CHAPTER II
THEORETICAL FRAMEWORK AND HYPOTHESES

2.1 Literature Review

A research conducted by Herawati *et al.* (2018) at Indonesia regarding the relationship between financial literacy, financial self-efficacy and parent's social economic status toward the respondents' financial behavior. This research has been conducted among accounting students in Bali by using quantitative approach through distributing questionnaires and a financial literacy test.

Farrel *et al*. (2015) examined the influence of individual's self-efficacy toward their personal financial behavior by using a psychometric instrument in 2013. The study result is with higher financial self -efficacy, which means the individuals have greater self-assuredness in their own financial management capacities, the respondents are more likely to get engaged in saving and investment products, and less likely to hold debt-related products.

Ismail *et al*. (2017) has conducted a research regarding the relationship between financial knowledge, financial attitudes and financial self-efficacy with financial behavior. This research was focused on Malaysian workers by spreading online questionnaires. The findings of this study were financial knowledge have proven to have significantly influence financial behavior, however the other two independent variables, financial attitude and financial self-efficacy were found to be not significantly influencing.

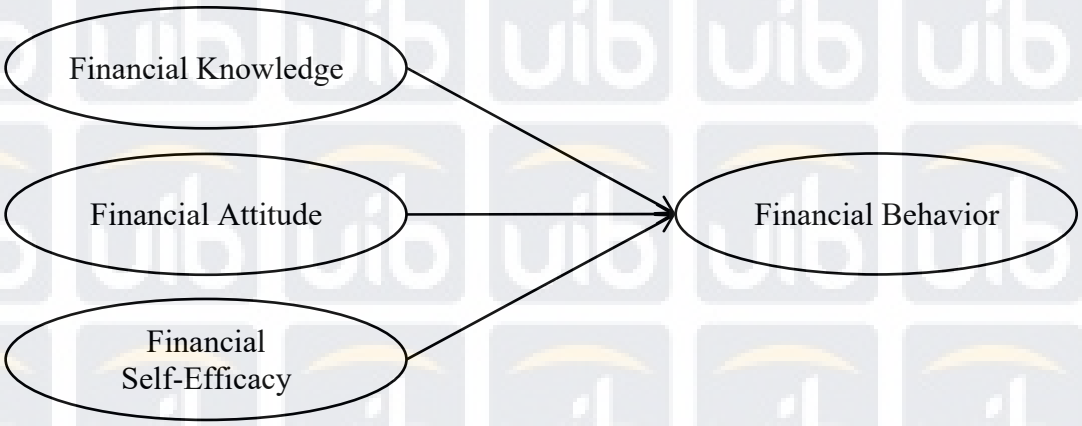

Figure 2.1 The role of financial self-efficacy scale in predicting financial behavior, source**:** Ismail *et al*. (2017)

Asebedo and Seay (2017) investigated the relationship between financial self-efficacy beliefs and saving behavior by using the sample of 847 pre-retirees at U.S. The study was done according to Social Cognitive Theory of Self-Regulation and was analyzed using OLS regression model because of the continuous and unbounded nature of the dependent variable.

In her study, Fluellen (2013) tried to prove the link between financial social learning opportunities and financial behavior of college students significantly. The study used mean-comparison techniques and cross tabulations, proposing the bivariate relationship. The questionnaire was spread in one of the United States university. Along with it, the research found that there is a positive relationship between financial self-efficacy and financial behavior (budgeting and saving) of the students. Students who save tended to have lower self-efficacy, but students who had higher self-efficacy tented to have budget than those who do not.

The purpose of the study conducted by Arifin (2017) is to analyze the influence of financial knowledge, locus of control, and income on financial

behavior. With the entire Jakarta communities as the subjects and control for the workforce-age which have a fixed income each month, this study has proved that financial knowledge and locus of control indeed have influence on financial behavior. This study applied the non-probability sampling, by spreading online questionnaires through social media.

The study conducted by Mien and Thao (2015) investigated the relationship between financial attitudes, financial knowledge and locus of control with personal financial management behavior. To collect the data, a paper-based questionnaire was spread in Vietnam. This study also conducted a pilot survey before doing the main survey with the purpose of refining the measurement. The study revealed that financial knowledge significantly positive related to financial management behavior.

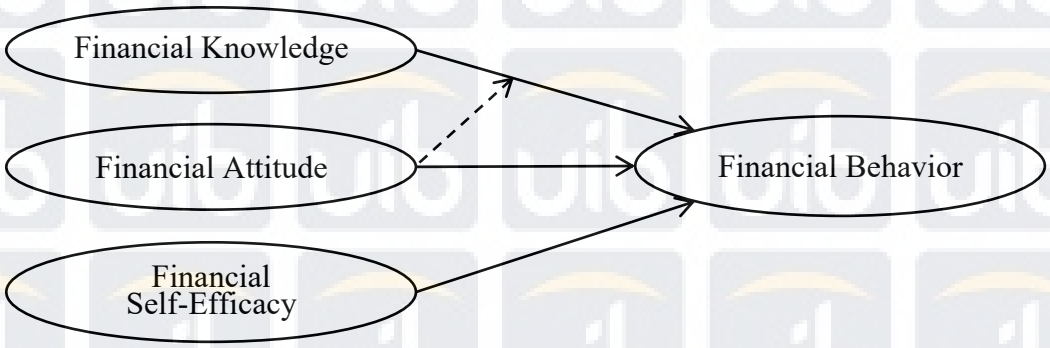

Figure 2.2 Factors affecting personal financial management behaviors: evidence from Vietnam, source**:** Mien and Thao (2015)

Nusron et al. (2018) examined the effect of financial attitude, financial knowledge and personal income on financial management behavior. To obtain the research data, questionnaires was spread among the students of Bachelor, Master and Doctoral program in Special Region of Yogyakarta several universities. The results of the research were the three independent variables indeed have

significant influence on financial management behavior. The significant effect of financial knowledge on financial management confirmed that financial knowledge of respondents will influence the skill, self-confidence, and decision making in financial behavior.

Tang and Baker (2016) highlighted the importance of financial knowledge and self-esteem toward financial behavior. It divided financial knowledge into two parts which is subjective and objective financial knowledge. The results of the study showed that the self-esteem and financial behavior could have direct and indirect, through subjective financial knowledge, association link. Strömbäck *et al.* (2017) have conducted a research where it investigated the relationship of self-control, optimism, and deliberative thinking with the saving behavior, financial well-being and general financial behavior. The sample used was from Swedish population amounted to 2063 people. This study used OLS regressions to analysis its data.

College Students' Financial Behaviors and Socialization paper aimed to explore the relationship between parental/guardian socioeconomic status, socialization, and college student financial behaviors. The study used the data gathered from spreading anonymous online surveys among students in Minnesota small liberate arts college. The surveys contained two parts which were multiple choice part and open-ended questions.

A study has discovered that respondents who had taken courses regarding financial matters were not more financially literate than those who had not. Additionally, those who took the courses did not evaluate themselves to be more

savings-oriented and did not appear to be better in financial behavior than those who had not. This study is conducted by Mandell and Klein (2009) by examining high school students of a personal financial management course.

A study was conducted by Ameliawati and Setiyani (2018) to research about the influence of financial attitude, financial socialization and financial experience to financial management behavior, directly and indirectly by using financial literacy as a mediating variable. The data was 910 students from four majors which were economic education, accounting, management and economic development. The sample used path analysis as the data analysis techniques.

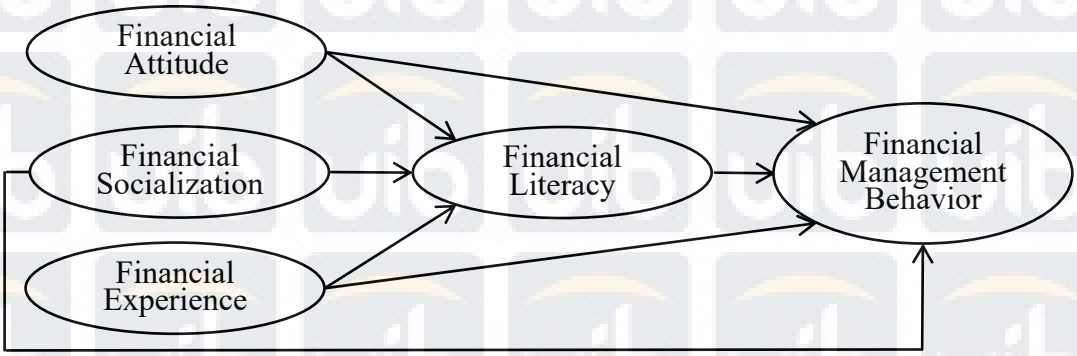

Figure 2.3 The influence of financial attitude, financial socialization, and financial experience to financial management behavior with financial literacy as the mediation variable, source**:** Ameliawati and Setiyani (2018)

Sundarasen et al. (2016) used Structural Equation Model analysis to research the influence of financial literacy, financial socialization, and parental guide to money management. The results were the three independent variables indeed play significant roles on money management of the young adults.

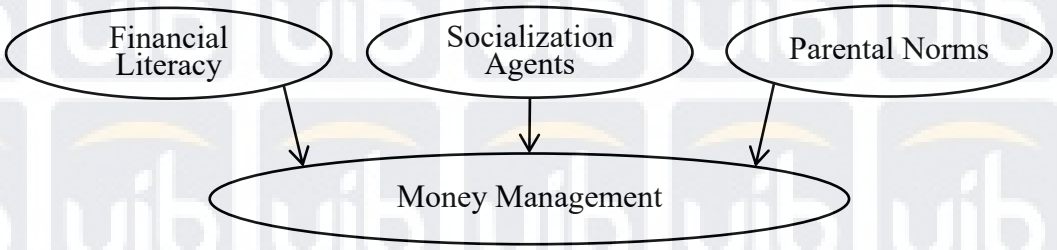

Figure 2.4 Impact of financial literacy, financial socialization agents, and parental norms on money management, source**:** Sundarasen *et al*. (2016)

Sabri and MacDonald (2010) conducted among Malaysian college students regarding the relationship between financial literacy, financial socialization and childhood consumer experience with saving behavior and financial problems. It was proved that financial literacy had the most positive effect on financial management because it had desired effects on both saving behavior and financial problems. On the other hand, financial socialization was also associated with more financial problems, but it did not predict saving behaviors. As for respondents who have experienced childhood consumers earlier, it was reported that they have more saving behaviors along with more financial problems.

Brown and Taylor (2018) argued that how children acquired money and the saving behavior of parents both have influence on the saving behavior of the children their self. Their study has also found an unexpected factor that significantly influences the saving behavior which is the future orientation of the children such as intention to go to college.

A study was conducted by Akben-Selcuk (2015) by conducting a nationwide survey towards college students in Turkey. It showed that students who were more literate in finance tend to exhibit the three positive financial

behaviors. Respondents who had taken finance courses were positively related to saving behavior, while on the other hand were unrelated to timely payment or budgeting. Respondents' attitude towards money was also found to be significantly related to their financial behavior. Students who have positive attitude towards money were more likely to pay bill on time, have a budget plan, and saving for the future.

Sundarasen and Rahman (2017) used close-ended questionnaire to conduct a survey regarding money management among Malaysian young adults. The data gathered from the questionnaire was analyzed using Structural Equation Model. The independent variables were parental norm and perceived financial literacy, while using attitude towards money as the mediating variable.

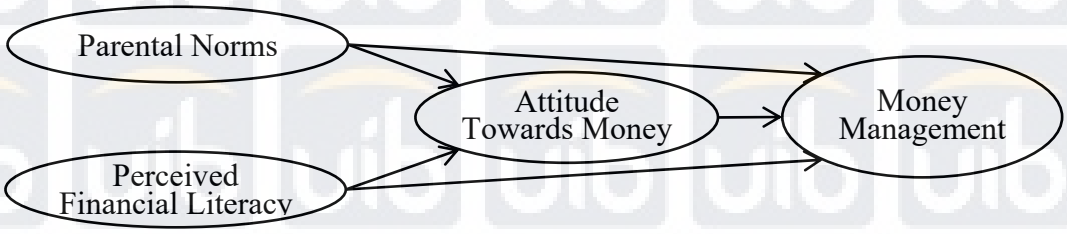

Figure 2.5 Attitude Toward Money: Mediation to Money Management, source: Sundarasen and Rahman (2017)

A study was conducted by Sabri (2015) to examine the relationship between financial literacy, money attitude, financial strain and financial capability toward financial well-being as the dependent variable. The sample consisted of 508 young employees from public and private agencies in Malaysia and was gathered through self-administrated questionnaire. It was then analyzed using SPSS analysis technique.

Qamar et al. (2016) analyzed how money attitude, which is money avoidance, money worship, money vigilance and money status, influence personal financial management behavior while being moderated by financial knowledge and financial self-efficacy. 500 valid samples consisted of college students were used to support this study and the data was analyzed using SPSS regression analysis.

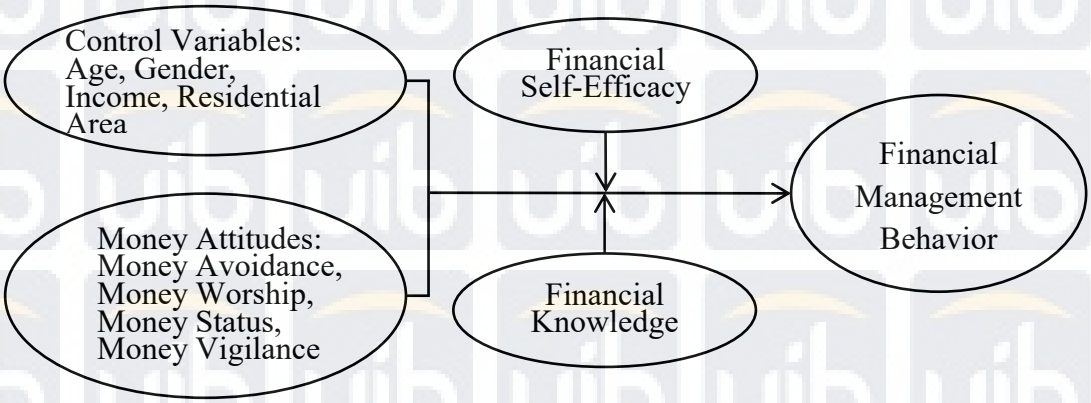

Figure 2.6 How knowledge and financial self-efficacy moderate the relationship between money attitude and personal financial management behavior, source: Qamar *et al*. (2016)

2.2 Financial Management Behavior

Common financial behavior is budgeting, spending, borrowing, saving and investing, and risk managing. In the study written by Qamar et al. (2016), personal financial management behavior is positively influenced by money attitude. In this article, personal financial management behavior was measured by the how students manage their finance. To be more precise, the measurement consisted of four sub scales which are saving and investment, cash management, credit management and insurance.

In a study conducted by Farrel *et al.* (2015), it is found that financial self-efficacy was related strongly with woman's personal finance behavior. This study measured personal finance behavior based on the types and number of financial products that she held. Woman with higher financial self-efficacy, which means with greater self-assuredness regarding their financial management capacities, had a tendency to hold saving and investments product. Oppositely, they tend to hold less debt-related products. Saving and investment products can be taken as an indication of forward thinking and responsible financial behavior, while debt-related products indicate weaker financial planning capacity and potentially poorer financial prospects.

According to Ismail *et al.* (2017), financial knowledge has significant relationship with financial behavior. But financial attitude and financial self-efficacy has no significant relationship with financial behavior. In this article, woman showed weak relationship between financial attitude and financial behavior.

There is a study conducted by Fluellen (2013) which discuss about how financial social learning opportunities and financial self-efficacy were significantly related to financial behavior. It was revealed that students who save had lower self-efficacy than those who do not. Oppositely, those who budget had significantly higher self-efficacy scores than those who do not budget.

To summarize the statement of the experts, trading behavior is affected by several factors such as: financial self-efficacy, money attitude, financial social learning opportunities, and financial knowledge. To study the financial

management behavior, researcher usually measures it from the saving and investing, budgeting, cash management, credit management and insurance planning.

2.3 Relationship Between Independent Variables and Dependent Variables

2.3.1 Relationship Between Financial Self-Efficacy and Financial Management Behavior

Financial self-efficacy has an effect on the students' financial behavior. One major factor which influence consumer behavior is the level of self-efficacy, it means that one's self-confidence in his or her own financial capability will affect how he or she behaves financially (Herawati *et al*., 2018).

According to Farrel *et al.* (2015), the relationship between women' level of financial self-efficacy and financial behavior was related significantly. It was proved that women with higher financial self-efficacy level in other words have more confidence on her financial capability, would be more engaged in investment and saving products rather than debt-related products.

Referring to Asebedo and Seay (2017), age was a significant factor between financial self-efficacy and investors. Older pre-retirees showed an indication of motivated to save given their proximity to retirement. Respondents with higher financial self-efficacy beliefs were associated with an increased change in net worth.

2.3.2 Relationship Between Money Attitudes and Financial Management Behavior

According to Selcuk (2015), money attitude was also one of the significant predictor of financial behavior. Respondents with positive attitude towards money will have tendency to pay bill on time, making budget and saving for the future. The hypotheses that attitude towards money is a significant variable to money management has been accepted (Sundarasen and Rahman 2017). With a positive money attitude, respondents will have a better money management.

Sabri (2015) through his research has proved that positive attitude towards money will assist respondents to be more careful in their spending activity, through budgeting and planning for the future financial. Respondents with positive attitude toward money would possess greater financial well-being which indicates they have a better behavior regarding financial.

By having a positive attitude toward money, respondents were still willingly spent more of their money. This was proved from the research conducted by Kowel (2015). Attitude toward money has played a significant and positive role in effecting financial behavior and money management (Sundarasen and Rahman, 2017); (Simanjuntak and Rosifa, 2016)

2.3.3 Relationship Between Financial Knowledge and Financial Management Behavior

Arifin (2017) claimed that financial knowledge indeed has positive and significant influence on financial behavior. Respondents who possess greater financial knowledge will have better financial behavior. A better financial

behavior means greater capability in financial controlling, more discipline in paying bills, have a better saving, and planning for the future financially.

Based on Nusron *et al.* (2018), financial knowledge has a significant influence on financial management behavior. Financial knowledge, also referred as financial education will affect and improve the skill, self-confidence and decision making in financial behavior aspect. Selcuk (2015) has proved that financial literacy, measured as financial knowledge, had a positive and significant impact respondents' likelihood to display positive financial behavior, which is paying bills on time, have a financial control by making a budget, and saving for the future.

A study conducted by Andrew and Linawati (2014) has proven that there is indeed a significant relationship between financial knowledge and financial behavior of the respondents. Following the higher financial knowledge, respondents tend to be wiser in managing their money. This indicated that higher financial knowledge will resulted in wiser financial behavior.

2.3.4 Relationship Between Money Attitude and Financial Management Behavior with Financial Self-Efficacy as the Moderating Variable

Qamar *et al.* (2016) has proven in his study that there is indeed a moderate influence of financial self-efficacy between the relationship of money attitude and financial management behavior. It is a positive moderating effect, which indicated an explanatory power.

2.3.5 Relationship between Money Attitude and Financial Management Behavior with Financial Knowledge as the Moderating Variable

Qamar *et al.* (2016) has proven in his study that there is indeed a moderate influence of financial knowledge between the relationship of money attitude and financial management behavior. It is a positive moderating effect, which indicated an explanatory power.

2.4 Research Framework and Hypotheses Formulation

Based on the previous research models which were mentioned above, author has decided what framework will be used for this research. The author will use the framework from the research conducted by Qamar *et al.* (2016) as the basic framework while modify the variable. The differences between this research and the previous research are the time dimension, place dimension and research object. The criteria for this research are it will be done on not only in Universitas Internasional Batam but also Nanjing Xiaozhuang University, and the college students have their own income.

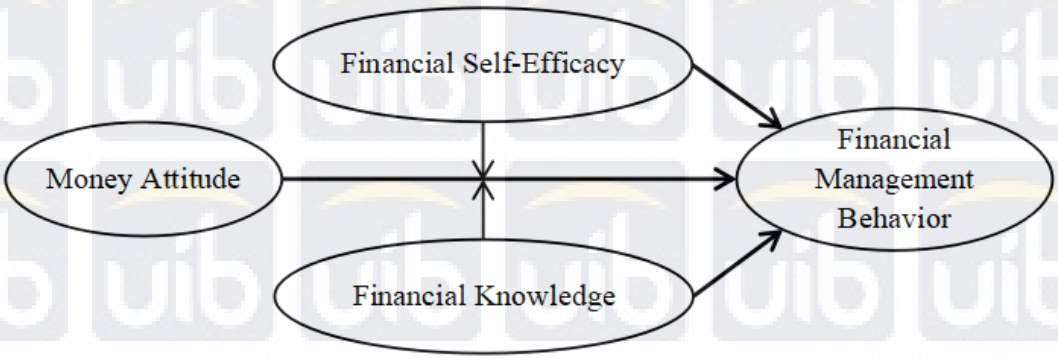

Figure 2.7 The analysis of money attitude influence towards financial management behavior on China and Indonesia college students with financial knowledge and self-efficacy as the moderating variable

The hypotheses formulations for this research are:

H_1 = Financial self-efficacy has significant and positive influence toward China college students financial management behavior.

H_2 = Financial self-efficacy has significant and positive influence toward Indonesia financial management behavior.

H_3 = Money attitude has a significant and positive influence toward China college students financial management behaviors.

H_4 = Money attitude has a significant and positive influence toward Indonesia college students financial management behaviors.

H_5 = Financial knowledge has significant and positive influence toward China college students financial management behavior.

H_6 = Financial knowledge has significant and positive influence toward Indonesia college students financial management behavior.

H_7 = Financial self-efficacy moderate the relationship between China college students money attitude and financial management behavior.

H_8 = Financial self-efficacy moderate the relationship between Indonesia college students money attitude and financial management behavior.

H_9 = Financial knowledge moderate the relationship between China college students money attitude and financial management behavior.

H_{10} = Financial knowledge moderate the relationship between Indonesia college students money attitude and financial management behavior.