

# Financial Behavior and Problems Among College Student in Indonesia: the Role of Financial Knowledge

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## Abstract

There has been a lot of research on financial literacy that has been done in many countries, but the particular research on the topic has a very high relevance while being conducted in Indonesia, considering the low financial literacy level in Indonesia. The results of national survey on the level of financial literacy in 2016 showed that only 29.66% of Indonesian society has decent financial literacy. This research is conducted with the purpose to illustrate the description of Financial Knowledge, Financial Attitude, Financial Behavior, and Financial Problem of college students in Bandung, West Java, Indonesia. Primary data is used in this study to obtain data on related variables. This research descriptively analyzes financial knowledge, financial attitude, financial behavior, and financial problem of college students. This study also conducted hypothesis testing about the causal relationship between the related variables. Structural Equation Modeling is used to determine the relationship of financial knowledge, financial attitude, financial behavior, and financial problem. The result of this research indicates the effect of financial knowledge to financial attitude and its impact to financial behavior. However, college students' financial behavior has no impact on financial problem.

**Keywords:** *Financial Knowledge; Financial Attitude; Financial Behavior; Financial Problem*

## 1. Introduction

In essence, companies have various objectives, which need an understanding of financial management to ensure that the objectives are achieved. The understanding of financial management is required for companies to make accurate financial decisions. Financial management may support the achievement of corporate objectives effectively and efficiently. In the same way, this also can apply to personal financial management. Many of the principles of managerial finance also apply to individual personal life. Individuals can manage their own money more effectively by learning simple financial principles (1).

Personal financial management has the same principles as the management of corporate finance. The increasing awareness of the importance of financial management understanding has made personal financial management an important issue. There were many changes in the external environment such as economic factors which have impact on societies' purchasing power, and they have made personal finance more critical today. Individuals have to understand how they manage and make planning of their personal finance. In this case, personal financial management has to be done for short-term and long-term financial affairs (2).

Individuals may have goals throughout their life, and personal financial management is intended to achieve their financial goals. An understanding of financial management is required in order to achieve individuals' financial goals. Individuals may have many goals to be achieved throughout their life, such as to buy a house or other properties, to send their children to college, or to have a comfortable life in their golden age.

The problem associated with an inadequate level of financial literacy is a national issue which currently becomes the Indonesian government's concerns. The results of national survey on financial literacy level in 2016 showed that only 29.66% of Indonesian society has decent financial literacy. This national survey of financial literacy and financial inclusion which was conducted in 34 provinces, 64 cities, with 9,680 respondents, showed that majority of Indonesian society does not have decent financial literacy (3).

College students are the focus of this study since the results of previous financial literacy research have shown an inadequate level of personal financial knowledge among students (2). College students are part of the community with access to higher education. Through the learning process, they get more financial information which is expected to be able to improve their financial knowledge and attitude. A positive financial attitude is expected to determine positive financial behavior, and ultimately avoid them from financial problem.

The objective of this study is therefore to assess variables related to financial knowledge, financial attitude, financial behavior, and financial problem of college students. The other purpose of this research is to conduct the hypothesis testing of related variables.

## 2. Literature Review

A study of economic factors and personal decisions affecting the financial well-being of individuals are the scope of personal finance (4). How individuals manage and make plans for their personal finance is one thing which they have to understand because many decisions that they have to make throughout their lives may affect and be affected by personal finance. Discipline in financial management is required in personal financial management. Finan-

cially understanding or financial knowledge and the ability in managing money are important factors to make good financial decisions (5).

Understanding and knowing current and future expenses patterns is one of the fundamentals of money management. Despite the effect that money can bring towards a person's motivations, it may not be the only goal that an individual is looking for, as there are various targets that money can also help to achieve (6). By managing their money, an individual may allow himself to reach higher status and life standard (7). One's success can be determined by their ability in making financial decisions pertaining money management (8).

Skills that are important to understand regarding money includes controlling expenses, savings, and investments. It is affected highly by how strictly someone follows their financial goals (4). The problem that many people will face, especially younger individuals, will be the lack of financial knowledge which leads to poor financial management.

The terms financial knowledge and financial literacy have been used interchangeably throughout works (7). Financial literacy can be defined as the awareness, insight and recognition of financial concepts (9). It can also be defined as proper analysis and decision making towards money management. Financial literacy would show the understanding of financial knowledge regarding financial resources management. The essence of many of these definitions is the undeniable importance of the degree of financial knowledge into making informed judgments (10).

Since the year 2000, the definitions of financial literacy have arced towards five categories, which are financial concept knowledge, the communicative ability regarding financial concepts, the sense of importance towards managing personal finance, proper ability in deciding any financial decisions, and assurance in making well-planned financial needs (11).

Financial knowledge has two branches of research focus, which is the ability of the respondent on using and applying general financial knowledge or specific financial knowledge is used as a proxy for financial literacy (12). Concerning financial literacy measurement, Chen and Volpe had conducted a research in four main aspects, which are personal financial knowledge, general financial literacy, investments, and financial planning and taxes (9). Ronald and Haiyang, on the other hand, created knowledge scale that includes skill and knowledge linked to deposit and debit, insurance and investment item, and financial information. Another way to measure financial knowledge is through self-judgment on financial matter knowledge (13, 14). Moreover, financial management knowledge is used as an instrument of evaluation (15).

An individual's attitude towards money may determine their personality and management style (6). Attitude is subjective tendencies to do something and expressed which will be shown through beneficial or disadvantageous evaluation of an object (16).

Financial decisions calls for precise judgment without leaning completely on external resources. Taking these financial decision may still prove to be a difficulty despite having legitimate and sufficient financial knowledge. Attitude towards money is as important as financial knowledge when it comes towards individual financial behavior (9).

A research was conducted which revealed low financial literacy among college students in Malaysia that aligns with several others researchers' findings (17). There also were researchers who conducted research on the links between initial financial knowledge, credit attitudes, and student's financial behavior (18). The relationship shows that financial behavior is not determined by financial knowledge, while financial knowledge determined the student's credit attitude.

Evidence shows that credit card usage attitude is linked to individual financial behavior (18). In general, attitude affects behavior. Moreover, there are evidences which prove that the behavior toward money is foreshadowed by attitudes, which contribute towards foreseeing financial practices. The research's results on financial issues proves that attitude toward money are crucial factors which would determine individual financial behavior, while Ajzen and Fishbein and their theory of reasoned action brings a theoretical footing for recognizing attitude's role in determining behavior (19).

An empirical research (20) shows that financial literacy correlated with better savings. Financial Behavior and financial literacy were also negatively related to financial problems, which mean that students who have greater savings behavior will have lower financial problems.

A series of relationship is developed to explain the causal effects of these variables. Improved financial knowledge leads to a positive financial attitude. Positive financial attitude leads to positive financial behavior. Positive financial behavior leads to a lower financial problem of college students.

Based on the literature review and previous empirical research, it was hypothesized that:

- H1: Financial Knowledge affects Financial Attitude of college students
- H2: Financial Attitude affects Financial Behavior of college students
- H3: Financial Behavior affects Financial Problem of college students

The research model is depicted in figure 1.

### 3. Methodology

This research is a descriptive analysis and causal research. Data are obtained and processed to analyze descriptively financial knowledge, financial attitude, financial behavior, and financial problem of college students in Bandung, West Java, Indonesia. In this case, data is acquired from college students in Bandung as one of many capitals in Indonesia with the best rating universities. This study is also conducted to test the research model in order to determine the causal relationship between related variables.

Primary data from college students in Bandung as the population are obtained through direct surveys by the distribution of questionnaires. In this study, purposive sampling is used in determining the sample. Students who have taken subjects related to financial management become the criteria for determining the sample. The distribution of questionnaires was conduct-

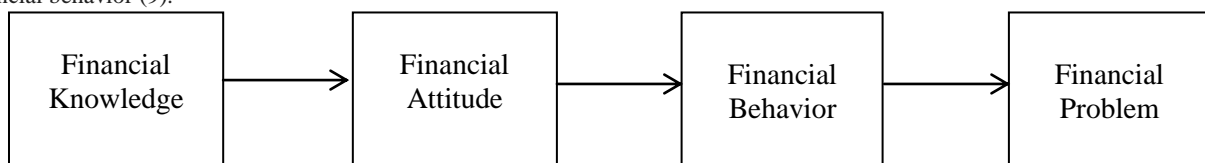


Fig 1: Research Model

ed with supervision to ensure the data obtained in accordance with the objectives of the study. A total of 479 data was obtained from collecting data, and it is in line with the rules of thumb in determining sample size in multivariate research where the sample size should be several times as large as the number of variables (21).

The variables of the research are Financial Knowledge, Financial Attitude, Financial Behavior, and Financial Problem of college students. A 7-point numerical scale is used for every statement of related variables in the questionnaires. A 7-item of one's self-assessment about financial matter knowledge is used in measuring Financial Knowledge; a 6-item of Financial Attitude measurement; a 5-item of Financial Behavior measurement, and a 4-item of Financial Problem measurement. All the variables and its indicators can be seen in Table 1 – 4.

The test of validity and reliability of the measurement instrument was performed prior to testing hypotheses and model. Structural Equation Modeling is used to determine the causal relationship of Financial Knowledge, Financial Attitude, Financial Behavior and Financial Problem, while t-value was used as criteria for hypothesis testing. The data processing is conducted with Lisrel program.

**Table 1:** Financial Knowledge Indicators

No	Financial Knowledge Indicators
1	Understanding on interest rate, finance charges, and credit terms
2	Understanding on credit ratings
3	Understanding on money investment
4	Understanding on bank statement
5	Understanding on return and risk of bond
6	Understanding on how to minimize risk in investment
7	Understanding on preparing budget to achieve financial goals

**Table 2:** Financial Attitude Indicators

No	Financial Attitude Indicators
1	Setting up patterns of saving money and strictly following the patterns is an important action to do
2	Taking notes regarding cash inflows and cash outflows is important and quick to do
3	Deciding on financial goals is important to help in setting up the priorities for expenses.
4	People should always be responsible for their own financial well-being
5	Creating written budget is important to ensure proper financial management
6	Creating financial plan will help decision making regarding investments

**Table 3:** Financial Behavior Indicators

No	Financial Behavior Indicators
1	Creating financial goals
2	Making plans to reach financial goals
3	Setting specific financial goals
4	Knowing roughly how much money needed to achieve financial goals
5	Discussing financial goals with spouses

**Table 4:** Financial Problem Indicators

No	Financial Problem Indicators
1	Uncertain about what for the money is spent
2	Borrowing money from friends
3	Spending more than an individual can afford
4	Borrowing money for basic needs such as buying food

## 4. Results and Findings

A total of 479 data concerning Financial Knowledge, Financial Attitude, Financial Behavior, and Financial Problem was obtained from questionnaires distribution. Validity and Reliability testing of the instrument is applied in advance to ensure that data collection instruments can be used to measure all research variables. Cronbach's alpha as a measure of internal consistency is used to show how closely related a set of items are as a group.

The alpha coefficient for the Financial Knowledge variable is 0.763, suggesting that the items have internal consistency since a reliability coefficient of 0.70 or higher is considered acceptable in most social science research. The validity testing result shows that based on the correlation value between 0.378 – 0.612, it can be concluded to the all seven indicators of Financial Knowledge variable are valid.

The validity and reliability testing for Financial Attitude variable and its indicators show that the items have internal consistency since the alpha coefficient is 0.723. The result also shows that the all six indicators of Financial Attitude construct are valid with corrected item-total correlation values between 0.396 – 0.556.

The same testing is conducted for Financial Behavior and Financial Problem construct, and the result shows that Financial Behavior construct is reliable with Alpha coefficient is 0.805, and moderate reliable for Financial Problem construct with Alpha coefficient 0.642. The validity testing for five indicators of Financial Behavior variable shows that the correlation value is between 0.377 – 0.720, and 0.318 – 0.523 for four indicators of Financial Problem variable, it can be concluded to all indicators of both variables are valid.

A description of Financial Knowledge, Financial Attitude, Financial Behavior and Financial Problem of college students in Bandung can be seen from the results of data processing obtained from the respondents. College students have an average level of financial management understanding, which can be seen from the questionnaire result of average 4.287 on a 1 - 7 numerical scale. For students who have taken subjects related to financial management, they do not have sufficient financial knowledge. Two items with low scores below 4 on a 1 – 7 scales show that they do not have enough financial knowledge about bond's return and risk, and how to minimize risk in investment. They have above average financial knowledge pertaining to understanding of bank statement and how to prepare budget to achieve financial goals.

The questionnaire result for the Financial Attitude items is an average of 5.920. The relatively above average scale values of Financial Attitude shows students' agreement especially with respect to someone should always be responsible for their own financial well-being.

The items associated with students' Financial Behavior are ranged in between 4.0731 to 4.8163, which show that college students consider creating financial goals and make plans how to achieve it, and surprisingly they know roughly how much money needed to achieve their financial goals.

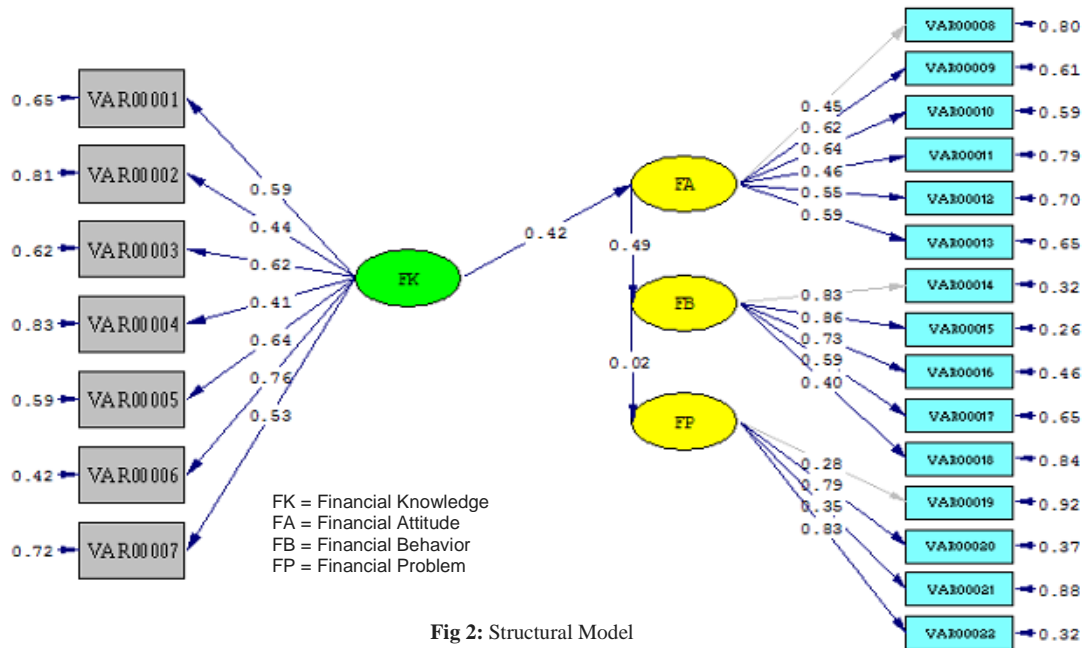


Fig 2: Structural Model

The average respondents' answer for items representing Financial Problem is 2.700 which shows that college students relatively do not have any significant financial problem, such as they do not borrow money from friends, especially for buying food.

The other objective of this study is to test the causal relationship between Financial Knowledge, Financial Attitude, Financial Behavior, and Financial Problem of college students. Structural Equation Modeling is used to determine the causal relationship of these related variables. The results of the data processing of the causal relationships among variables show that Goodness of Fit Indices (GFI) is 0.88, Root Mean Square Error of Approximation (RMSEA) is 0.072, and Adjusted Goodness of Fit Index (AGFI) = 0.85.

Hypothesis testing shows the influence of Financial Knowledge on Financial Attitude, which is indicated by t-value of 5.88; while Financial Attitudes also significantly influence Financial Behavior of college students with t-value of 6.58. The estimated coefficient of Financial Knowledge on Financial Attitude is 0.42, and the estimated coefficient of Financial Attitude on Financial Behavior is 0.49. However, hypothesis testing between the Financial Behavior and Financial Problem shows that the Financial Behavior has no impact on the Financial Problem which is indicated by t-value of 0.34.

This result suggests that college students' understanding of the financial concepts will positively determine their financial attitude, and their financial attitude will positively influence their financial behavior. In this case, the role of Financial Knowledge is significant in determining Financial Attitude, and will further have a positive impact on the Financial Behavior. However, the result of this study also reveals that there is no positive effect of Financial Behavior on the Financial Problem of college students. Students who have no significant financial problem are not due to their financial behavior. This fact can be due to their family background which is a family with a relatively prosperous life.

The results of hypothesis testing show that only two hypotheses are proved. The relationship of the related variables can be seen in Figure 2.

## 5. Conclusion

The findings of this study indicate that college students have an average level of financial management understanding. However, for college students who have taken subjects related to financial management, they seem do not have sufficient financial knowledge. The survey result which revealed relatively low financial knowledge of college students corroborates with findings of previous studies (2, 17). The relatively above average scale values of Financial Attitude shows students' agreement of the importance of various aspects pertaining to financial plans and management. They also seem to consider creating and planning financial goals in their Financial Behavior, and they relatively do not have any significant financial problem.

The study also revealed the role of Financial Knowledge which is significant in determining Financial Attitude. Financial Attitude also has a positive impact on Financial Behavior of college students. This result corroborates with findings of the previous studies (18, 19, 22) which showed that financial knowledge of college students was found predicting their attitude. However, there is no positive effect of Financial Behavior on the Financial Problem of college students. The college students as the sample of the study relatively have no financial problems which could be due to their relatively prosperous family background.

Based on the results of the study, it is necessary to focus on specific aspects that college students are lacking in financial knowledge, since college students, especially those who have taken financial management subject, should have adequate financial knowledge. Universities should play a role in imparting financial knowledge such as in the curriculum, with more attention to the subject especially pertaining to personal financial management.

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