



Original Article

Impact of Financial Literacy on Vietnamese Students' Spending Management

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Abstract: The study was carried out to evaluate the impact of financial literacy by considering the influence of three components: Financial Attitude, Financial Knowledge and Financial Behavior on students' spending management. The article used a combination of qualitative and quantitative research (through Structural Equation Modeling - SEM) to evaluate. The results showed that financial knowledge and financial attitude do not influence students' spending management, while financial behavior and influence of parents are statistically significant factors. Primarily, financial behavior has the most prominent influence. From the research results, the author has made some policy implications for relevant agencies to improve the influence of parents on children and to improve students' financial behaviour.

Keywords: Financial literacy, financial behavior, spending management, student.

1. Introduction

In the modern context, financial literacy plays an increasingly important role in the financial stability of each individual in particular and the economy in general. Since 2000, the concept of financial literacy has been developed in five directions: (1) Related to the knowledge of financial concepts, (2) The ability to use financial concepts to calculate prices, including the price of goods and services, (3) How to manage personal finances, (4) Skills to make

sound financial decisions, and (5) Confidence in effectively planning for future financial needs. This confidence is also one of the factors affecting Vietnam's financial inclusion - if approached from the financial service supply side (from the demand side).

Discussions about personal financial management skills for young people and students in particular, are not new, especially with the explosion of smartphone applications. However, a problem has arisen: students are still

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confused about financial management, leading to uncontrolled spending and falling into crisis when struggling with loans and money. There is no accumulation for the future. This group of people will become the primary labor force shortly. In this study, I do not continue to evaluate the student's personal financial management status or level of financial literacy but only focus on this aspect: the financial literacy components. How do they affect spending management? After that, several policy implications are given to provide multi-dimensional perspectives on the unique problem of students.

Therefore, after the introduction, in part 2, I will mention the literature review and theoretical framework. Part 3 will discuss the research methodology, the model result will be presented in part 4 and the policy implications in part 5.

2. Literature review and theoretical framework

2.1. Financial literacy

There are quite a few points of view when defining financial literacy – with different approaches. Atkinson and Messy (2012) defined financial literacy as the combination of perceptions, knowledge, skills, attitudes, and behaviors necessary to make sound financial decisions, and ultimately, personal effectiveness. The OECD (2015) defines financial literacy as knowledge and understanding of financial concepts and risks and the skills, motivation, and confidence to apply such knowledge and understanding to experience effective decisions in various financial contexts to improve individual and societal financial well-being and to enable participation in economic life. This study argues that financial literacy is structured into financial knowledge, financial behavior, and financial attitude.

2.1.1. Financial knowledge

In early research, financial literacy and knowledge were often used with the same meaning. However, one thing that is quite

interesting (or strange) is this: in many areas, people have good financial knowledge (such as calculating simple interest, compound interest or the price of properties to buy) but still are poor (ADB (2017))! And also, from that problem, studies separate financial knowledge into being a part of financial literacy. Typically, financial knowledge is the subject's understanding of financial terms (interest rates, bonds...) and how financial institutions work (Lusardi et al., 2021). Thus, financial knowledge will be a prerequisite for forming an individual's financial behavior and attitude. Another perspective can be given: Financial knowledge refers to a theoretical understanding of financial concepts in terms of academic knowledge (understanding concepts) and application (the use of financial information) (Nguyen, 2017; Thomas & Subhashree, 2020).

2.1.2. Financial behavior

The OECD (2013) has shown that financial behavior is critical and is a fundamental component of financial literacy. Herdjiono and Damanik (2016) define financial behavior as human behavior related to financial decision-making and money management. For example, developing an appropriate budgeting program, controlling it, paying bills on/in time, and having savings. Regarding the relationship with other factors, according to Xiao (2008), financial behavior reflects human behavior related to financial management. Behavioral finance aims to understand and predict the systematic effects of financial markets from a psychological point of view. Some researchers believe that financial behavior affects financial satisfaction (Lusardi et al., 2017; Lusardi & Mitchell, 2011).

2.1.3. Financial attitude

Financial attitude is a pre-preparedness to behave in a particular way that is formed by specific economic and non-economic beliefs of an individual about the outcome of a specific behavior (Ajzen, 1991). Financial attitude is an individual's predisposition to financial matters, that is, the ability to plan and maintain a significant amount of savings (Rai et al, 2019). In addition, this concept is also defined as an

individual's psychological attitude towards a particular financial activity; it is the evaluation of ideas, events or objects (Yong et al., 2018). Attitudes and preferences are considered essential components of financial literacy and critical for examining and evaluating personal finances. They play a crucial role in understanding and predicting an individual's financial decision-making and behaviour (OECD, 2015; Potrich et al., 2015).

2.2. Spending management

We argue that individual/household expenditure management is the process of determining income sources (input sources), spending levels (outputs) and allocating surplus to achieve the short-term, medium and long term goals of that individual or household (Lusardi & Mitchell, 2007). This definition is considered the most important part of personal financial management, in which spending management is how to manage cash flow to achieve personal economic satisfaction. Thus, expenditure management makes a balance between short-term revenues - expenditures and long-term ones, from which there is a plan to maintain a sufficient amount of cash for immediate expenses. In addition, spending management also needs to take into account unexpected expenses that are not in the plan, so it requires investments from unused money to have high liquidity.

Spending for daily necessities is also one of the issues that needs to be managed, and spending management is as vital as generating income, or in other words, to be a good spending manager who is also a good earner. Usually, people have greater control over their expenses than their income. Good spending habits are essential for good personal financial management.

2.3. The impact of financial literacy on student spending management

2.3.1. Financial knowledge

Most of the studies related to financial literacy use financial knowledge as an essential

factor to represent financial literacy (Atkinson & Messy, 2012; Lusardi et al., 2020). Studies by Kaiser et al. (2021), Hasan et al. (2021) suggest that good financial knowledge will better manage spending, and will not cause "wasting" for individuals, typically students. This is also consistent with the studies of Michaud and Mitchell (2017) or Nicolini et al. (2013). Thus, it can be assumed that:

H1: Financial knowledge has a positive influence on student spending management.

2.3.2. Financial behavior

When students have attitudes consistent with money (such as saving and investing), they are more likely to manage their finances better (Albeerdy & Gharleghi, 2015; Louw et al., 2013; Robb & Sharpe, 2009). The principle of this problem is based on the idea that having a positive attitude will influence the behavior of money use. If this is the case, students will spend money in a better way. Therefore:

H2: Financial behavior has a positive influence on student spending management.

2.3.3. Financial attitude

Scheresberg (2013), Sekar and Gowri (2015) and the studies mentioned in part 2.3.2 of this article all suggest that: for young people (including students), financial attitudes have positively affected spending management, especially spending through credit cards. Thus:

H3: Financial behavior has a positive effect on student spending management.

2.3.4. Influence of parents

Previous financial literacy studies have also found the influence of parents on children's spending management, specifically through child support and conversations and teachings, both explicitly or implicitly, are related to finance (Jayaraman & Jambunathan, 2018; Mandell & Klein, 2009). However, in studies this factor is still in dispute; there is no high consensus. Therefore, within the scope of this study, to better clarify the influence of parents on the spending management of Vietnamese students, hypothesis H4 is proposed:

H4: Parents influence children's spending management.3. Research methodology

3.1. Qualitative Research

Qualitative research was carried out to provide the most accurate measurements, selecting the factors affecting the spending management of Vietnamese students in the research model, and making necessary adjustments. In-depth interviews were conducted with 12 students, including three first-year students, two second-year students, four third-year students and three fourth-year students. Regarding the study and living area, there were four students from the South region, two students from the Central region and five students from the North. To ensure comfort and privacy, interviews were conducted in person or online at school, at home, or through suitable online platforms such as Teams and Google Meet... to ensure comfort and privacy. Each interview lasted from 25-40 minutes.

We recorded (after getting permission from the interviewer) the interview. The interview results were recorded to see the key words, thereby assessing the impact of financial literacy on student spending management. Qualitative research results show that parents positively influence their children's spending management (for example, spending orientation). The in-depth interview results also help adjust the questionnaire to suit the interviewee.

3.2. Building questionnaires and scales

In this study, all scales are built based on previous studies, notably OECD (2015), Lusardi et al. (2020) and adjusted for Vietnamese students after qualitative research. The scale is built in the form of Likert 5 levels, where 1 is completely disagree, and 5 completely agree.

Specifically, the influence of Parents (coding CHA_ME) scale includes 12 observed variables; the Financial Knowledge (coding HIEU_BIET) scale comprises 8 observed variables, and the Financial Attitudes (coding THAI_DO) scale includes 13 observed variables. The Financial

Behavior (coding HANH_VI) scale has 15 observable variables, and the Spending Management (coding QUAN_LY) scale includes 7 observed variables. The survey tool is built based on the observed variables that measure the concept in the model. The questions in the questionnaire were compared several times by the authors to check the semantics between the original English and the Vietnamese translation.

4. The results

4.1. The sample

After the scale was calibrated, the questionnaire was broadcast directly and indirectly (via google form) to the students. These questionnaires were sent from the Ho Chi Minh Communist Youth Union to universities to request answers. The research sample was randomly taken from many universities in different provinces within Vietnam. After synthesizing the questionnaire, the study obtained 1,384 observations, but there were 253 invalid observations (answering the same or not answering all the questions).

The total number of observations analyzed was 1,131, including 364 males (32.18%), 761 females (67.29%) and 6 others (0.53%). The sample concentrated on third-year university students, accounting for 44.92%, then second-year students accounted for 22.37%. Survey subjects were students, mainly still studying, so their income was below 6 million VND a month (accounting for 40.41%) and 6-8 million a month (accounting for 28.82%), from 8 to 10 million accounted for 20.51%, the rest had incomes over 10 million. Regarding the proportion of regions, 62.60% students were from the North region, 25.55% students from the South and the remaining 11.85% students from the Central area. In addition, students majoring in banking, finance and economics accounted for the most significant proportion of 56.14%; 16.62% were engineering students, 4.86% were medicine students and 22.38% in other fields of study.

Thus, the research sample has quite a clear difference in gender, the field of study, and students' region of residence

4.2. The result of the model

We used SPSS 25 and AMOS 20 software to process the data. The KMO value according to the results of the model is 0.743, proving that the factor analysis is suitable for the research data set. The Barlett KMO test has statistical significance when $\text{sig} = 0.000 < 0.05$, showing that observed variables are correlated in the factor.

Table 1: KMO and Barlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.743
Bartlett's Test of Sphericity	Approx. Chi-Square	5968.758
	df	120
	Sig.	.000

Source: Calculated from SPSS 25.

The results of exploratory factor analysis (EFA) with 4 components determined according to the theory with Varimax rotation give us the results of 4 components with fewer but more significant items. The influence of the Parents scale is from 12 to 5 items. The Financial Knowledge scale includes 8 to 6 items. The Financial Attitude scale consists of 13 items, down to 4 items, and the Financial Behavior scale from 15 to 3 items.

All indicators have "Factor loading" > 0.5 . This indicates that the observed variables are valid, relevant and statistically significant in factor analysis and reliable enough to explain the total variable. The total variance extracted reached the explanatory value of 56.962; so 56.962% of the variation of the component variables (of the factors) was explained by the observed variables.

After completing the Varimax rotation, we conduct the Promax rotation between 4 independent factors, and the dependent factor is Spending Management. After performing the analysis of extracted variance, the items for the

4 component factors continued to be reduced: Influence of Parents had 3 items, Financial Knowledge had 4 items, Financial Attitude had 3 items, Financial Behavior factor had 3 items and Spending Management had from 5 to 3 items. Almost all the "Factor Loading" indexes of the observations are > 0.5 ; only the "Factor Loading" index of the observation variable QUANLY3 has a value of $0.496 < 0.5$, but this value is still greater than 0.3, and less than 0.5 and is not significant, so it can be confirmed that all variables have good statistical significance.

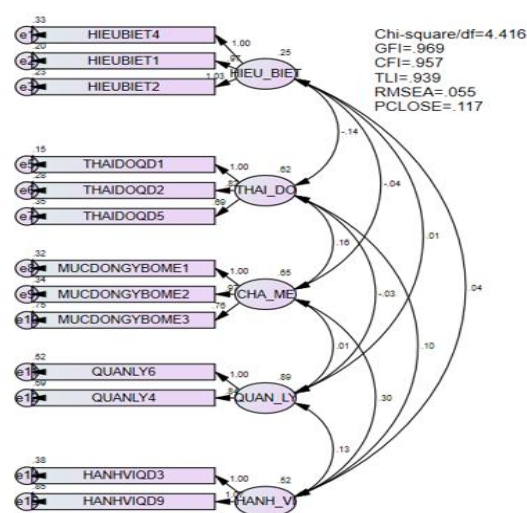


Figure 2: Result of CFA

Source: Calculation from SPSS 25 and AMOS 20.

Regarding the confirmatory factor analysis (CFA), the Estimate value of the variable QUANLY3 has a value of $0.486 < 0.5$, so this item is excluded from the model. After calculating the composite reliability (CR), all observed variables have $CR > 0.5$. In addition, with the coefficients $CR > 0.8$, the author continues to calculate the extracted variance AVE. I continued to exclude two more observed variables with $AVE < 0.5$ (HIEUBIET5 and HANHVIQD8).

Convergent validity: the average variance extracted (AVE) ranged from 49.7% to 61.9%, demonstrating that the change of observed variables could explain over 49.7% of the

change of the variable. Although less than 0.5, these values are still within acceptable values (Hair et al., 2016). The results of the model are shown in Figure 3. The results of the model fit test show that the model is quite suitable for the analysis (CMIN/DF < 5; GFI, TLI, CFI > 0.9; RMSEA < 0.06 and PCLOSE > 0.05). Spending management is assessed by 4 components: financial knowledge, financial attitude, financial behavior, and influence of parents. The team used SEM analysis to examine the effectiveness of this assessment.

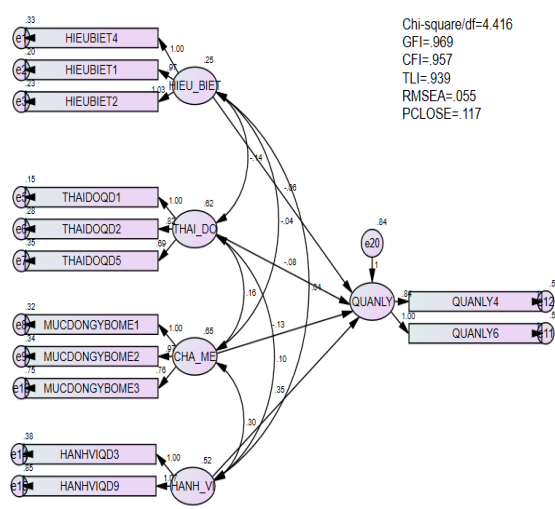


Figure 3: Result of SEM

Source: Calculation from SPSS 25 and AMOS 20.

The results of Regression Weights show that the factors of Financial Behavior and Influence of Parents reflect the spending management of Vietnamese students. In other words, the relationship between financial behavioral factors and Influence of Parents on Spending Management is significant. In contrast, Financial Knowledge and Financial Attitude have no impact on Student Spending Management. Therefore, hypotheses H1 and H2 can be rejected. Of the two influential variables, the effect of Financial Behavior is more significant than the effect of the Influence of Parents. These two independent variables affect 52% of the variation in Spending Management. In addition, in the items measuring financial attitude, the

item THAIDOQD1 (the item expressing the respondents' views with the judgment on money management) has the most critical influence on spending management. Influence of parents has a positive impact on student spending management. For Vietnamese students, it seems that personal financial management still depends a lot on the opinions of their parents; or maybe they are not yet financially independent.

5. Discussions and implications

Based on the research results of the model, it can be seen that for Vietnamese students, two factors that have an impact on spending management behavior are Influence of Parents and Financial Behavior, so the authors make several proposals to improve these two factors, thereby increasing the efficiency of spending management. An interesting thing in this study is that financial literacy - reflected in financial attitudes - positively affects student spending management. In contrast, financial knowledge and financial behavior are not meaningful. This result is in contrast to the studies of Scheresberg (2013), Sekar and Gowri (2015), Kaiser et al. (2021), Hasan et al. (2021). Financial knowledge does not affect spending management because students can completely calculate their costs or benefits when spending on specific goods or services. This means that students know entirely that what they do is beneficial or harmful, but it seems that most of the money they spend or have to manage is not made by them, so they do not need to care about their behavior. This seems to be a difference between Vietnamese students and other students worldwide. Since only 2 variables are statistically significant, we focused on these 2 issues.

5.1. Financial attitude

This is a critical issue in the formation of financial behavior; specifically, here is the spending management behavior of students. Therefore, to promote issues related to financial attitudes, the following can be done:

Firstly, enable information and communication about the importance of improving financial literacy for students. Policymakers should encourage the power of visual and audio media directly through banners and radio systems, with concise, easy-to-understand messages, and further expand existing communication channels. Modern-day influences like social networks are where young people source information and financial news. In addition, increasing communication at schools also helps students better access new financial products and services, thereby improving financial knowledge and changing people's attitudes towards these products.

Second, focus on efficiency and ease of use when building financial programs and products. Focus on diversifying financial services and products for students with different financial literacy levels in Vietnam.

Third, focus on personal finance training, such as financial education (Nguyen, 2017). For students, it is necessary to supplement the subject of Personal Finance into the curriculum. Currently, there are not many schools that teach this subject. Compared with Banking and Finance programs, the time spent on personal finance (if any) accounts for only about 5% of the total number of specialised courses. This is difficult to match with modern finance when most countries worldwide focus on financial education from high school.

5.2. Influence of parents

The results from the SEM show that parents play a vital role in influencing their children's spending management, especially in terms of financial education at home. So, we propose several solutions to help strengthen the role of parents as follows:

Firstly, to increase the influence of parents, it is necessary to strengthen education and propaganda so that parents are aware of the importance of financial education for children. Then, financial education measures in the family can be adjusted to suit each individual, flexibly

with socio-economic development conditions, and at the same time close to children.

Secondly, it is necessary to promote the change of parents' views on financial education for their children. If parents often avoided this 'problem' in the past, though it was unnecessary, or thought it would have harmful effects on their child's development if they knew how to spend/earn money early or give children money to shop and spend by themselves.

6. Conclusion

Finance literacy is a new field which has not been developed much in research in Vietnam. This study shows that Influence of Parents and Financial Behavior are the factors that have an impact on students' spending management, and the other two components of financial literacy - Financial Attitude, Financial knowledge (demographic factors, factors on participation in finance courses, and use of banking services) - do not influence this dependent variable. This can be said to be one of the findings that additional research into the gap is focused on linking 3 components of financial literacy to explain a specific behaviour. At the same time, the study was conducted on Vietnamese students - a group of subjects with many differences compared to students from other countries in the world. Besides that, this group has not been targeted by many studies.

This study also acknowledges some limitations. Firstly, we now have some factors affect the spending management of students, such as student experience, major, age, gender... Second, the hypotheses in the article have a direct influence on student spending management. In future studies, the author will supplement this issue.

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