Assessing the Effect of Financial Literacy on Saving Behaviour of Staff: A Case of Co-operative University, Thanlyin

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Abstract

Financial literacy of individuals is important ingredients for economic development of the country through their informed financial decisions like savings which can trigger the investments for the corporations. The main objective of the study was to assess the effect of financial literacy on saving behaviour among staff in Thanlyin Co-operative University (TCU). The study found that the TCU staff have high level of financial literacy and positive saving behaviour according to the composite mean value. On the aspect of correlation between the variables, the study found that there is a significant positive relationship between financial literacy and individual saving behaviour among TCU staff. The estimated coefficient indicates that financial literacy has a positive impact on increasing the saving behaviour of the staff while socio-demographic factors like gender, age, marital status, and monthly income cannot predict the saving behaviour of the TCU staff. Accordingly, the university policy makers should consider the interventions to enhance the financial literacy of the staff to make the contribution to the individual saving level and the whole economy of the country. Also, the finding addresses the financial literacy training programmes on individual saving for employees in the universities.

Key words: Financial Literacy, Saving behaviour, Socio-demographic variables

I. Introductionship

Jacinta Odek (2013) firmly stated that financial literacy continued to gain greater prominence in the field of education and beyond in this period. Accordingly, many researchers became interest in the field of financial literacy and its impact on personal financial management practices. Nowadays environmental changes in technology, legal and evolutions in financial markets have become ever more necessary for individuals, households, and corporations to be more knowledgeable and competent in financial management practices. Among them, saving is one of the common financial management practices for individuals, households and corporations. In today, most of the financial institutions provide various forms of saving for consumers. Saving can have positive impact on the entire economy since it can encourage the investments that trigger the economic growth and development. Thus, it can be said that saving plays an important role in the economic growth and development around the world. Harrod (1939) and Domar (1946) stated that the speed of economic growth is determined by the ability to save because higher savings rate will drive up the rate of investment and consequently

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stimulate economic growth. Thus, financial literacy of individuals is important ingredients for economic development of the country through their informed financial decisions like savings which can trigger the investments for the corporations. Accordingly, implementing financial literacy programmes can enhance individuals' financial literacy which would increase their financial circumstances and facilitate future financial plan. Higher level of financial literacy can have a positive impact on individuals' saving behaviour, because increased financial literacy means that individuals with better understanding of their financial circumstances would be able to plan their finances better and informed financial decisions.

II. Research Objectives

The main objective of the study was to assess the effect of financial literacy on saving behaviour among Thanlyin Co-operative University (TCU) staff. Accordingly, the following subsidiary objectives are developed for the current study;

(1) To determine the level of financial literacy among the Thanlyin Co-operative University Staff.
(2) To describe the saving behaviour among the Thanlyin Co-operative University Staff.
(3) To determine the relationship between financial literacy and saving behaviour among the Thanlyin Co-operative University Staff.

III. Research Methodology

The study used descriptive and explanatory research design to determine the level of financial literacy among the TCU Staff and how it influences their saving behaviour. The study used survey method to collect primary data from respondents by administering self-completion questionnaire. The questionnaire is made up of both open-ended and closed-ended questions. The population of the study is the staff of TCU. According to Administrative Department of TCU, it has 257 employees as at July 2017. By using simple random sampling technique, necessary data was collected from a sample of 128 permanent staff (50% of the population). In the study, financial literacy and saving behaviour is measured by five-point Likert scale (1=strongly disagree to 5= strongly agree). Then, the average score was calculated to determine statistically the staff's level of financial literacy and saving behaviour. In the study, financial literacy and socio-demographic variables are independent variables and saving behaviour is dependent variable. The study expected that financial literacy affects the staff's saving behaviour. The improvement in financial literacy enable the staff to make more informed decisions such as saving, expenditure allocation. For analyzing purpose, the study applied the

SPSS 23 and linear regression, Pearson Correlation, means, standard deviation, frequency distribution were calculated. For reliability purpose, Cronbach's alpha is used to check the reliability of the data. Then, the study developed the model which help establish the relationship between the independent variables (financial literacy and socio-demographic variables) and dependent variable (saving behaviour). The model was as follows:

$$SB_i = a + \beta_1 FL_i + \beta_2 Gen_i + \beta_3 Age_i + \beta_4 MS_i + \beta_5 MI_i + e$$

Where,

SB	=	Saving Behaviour
a	=	Constant
β	=	Coefficient
FL	=	Financial Literacy Level of the staff
Gen	=	Gender of the staff
Age	=	Age of the staff
MS	=	Marital status of the staff
MI	=	Monthly Income level of the staff
e	=	Error

IV. Literature Review

Financial literacy is important for individuals, households and corporations, financial systems and national economy, and monetary policy. Previous literature pointed out that financial literacy directs the individuals and households to make the budgeting right and savings in financial institutions. Brown et al. (2006) defined the financial literacy as the evolving state of competency that enable people to respond effectively to ever changing personal and economic circumstances. Garman & Forgue (2006) defined financial literacy as sufficient knowledge of personal finance facts and terms for successful personal financial management. Meanwhile, Anthes (2004) defined financial literacy as the ability to read, analyze, manage and communicate about the personal financial conditions that affect the material well-being. Remund (2010) defined financial literacy as a measure of the degree of which one understands key financial concepts and processes the ability and confidence to manage personal finance through appropriate, short-term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions. Huston (2010) defined financial literacy as a skill that can help people to make financial decisions effectively. It also refers to a skill that can help people to make financial decision effectively. People who are financially literate should have basic understanding of the financial concepts such as interest rate, inflation rate, compound interest, and risk (Huston, 2010).

In a study of Jacinta Odek (2013), Beal & Delpchitra (2003) described that the skills acquired in financial literacy enables individuals to navigate the financial world, make informed decisions about their money and minimize their chances of being misled on financial matters.

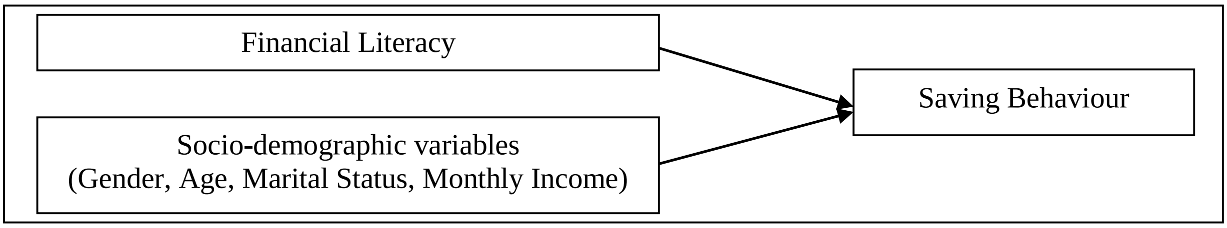
Saving behaviour is the most common form of individual financial behaviour which can have a significant financial wellbeing. However, the word “saving” has different meaning and explanations in different situations. For some people saving means keeping money in financial institutions like commercial banks, credit societies, etc. For others, saving means buying equity like stock and debt instruments, buying real assets like gold, land etc. In the current study, saving means keeping money in financial institutions and at home. Browning & Lusardi (1996) and Warneryd (1999) defined the saving, in economic contexts, as the residual income after deducting current consumption over a certain period of time. This implies that saving takes place when money is left over. Conversely, saving in psychological context is referred to the process of not spending money for current period in order to be used in future (Warneryd, 1999). Savings benefit not only individuals and households but also the entire economy as it provides the base for investments and infrastructure development for every country. Saving behavior is the combination of perceptions of future needs, a saving decision and a saving action. The individual’s saving behavior of the individual is influenced by their socio-demographic variables like age, gender, income etc., and financial literacy (Banks et al., 2009; Jappelli and Tullio, 2010).

Researchers showed that individuals with high level of financial literacy can manage their funds well, understand how financial institutions work, and possess a range of analytical skills. Delafrooz and Laily (2011) have conducted a study in Malaysia to examine the degree to which financial literacy influenced the saving behaviour. This research had been conducted via quantitative methodology by distributing self-administered questionnaires to 2246 employees in the public and private sectors. The finding revealed that saving behavior is significantly influenced by the financial literacy whereby individuals with low level of financial literacy are not intended to save and eventually encounter financial problems in future. Hilgert, Hogarth and Beverly (2003) explored the connection between knowledge and behavior of US Household by using the secondary data adopted from the University of Michigan’s monthly Surveys of Consumers conducted in 2001. The researchers found that households obtained higher financial scores (answered the quiz correctly) tend to have higher scores on saving index (achieved more saving practices). Thus, the researchers concluded that increase in financial knowledge can lead to better saving behavior.

V. Conceptual Framework of the Study

The primary purpose of the research is to assess the staff's level of financial literacy and saving behaviour. According to literature and previous research studies, there are many factors affecting the individual's saving behaviour. However, in this research it is assumed that the staff's saving behaviour is mainly affected by their level of financial literacy and socio-demographic variables like gender, age, marital status, and monthly income. Figure 1 shows the conceptual framework for the current study.

Figure 1: Conceptual Framework of the Study



Source: Adapted from literature

VI. Empirical Analysis

In this section, the staff's socio-demographic profile, financial literacy and saving behaviour are analyzed and presented. The data was analyzed by using Statistical Package for Social Science (SPSS Version 23).

(1) Data Reliability

The research instrument was tested for reliability using the Cronbach's alpha coefficient. Regarding financial literacy measurement items, the reliability test shows the Cronbach's Alpha value of 0.760 (Good reliability) which strengthen the reliability for the instrument for the study. In addition, the reliability test showed Cronbach's Alpha value of 0.891 (Very good reliability) for saving behaviour. In summary the Cronbach's Alpha for both dimensions are exceeding the minimum alpha value of 0.60, thus the construct measures are deemed reliable and acceptable in the current study. Table 1 shows the summary of reliability statistics.

Table 1: Summary of Reliability Statistics

Construct	Cronbach's Alpha	Number of Items	Remark
Financial Literacy	0.760	7	Good
Saving Behaviour	0.891	7	Very good

Source: Survey Data (2017)

(2) Socio-demographic Profile of the respondents

Firstly, socio-demographic profile of the staff covered in the study is presented in this section. It has been constructed based on students' gender, age, marital status and monthly income. Table 2 presents the socio-demographic profile of the respondents.

Table 2: Socio-demographic Profile of the Respondents

Particular	Freq.	%	Particular	Freq.	%
Gender			**Marital Status**		
Male	21	16%	Single	69	54%
Female	107	84%	Married	59	46%
Total	128	100%	Total	128	100%
Age			**Monthly Income**		
Below 30	61	47%	Below MMK 300,000	107	84%
31-40	33	26%	MMK 300,000- 400,000	19	14%
41-50	23	18%	Above MMK 400,000	2	2%
Above 50	11	9%			
Total	128	100%	**Total**	128	100

Source: Survey Data (2017)

As shown in Table 2, totally, 128 respondents participated in the current study. According to gender difference, the result showed that majority of the respondents were female which was represented by 84% of the total respondents while 16% of the respondents are male staff. This showed that more female than male staff participated in the current study. According to age distribution, the results indicated that respondents below 30 years were 47%, between 31 and 40 years were 26%, between 41 and 50 years were 18% while only 9% of the respondents were above 50 years. This showed that majority of respondents were 30 years old and below. According to marital status, 54% of the respondents are single and 46% of the respondents are married. According to monthly income variables, 84% of the respondents have monthly income up to MMK 300,000 and 16% of the respondents have monthly income above MMK 300,000. This showed that majority of respondents have monthly income less than MMK 300,000.

(3) Staff's Financial Literacy

Financial literacy has a significant impact on individual saving behaviour, as more knowledge on financial matters enable individuals to make more substantive financial plans and more informed decisions regarding allocations of their money and savings. Hence it is expected that the relationship between financial literacy and saving behaviour among the staff from Thanlyin Co-operative University is positive. In this study, the respondents' level of financial literacy is measured by using Five-point Likert scale on seven statements ranging from 1=

strongly disagree to 5= strongly agree. Then, the mean score is calculated and interpreted as the respondents have high level of financial literacy when the mean score is above the 21 in the study. The study implies that the higher the mean score, more the respondents have financial literacy. Table 3 shows the frequency distribution for financial literacy.

Table 3: Frequency distribution for Financial Literacy

No.	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
FL1	I have better understanding of how to invest my money.	1 **0.8%**	4 **3.1%**	41 **32%**	71 **55.5%**	11 **8.6%**
FL2	I have better understanding of how to manage my credit.	- -	4 **3.1%**	32 **25%**	78 **60.9%**	14 **10.9%**
FL3	I have a very clear idea of my financial needs during retirement.	- -	2 **1.6%**	30 **23.4%**	68 **53.1%**	28 **21.9%**
FL4	I have the ability to maintain financial records for my income and expenditure.	- -	5 **3.9%**	43 **33.6%**	61 **47.7%**	19 **14.8%**
FL5	I have little or no difficulty in managing my money.	- -	12 **9.4%**	52 **40.6%**	54 **42.2%**	10 **7.8%**
FL6	I have better understanding of financial instruments.	7 **5.5%**	18 **14.1%**	59 **46.1%**	37 **28.9%**	7 **5.5%**
FL7	I have the ability to prepare my own weekly/monthly budget.	3 **2.3%**	4 **3.1%**	37 **28.9%**	72 **56.3%**	12 **9.4%**
	Composite mean	25.4688				

Source: Survey Data (2017)

According to Table 3, majority of respondents have agreement on each given statement except item 6. Thus, the study finds that 64% of the respondents have better understanding of how to invest their money, 71% of the respondents have better understanding of how to manage their credit, 75% of the respondents have a very clear idea of their financial needs during retirement, 50% of the students have little or no difficulty in managing their money, 66% of the respondents have the ability to prepare their own weekly budget. It was also found that most of the respondents (66% of the respondents) have no understanding of financial instruments. However, the mean score 25.4688 shows that majority of staff from TCU have high level of financial literacy.

(4) Individual Saving Behaviour

The study sought to know whether the respondents have positive saving behaviour. The respondents were asked to indicate the extent of their reactions on the following aspects of individual saving behaviour. Responses were rated on a 5-point Likert scale. Then, the mean score is calculated and interpreted as the respondents have positive saving behaviour when the mean score is above the 21 in the study. This implies that the higher the mean score, more the respondents have more positive saving behaviour.

Table 4: Frequency distribution for Saving Behaviour

No.	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
SI1	I put money aside on a regular basis for the future.	1 **0.8%**	6 **4.7%**	33 **25.8%**	61 **47.7%**	27 **21.1%**
SI2	In order to save, I often compare prices before I make a purchase.	- -	7 **5.5%**	33 **25.8%**	68 **53.1%**	20 **15.6%**
SI3	In order to save, I often consider whether the real necessity before I make a purchase.	1 **0.8%**	5 **3.9%**	28 **21.9%**	70 **54.7%**	24 **18.8%**
SI4	In order to save, I always follow a careful monthly budget.	- -	9 **7%**	37 **28.9%**	64 **50%**	18 **14.1%**
SI5	I always have money available in the event of emergency.	2 **1.6%**	7 **5.5%**	43 **33.6%**	61 **47.7%**	15 **11.7%**
SI6	In order to save, I plan to reduce my expenditure.	- -	9 **7%**	42 **32.8%**	65 **50.8%**	12 **9.4%**
SI7	I always save to achieve certain goals.	**-** **-**	5 **3.9%**	33 **25.8%**	64 **50%**	26 **20.3%**
	Composite mean value	26.3203				

Source: Survey Data (July, 2017)

Table 4 shows the frequency distribution for saving behaviour. According to Table 4, majority of respondents have agreement on each given statement. Thus, the study found that 69% of the respondents put money aside on a regular basis for the future, 69% of the respondents often compare prices before they make a purchase in order to save money, 74% of the respondents often consider whether the real necessity before they make a purchase, 64% of the respondents always follow a careful monthly budget, 59% of the respondents have always money available in the event of emergency, 60% of the respondents plan to reduce their expenditure in order to save money, 70% of the respondents save to achieve their certain goals. Overall, the mean score of 26.3203 shows that majority of respondents from TCU have positive saving behaviour. In this study, the respondents' saving place is also asked in the study. The analysis showed that 86% of the respondents saved their money in financial institutions like commercial bank, credit societies. However, 6% of the respondents are saving money only at home.

(5) Correlation Analysis

To establish the relationship between the independent variables and the dependent variable, correlation analysis is used. The result is shown in Table 5. According to the results shown in Table 5, financial literacy has a correlation coefficient of 0.516 which shows a moderate positive relationship between financial literacy and individual saving behaviour. The relationship is statistically significant at p=0.000. Thus, it was found that if the staff from TCU have more financial literacy, they may have more positive saving behaviour.

Table 5 Correlations among Variables

	Saving Behaviour	Financial Literacy Level	Gender	Age	Marital Status	Monthly Income
Saving Behaviour	1					
Financial Literacy Level	.516**	1				
Gender	.112	.042	1			
Age	-.032	.075	-.080	1		
Marital status	.044	-.049	-.141	.435**	1	
Monthly Income	.060	.267**	-.036	.444**	.188*	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

(6) Regression Analysis

Linear regression was conducted to determine the relationship between saving behaviour (as dependent variable) and financial literacy and socio-demographic factors (as independent variables) in the study. In this study, R^2 for this model is 0.302 which indicates 30% of the variation in the saving behaviour can be explained by financial literacy (independent variable). Then, the F-value of 4.160 is significant at the 0.05 level. This indicated that the overall regression model with the independent variable (financial literacy) can well explain the variation of the dependent variable (Saving Behaviour).

Tables 6: Regression Analysis showing the effect of Financial Literacy on Saving Behaviour

Model	**Unstandardized Coefficient**		**Standardized Coefficient**	**t**	**Sig**
	B	**Std. Error**	**Beta**		
(Constant)	1.203	.384		3.132	.002
Financial Literacy Level	.682	.100	.543	6.839	.000
Gender	.163	.127	.098	1.276	.204
Age	-.059	.057	-.096	-1.042	.300
Marital Status	.171	.105	.138	1.623	.107
Monthly Income	-.050	.068	-.064	-.734	.464

Fit Indices
F = 10.256* , P = 0.000
R = 0.544
R^2 = 0.296
Adjusted R^2 = 0.267

Source: Survey Data (July, 2017)

The result of regression analysis showed that the independent variable, financial literacy can predict the respondents saving behaviour. This variable was significant at the 0.000 level. From the regression equation, if all factors are taking constant at zero, the individual saving behaviour will be 1.203. According to the results, financial literacy (β=0.682) has the greatest impact on saving behaviour. This showed that whenever increase in financial literacy will lead to increase in individual saving behaviour. The model for the current study can be stated:

$$SB = a + 0.682FL + 0.163Gen - 0.059Age + 0.171MS - 0.050MI + e$$

VII. Finding and Discussion of the Study

Individual saving is the one among the determinants of the economic development of the country. Therefore, factors encouraging the individual saving behaviour can contribute the economic development. Accordingly, most researchers explored the factors in various context and in different time setting. The current study examined whether the financial literacy can impact the individual saving behaviour among the public sector employees with focus on TCU Staff. The population of the study was 256 employees and the study used simple random sampling to select 128 employees. Regarding gender, female respondents were the dominant group than their male counterparts. On the age level, most of the respondents aged below 30 years. According to marital status, proportion of single respondents are relatively higher than married respondents. Regarding monthly income level of respondents, majority of respondents have income below MMK 300,000. The study also found that the TCU staff have high level of financial literacy according to the composite mean value of financial literacy items. In addition it was found that the TCU staff have a positive saving behaviour according to the composite mean value of saving behaviour items. Also, it was found that majority of the respondents have saving practices at the present time. On the aspect of correlation between the variables, the study found that there is statistically significant positive correlation between financial literacy and individual saving behaviour among TCU staff. However, there is no statistically significant correlation between saving behaviour and socio-economic factors like gender, age, monthly income, and marital status. Then, the study analyzed the effect of financial literacy and socio-demographic factors on individual saving behaviour in a sample of Thanlyin Co-operative University staff with linear regression. The estimated coefficients indicated that financial literacy have greatest impact on increasing the positive saving behaviour of the staff while socio-demographic factors like gender, age, marital status, and monthly income cannot predict the saving behaviour of the TCU staff. Regarding the impact of financial literacy on saving behaviour, the result of the current study was consistent with theoretical expectations and previous empirical findings. In this regard, it can be concluded that financial literacy can contribute the economic growth through saving and development of financial sector. In addition, the study identified the financial literacy level of the staff. Thus, the staff can plan to increase their financial literacy level to make better financial planning for their future. Moreover, increasing the financial literacy and saving behaviour can contribute the individual's financial goals such as buying a house, financing their children's education, better retirement experience, and investment to increase wealth more and more. Accordingly, the university policy makers should consider the interventions to enhance the financial literacy of the staff to make the contribution to the individual saving level and the whole economy of the country. Also, they must suggest the government to devise the policies that address the financial literacy training programmes on individual saving for employees.

VIII. Conclusion

In examining the relationship between financial literacy and individual saving behaviour of TCU Staff, financial literacy is determined as the key variable in enhancing the individuals' saving behaviour. Putting into socio-economic variables, gender, age, marital status, and monthly income level have no significant relationship with saving behaviour. Thus, they conclude that higher financial literacy level leads to more positive saving behaviour. Increased saving behaviour and practices can contribute many benefits for the individual as well as the economy as a whole. Thus, this study is significant to the policy makers, employers who will find the policies and strategies that encourage the individual saving behaviour and practices. As for the employees, by knowing their actual level of financial literacy, they can make some measures, if necessary, to make better financial decisions for themselves and their families. For employers, financially literate staff are more productive since they can largely focus on work activities, not on their financial problem. Thus, financially literate staff are able to contribute to the development of the organization through higher productivity. Thus, the research recommended that the employers should provide the financial literacy training for their employees. This study also will be useful for financial institutions like commercial banks, credit societies since they can offer various financial product in line with the level of financial literacy of their clients. Thus, understanding the financial literacy level of their clients, financial institutions are able to innovate the new financial products. Lastly, but not the least, the study contributed to the theoretical knowledge in personal finance. Thus, it would be useful for other researchers to make further researches regarding financial literacy and saving behaviour.

IX. Limitations of the study and suggestion for further studies

The current study focused on only one organization, namely Thanlyin Co-operative University. Therefore, the similar researches should also be done in other organizations and compare the results to ascertain whether there is consistency on effect of financial literacy on individual saving among respondents in various organizations. In addition, further studies should be done on private sector employees, students, and self-employed population in order to find out whether there is same effect of financial literacy on saving behaviour.

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