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Financial Literacy and Money Management among the Young

Rattana Waranyasathid
Assumption University, Thailand
rattanawrn@msme.au.edu
Khin Zar Win Htin
Assumption University, Thailand
khinzar@hotmail.com

Abstract

The aim of this study is to analyze the relationship between financial literacy, both basic and advanced, and money management among the youth. This includes saving and cash management. Data sets were collected using questionnaire surveys from undergraduate students in Bangkok. A regression analysis was conducted to test the relationship of financial literacy (the independent variable) and money management (the dependent variable). The results indicate that in the case of students who have basic financial literacy, i.e., understand inflation, the effects of interest rates, and how risk diversification works, there is a close relationship to money management. In contrast, in the case of students who have advanced financial literacy, i.e., have a solid grasp of risk-return tradeoffs, basic asset pricings, and knowledge in bonds, stocks and mutual funds, there is a weak relationship between literacy and money management. This is a rather surprising finding as it seems that more financially knowledgeable students should be more aware of how to manage money. These findings will be useful for policymakers and institutional educators to improve their curricula, which could help to improve the financial well-being of undergraduate students.

Keywords: Money Management, Savings and Cash Management, Financial Literacy, Basic and Advanced Financial Literacy

1. Introduction

The increasing availability of high-speed internet connection facilitates impulsive online shopping (Vijaindren, 2017). Young adults face a lot of temptations to spend while having limited income. This is especially the case with undergraduate students. The exponential rise of online shopping sites contributes to reckless behavior in spending or overspending due to poor money management. Indeed, online shopping is cited as one of the main reasons why Malaysian millennial have more debt problems compared to young adults 15 to 20 years ago (Vijaindren, 2017). There is also a strong relationship between the rise in overspending of younger consumers and the availability of credit (Soman & Cheemam, 2002). According to Modigliani's (1986) lifecycle saving hypothesis, at the early stages of their careers, most young people's incomes cannot cover their expenditures so they end up spending more than they have and will then rely on credit cards to maintain their lifestyles. However, once they move past this early stage, some of them will still have debt and this will be the case throughout their lives (O'Loughlin & Szmigin, 2006). One of the reasons for the continuation of debt is the lack of financial literacy (Reswari, Sudarto, &Widyastuti, 2018). Individuals should thus be taught at a young age how to handle money wisely and responsibly. This would save them from being immersed in debt, which can be costly and is never an easy problem to fix. When financial literacy is taught at university, the money management behavior of undergraduates improves. This is a crucial step to ensure that they most likely will adopt proper money management behavior at later stages of their lives (Bamforth, 2017). Educators, policy makers, and various other stakeholders should thus be aware of the importance of money management and the development of financial literacy.

Money management is a combination of people's abilities to handle personal finance activities such as spending, saving, investment, and budgeting toward financial wellbeing (Atkinson & Messy, 2012). Roughly speaking, money management can be defined as a financial behavior essentially observable with and relevant to monetary issues (Xiao, 2008). Decent money management requires financial literacy, which is essential to understand various financial products and services for making proper financial decisions. An individual with low financial education and therefore low financial literacy would have a hard time practicing personal finance (Navickas, Gudaitis, & Krajnakova, 2014). Today, financial literacy and money management thus play a key role in many aspects of one's life and also benefit individuals, households, small company owners, and the community at large. Once a person is able to manage his/her money wisely, debt-traps can be minimized and short- and long-term financial planning toward financial freedom be achieved. One way to shape one's money management behavior is through financial knowledge or financial education. As Brown et al. (2016) argue, financial education programs are likely to have a significant impact on the financial decision-making of youth. On the other hand, a lack of money management can influence one's spending patterns and lead to an accumulation of debt (Heath & Soll, 1996; Tokunaga, 1993). In 2017, Gurria, the secretary of the Organization for Economic Co-operation and Development (OECD) declared that financial literacy is an essential life skill (OECD, 2017).

This study focuses on financial literacy and money management in the context of Thailand. According to a survey conducted by the Bank of Thailand (BOT) in 2018, the financial literacy level of Thai people is below average (Bank of Thailand, 2018). The survey was conducted with parents, many of whom having to shoulder costly fees for the education of their children. Thailand's low financial literacy impacts the educational level of the young (parents overburdened with debts cannot send their children to university). These figures are in line with the OECD findings, which confirmed the positive relationship between knowledge and behavior and led to the conclusion that financial education could improve financial behavior. This study, however, focuses on youth, a population on which little research in term of financial literacy has been conducted. More specifically, it aims to explore the level of financial literacy and its influence on money management of Thai undergraduate students and therefore help to fill the knowledge gap about money management of the young in Asian countries.

2. Literature Review and Hypothesis Development

- Money Management

Sundarasen, Rahman, Othman, and Danaraj (2016) define money management as a combination of individuals' aptitude to realize, analyze, handle, and communicate personal finances towards financial wellbeing. A number of previous studies have broken down money management into four major components: cash management, credit management, saving/investment management, and insurance management (Hilgert, Hogarth, & Beverly, 2003; Ksendzova, Donnelly, & Howell, 2017; Srivalosakul, Suwanragsa, & Tangjitprom, 2018). However, in their research study with students as their sample, Ksendzova et al. (2017) found no effect on the investment management and insurance management dimensions. Moreover, parenting and upraising children in Asia are different from the West. Asian parents still support their children even when they are more than 18 years old. Undergraduate students' incomes mainly come from allowances as they do not work in general. They rarely consider buying insurance or make investment by themselves. In Southeast Asian countries like Thailand, parents take responsibility in raising their children, taking care of their education and ensuring general financial support. The present study therefore focuses on only two dimensions of money management: cash management and saving management. This differs from previous studies. For the purpose of this study, money management is defined as a financial behavior focusing on planning personal finances and savings.

- Cash Management

Xiao (2008) refers to cash management as financial behavior activities that are frequently carried out to review monthly bills, record monthly expenses, etc. Later studies define cash management as individuals' behavior to estimate their income, follow a monthly budget, record monthly expenses, and evaluate spending on a regular basis (Ksendzova et al., 2017; Srivalosakul et al., 2018). Compulsive shopping is more likely to be reduced when people know how to manage money (Ksendzova et al., 2017; Srivalosakul et al., 2018). Effective money management, i.e., tracking spending, budgeting, saving, and investing, can prevent excessive consumption and is likely to bring personal debt under control (Godwin & Koonce, 1992; Srivalosakul et al., 2018). Spending patterns of individuals are more likely to be successful due to the successful regulation of finances through budgeting (Kidwell & Turrisi, 2004; Kotze & Smit, 2008). This is in line with the findings of Chen and Volpe (1998) who determined that individuals who are more financially literate are likely to record their financial activities. One of the best ways to increase money management skills is to keep record of all revenues and expenditures quarterly or monthly. Reviewing one's budget regularly helps to control irrational purchases and save more money for investment (Navickas et al., 2014). Thus, in this study cash management refers to an individual's behavior to keep track of his/her expenses.

- Saving Management

Bime and Mbanasor (2011) defined saving as the amount of disposable income from which expenses are deducted. Rikwentishe, Pulka, and Msheliza (2015) determined that saving is the decision to put off current consumption in order to fulfill future needs. According to Jonubi and Abad (2013), saving is about transferring money from surplus economic units to deficit economic units through financial intermediaries. This benefits the entire nation. Some studies have also described saving management as an individual's behavior to set aside money for saving, emergencies, unexpected expenses, and long-term expenses such as home and education (Ksendzova et al., 2017; Srivalosakul et al, 2018). Saving management for the purpose of this study can thus be defined as an individual's effort to set aside money from the daily spending.

- Financial Literacy

Financial literacy refers to a person's ability to apply economic information and financial knowledge to make financial decisions in planning debt and accumulating wealth and pensions (Lusardi & Mitchell, 2007). Thanks to their solid background and financial skills, financially literate individuals are more likely to manage money wisely (Noctor, Stoney, & Stradling, 1992). Financial literacy can be seen in terms of inputs that explain variations in the financial outcomes of money management. Hung, Parker, and Yoong (2009) defined financial literacy as "the knowledge of basic economic and financial concepts, as well as the ability to use that knowledge and other financial skills to manage financial resources effectively for a lifetime of financial well-being" (p.12). Individuals with financial literacy are more knowledgeable in money management and less likely to be a victim of fraud. Financial literacy empowers people to achieve financial freedom. It is beneficial not only for household prosperity but for the community as well. This study classified financial literacy in accordance with Lusardi (2008), who identified financial literacy as either basic financial literacy or advanced financial literacy. Basic financial literacy is fundamental financial "knowledge about how interest rates work, the effects of inflation, and the concept of risk diversification" (Lusardi, 2008, p.4).

Individuals who are financially literate understand the basic concepts about how to manage money and assets (Hogarth, 2002; Abdeldayem, 2016). In countries with low financial literacy, household savings and investment behavior are dominated by basic rules of thumb (Abdeldayem, 2016). Xu and Zia (2012) found that individuals who were high in financial illiteracy made wrong financial decisions and had poor money management skills. Moreover, low financial literacy is one of the criteria on which individuals are more likely to be rejected to access loan (Kebede & Kuar, 2015).

Advanced financial literacy enables an individual to make decisions pertaining to saving and investment, including understanding the relationship between risk and return, how bonds, stocks, and mutual funds work, and basic asset pricing (Lusardi, 2008). A Health and Retirement Study (HRS) which measured how individuals make their saving decisions claimed that those who display higher financial literacy are more likely to save and invest in complex assets, such as stocks and bonds (Abdeldayem, 2016). According to Shahrabani (2012), young people have more knowledge about money management. They also master essential basic financial skills such as personal budget and are likely to avoid and solve financial problems. Financial literacy enables individuals to cope up with macro-economic shocks through savings and wise money management. Advanced financial literacy is helpful to handle financial problems (Klapper, Lusardi & Panos 2015).

Several studies have determined that a low level of financial literacy encourages financial misconduct practices (Robb & Woodyard, 2011; Aren & Aydemir, 2014) and limits an individual's ability to make good financial decisions (Chen & Volpe, 1998) and exercise tight control over his/her personal debt (Sharahbani, 2012). They also found that financially illiterate people are less efficient improving household financial management (Hilgerth et al, 2003). There is a positive correlation between financial literacy and money management (Bernheim, Garrett, & Maki, 2001). Moreover, financial literacy can make a significant difference on money management after graduating (Behrman, Mitchell, Soo, & Bravo, 2012). Therefore, it is hypothesized that:

H1: *There is relationship between financial literacy and money management.*

A number of studies have determined that in order to achieve financial wellbeing, it is important to have a good financial plan, stringent cash management, and consistent recording of income and expenditures (Livingstone & Lunt 1992; Srivalosakul et al., 2018); so that individuals' debt and excessive consumption can be avoided (Godwin & Koonce, 1992; Srivalosakul et al., 2018), and consumer debt reduced (Ksendzova et al., 2017; Srivalosakul et al., 2018). Regular recording of income and expenditures helps individual to achieve the financial wellbeing (Livingstone & Lunt, 1992) and mitigate debt and excessive consumption (Godwin & Koonce, 1992). Individuals with low financial literacy are more likely to have unnecessary spending and not be able to contribute to savings (Suwanaphan, 2013). If students have good basic financial knowledge, they will develop a good grasp of their financial issues and would avoid piling up their parents' debt burden of children. Therefore, the following hypothesis can be developed:

H2: *There is a relationship between basic financial literacy and cash management.*

"Self-occupied professionals have financial discipline among themselves. They control their excessive spending and impulse purchases and are independent in nature who can take bold decisions in life" (Bhargava, Mittal, & Kushwaha, 2017). This can be hypothesized as follows:

H3**:** *There is a relationship between advanced financial literacy and cash management.*

A rise in saving is possible if individuals have financial literacy in saving programs (Clark & Madeleine, 2008). People who have at least a basic level of financial literacy will still be able to build up their understanding of saving (Lusardi & Mitchell, 2011). Adequate financial literacy makes households likely to plan for both the short- and long-term such as retirement programs and unforeseen situations (Jappelli & Pistaferri, 2010). Thus, the following hypothesizes can be articulated:

H4: *There is a relationship between basic financial literacy and saving management.*

There is evidence showing the linkage between saving decision and solid financial credentials (Ameriks, Caplin, Leahy, 2003; Lusardi & Mitchell, 2007; Jonubi & Abad, 2013; Bernheim et al., 2001; Hastings, Mitchell, & Chyn, 2011; Srivalosakul et al., 2018). Boon, Yee, and Ting (2011) studied 160 individuals in a commercial area of Malaysia and found that there was a strong relationship between advanced financial literacy and saving management. Thus, this study hypothesizes that:

H5: *There is a relationship between advanced financial literacy and saving management.*

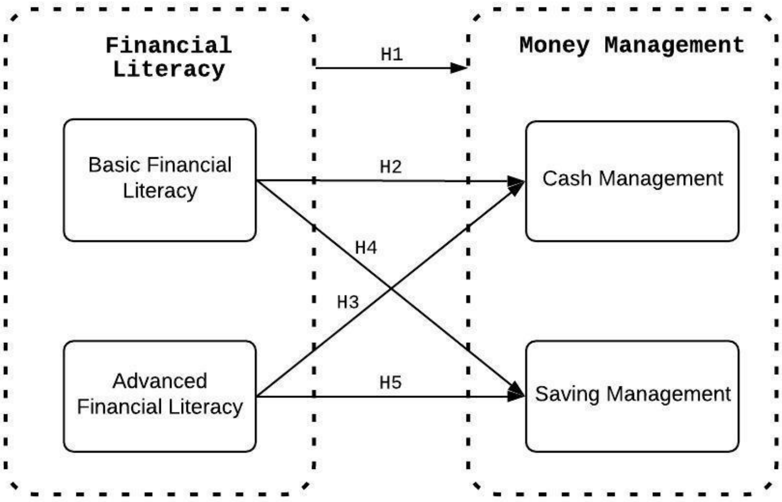

Figure 1: Conceptual Framework (created by the authors for this study).

3. Research Methodology

- Data Collection

The study collected data from 224 undergraduate students from a private international university in Thailand. Most of the respondents are Gen Millennial or Generation Y since they are between 18-25 years old (McCrindle, 2008). Online surveys, hosted on a platform on Google Survey, were appropriate to these tech-savvy generations. Respondents were approached in class and their consent for an online survey sought.

Table 1 summarizes the sample profiles. Out of 224 students, 59.8 percent of the respondents were females and 40.2 percent males. The majority of them (58%) were between 21 and 22 years old. Most of them (64.7%) had an allowance of less than 20,000 baht (USD635) per month.

Table 1: Sample Profiles (n = 224)

	Demographic Factors	Frequency	Percentage
Gender	Female	134	59.8
	Male	90	40.2
Age	Less than 18-20	39	17.4
	21-22	130	58.0
	23 and over	55	24.5
Allowance	Less than 20,000 Baht	145	64.7
	20,000-40,000 Baht	64	28.6
	40,001-60,000 Baht	12	5.4
	Over 60,000 Baht	3	1.3
Faculty	Business School	196	87.5
	Others	28	12.5

- *Questionnaire Development*

The study is an exploratory quantitative type of research. The dependent variables include cash management (CM) and saving management (SM) and the independent variables, basic financial literacy and advance financial literacy. The survey instrument consists of three parts. Part I General Information was designed to explore money management behavior. Part II Financial Literacy measures two levels of financial literacy. Part III is meant to obtain the demographic characteristics of the respondents (gender, age, education, and income).

- *Measurement Reliability and Validity*

The measurement of money management behavior was based on two dimensions, cash management (CM) and saving management (SM). It was adopted from the study of Ksendzova et al. (2017). The respondents were asked to rate part I and part II using a five-point Likert scale (0 = Never, 1 = Rarely, 2 = Seldom, 3 = Sometimes, 4 = Frequently and 5 = Always). Financial literacy was measured in two ways. First basic financial literacy was measured via questions on fundamental concepts such as the effect of interest rates, inflation, diversification of risk, etc. The questions were adopted from Lusardi and Mitchell (2007). Advanced financial literacy was assessed by testing respondents' understanding of, for example, the relationship between risk and return, how bonds, stocks and mutual funds work, and basic asset pricing, etc. These questions were adopted from Van Rooij, Lusardi, and Alessie (2011). All the questions had been validated as "having a good internal consistency and retest reliability" (Kramer, 2016, p.202).

Table 2: Reliability, Means and SD of Measures

Construct	Item measures	Factor Loadings	Cronbach's Alpha	Variance Extracted	Mean	SD
Cash Management	CM1-CM4	.641-.817	.822	32.842	3.08-3.37	.908-1.020
Saving Management	SM1-SM4	.738-.836	.893	38.528	3.23-3.42	.883-1.019

Note: KMO measures of the study's sampling adequacy is .907, which exceeds the suggested cut-off value of 0.60 (Tabachnick and Fidell, 2001). The Bartlett's test of sphericity is at chi square = 1006.582, and p value = .000. Total variance extracted = 71.369.

The reliability of the measurements was tested by Cronbach alpha. The test showed an internal consistency of (α = .822) for cash management and (α = .893) for savings management respectively. According to Nunnally (1978), if the Cronbach's alpha (α) value is above the threshold 0.70, this indicates acceptable reliability. Furthermore, all the item measured had standardized factor loadings above 0.5 at a significance level of 0.001, indicating that there was convergent validity (see Table 2).

4. Study Results

Multiple and simple regression analysis were conducted to test H1-H5. The results show that hypotheses H1 (β =.172, p=.010), H2 (β = .219, p =.004), and H4 (β =0.167, p =.027) were supported. However, H3 (β =.005, p= .951) and H5 (β =.030, p =.688) were not supported. The overall adjusted R square was 3%, which is quite low (see Table 3). The hypothesized regression results can be interpreted to mean that financial literacy had a positive significant effect on money management. However, only basic financial literacy had a positive significant effect on cash management and saving management. Advanced financial literacy had no significant effect on cash management and saving management. This points to the fact that efforts to raise the level of financial literacy should focus on basic financial knowledge which has far more practical daily applications than advanced financial knowledge.

Table 3: Hypothesis Testing Results

Independent Variables	**Dependent Variables**				
	Cash Management		**Saving Management**		**Money Management**
Basic financial literacy	.219(.004)		0.167(.027)		
Advanced financial literacy		.005(.951)		.030(.688)	
Financial literacy					.172(.010)
Hypotheses	H2	H3	H4	H5	H1
Results	Supported	Not Supported	Supported	Not Supported	Supported
ANOVA results	F value = 5.657, p value= 0.004 Adj R square = 4%		F value = 3.820, p value = 0.023, Adj R square = 2.5%		F value =6.778, p value = 0.010, R square = 3.0%

5. Discussion and Conclusion

This study examined the relationship between financial literacy and money management behaviors among the young, represented by university students. The results demonstrate that financial literacy affects money management behaviors. The findings are consistent with the studies of Murendo and Mutsonziwa (2017) and Parcia and Estimo (2017). However, in this study, only basic financial literacy had any effect on money management. This is in keeping with Hilgert et al., (2003) who surveyed 1,004 households and found that households with low financial literacy were more aware of money management. Surprisingly, the study found no effect of advanced financial literacy on money management. This finding though is consistent with Reswari et al.'s (2018) conclusion. A possible explanation is that since the respondents do not work and are financially supported by their parents, they have no opportunity to practice advanced financial literacy such as investing in financial products, e.g. bonds and stocks.

The results in this study have implications for financial education programs and for students' personal lives. Institutional educators and policy makers could use of the results of this study to enhance university students' financial literacy and well-being by designing effective curricula for undergraduate studies. Providing proper financial education at the undergraduate level could instill good financial habits such as cash management, saving management and more knowledge in investments in financial markets.

For students, financially balancing day-to-day activities could be done primarily through personal financial management. Financial literacy can serve as a basis for positive engagement in economic events and as a guide for improving investments, making the right shopping choices, opting for sound expenditures, and managing assets and loans. Moreover, it can help students evaluate their financial status wisely, responsibly recognize their economic conditions, be concerned about financial matters, and eventually feel less anxious about it.

The present study had some limitations mainly due to the small sample size of undergraduate students from a private university, not nationwide coverage. The data do not represent geographical or socioeconomic diversity.

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