

Relationship between Financial Knowledge, Financial Attitude and Financial Behaviour The second objective of the study was to determine the relationship between financial knowledge, financial attitude and financial behaviour. This study employed Pearson correlation statistics to examine the outcome.

Table 5 shows the summary result of the correlation analyses. It shown that there is a significant, low and positive relationship between financial knowledge and financial attitude, r(251) = 0.19, p < 0.05). The result also showed that there is a significant, low and positive relationship between financial knowledge and financial behaviour, r(251) = 0.16, p < 0.05) and there is a significant, low and negative relationship between financial attitude and financial behaviour, r(251) = -0.21, p < 0.05).

Variables	Mean	SD	Financial	Financial	Financial
			Knowledge	Attitude	Behaviour
Financial Knowledge	.63	0.19	-	0.19*	0.16*
Financial Attitude	3.55	0.82	0.19*	-	-0.21*
Financial Behaviour	1.90	0.64	0.16*	-0.21*	-

^{*} *P*< 0.05, ** *p*< 0.01

Table 5: Correlation between financial knowledge, financial attitude and financial behaviour

Discussion and Conclusion

The main purpose of this paper is to examine financial literacy in military and the relationship between financial knowledge, financial attitude and financial behaviour in the military context. The next discussion will be guided by the established objective of this study.



The first objective focused on determining the level of financial literacy in terms of financial knowledge, financial attitude and financial behaviour. Results revealed that the level of financial literacy among the respondents was moderate and this signifies that in general the overall level of financial literacy among military personal was good. Furthermore, results showed that almost half of the respondents indicated a high level of financial knowledge. In terms of financial attitude, military personnel were found to have a relatively low level of financial attitude. Further, the results of financial behaviour showed a high level of financial behaviour among them. In addition, the results of the first objective are in line with the survey of OECD (2013).

The second objective is to examine the relationship between financial knowledge, financial attitude and financial behaviour. Results of correlation between variables showed that there is a low and positive relations between financial knowledge and financial attitude and behaviour but low and negative relations between financial attitude and financial behaviour.

It can be concluded that, the military personal especially the lower-level ranks need to have a great personal financial planning to sustain their life in the present environment. It will indirectly help them in carrying big responsibilities without any distress or distract to their work performance pre and post retirement from the military service.

The study has revealed that soldiers might think money is there to be spent and think for short-term financial planning rather than long-term financial planning. A systematic financial education program should be developed to educate military personnel to be more alert to the impact of financial literacy including financial knowledge, financial attitude, and financial behaviour on their future life. Military members that have a low level of financial attitude may require different education approach for optimum education effectiveness. Awareness programmes on financial wellbeing can be conducted among the new batch of military personnel during orientation. Financial wellbeing matters need to be disclosed and applied from the beginning so that members can make financial preparation better. In addition, financial programs need to be implemented continuously

Limitations and Suggestions for Future Research

This study revealed the inconsistencies in findings in which financial attitude negatively related to financial behaviour and indicated that there are still opportunities for future studies to determine the relationship between those variables. Continued efforts exploring financial literacy associated with socio-demographic profile and other potential factors are essential for the ongoing development of research and practice unique to business studies.

Furthermore, there needs to be more research on the effect of financial literacy on quality of work life. Issues related to managing finances can be determined earlier to ensure soldiers feel secure financially and get benefits for a better financial wellbeing in the workplace. Therefore, it is critical to research on how the abilities of soldiers in making accurate financial decisions (financial literacy) affect the quality of work-life and lead to healthy economic habits, and in turn encouraging savings and investment over-indebtedness in the long run.



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