Personal Finance Management Model for Polytechnic Students

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Abstract—This study aims to: (1) examine the impact of financial literacy on financial attitude; (2) influece of financial attitude on financial behavior; (3) impact of financial literacy on financial behavior. Data were collected using questionnaires, interviews, observations, and literature studies. The research model was built using the structural equation model and analyzed with smartPLS-3 software. The results showed that (1) there is a positive and significant impact of financial literacy on financial attitude; (2) there is a positive and significant influence of financial attitude on financial behavior; (3) there is a positive and significant impact of financial literacy on financial behavior. The suggestions that can be given are (1) additions or changes to campus subjects and programs such as seminars so that students can better understand financial knowledge, behavior and attitudes; (2) further research needs to follow up the findings of this research by adding other variables included in the model, so that becomes more interesting and perfect.

Keywords—financial behavior, financial attitude, financial literacy, financial management, personal finance

I. Introduction

An individual decision related to financial problems requires a good understanding in the financial field. A good understanding of financial issues -known as financial literacy- should be a financial guideline for anyone who has financial problems. Thus, financial literacy is one of the factors that contribute to financial decisions that lack of information so that it can have a negative impact [1]. Financial literacy is a fundamental understanding and knowledge that is also needed for the need of successful personal finance arrangements [2]. In a previous study [3], regarding financial literacy, it was said that in Indonesia it was ranked 43rd among 55 other countries, while those in the first position were Singapore and followed by Finland, Ireland, Hong Kong and Australia.

Financial knowledge should be planted early on in the Indonesian community and balanced with financial skills and financial attitudes, especially for the younger generation to grow, they are able to better understand how to manage the financial world. Financial Literacy directs individuals to be able to use financial instruments and products and is able to make appropriate financial decisions. While financial behavior is a behavior related to financial practices or applications [4], and financial attitude is a state of mind, opinions and valuations about finance [5], so that these three variables are the benchmarks of a person's success in managing finances and making appropriate financial decisions.

College is the first time for most students to manage finances independently without full supervision from parents [6]. During the lecture period, students are in a transition period from dependence to financial independence and during the lecture period students must also make plans that will affect their welfare and future success. Students are one component that is quite large in number and will have a major influence on the economy because in the future these students will enter the workforce and begin to be independent including in financial management.

According to [7], students as the younger generation will not only face increasing complexity both in financial products, services and markets, but more likely to have to bear greater financial risks from their parents in the future. Students have complex financial problems because most students do not have income, the reserve funds are also limited to use every month. The problems faced can be due to delays in remittances from parents, or monthly money out of time, which can be caused by unexpected needs, or caused by wrong personal financial management, absence of budgeting, and wasteful lifestyles and consumption patterns.

From several previous studies [8] concluded that the best way to improve behavior in adulthood is to teach good behavior since childhood, including financial behavior, while Indonesia is still lacking in good personal financial education in elementary school to college. If it is associated with financial difficulties, this is not only due to the low level of income, but also due to mismanagement of money, so that financial literacy factors are needed.

According to [9], with financial literacy, individuals and families can enjoy life by using their financial resources right in order to achieve their personal financial goals. Some research has been done before [10-13] found that there were significant differences in the level of financial attitudes between women and men and could not have significant differences in financial literacy based on the gender of the study program. In Research [14] found that there were significant differences in the level of financial literacy, financial behavior and financial attitude based on student residence. Whereas [11] found that there were no financial literacy differences between women and men.

II. Literature Review

A. Financial Literacy

Financial literacy is the ability of an individual to make decisions in terms of personal financial arrangements. Financial literacy or financial knowledge is one of the important aspects in everyday life that directs individuals to use financial instruments and products and be able to make

the right decisions. Financial literacy is a fundamental understanding and knowledge that is also needed for the need for successful personal finance regulation [2].

B. Financial Behavior

Financial behavior is behavior related to financial practices or applications [11]. Financial Behavior relates to how a person can manage and use financial resources available to him [4]. Whereas according to [15], Financial behavior is a scientific discipline in which the interaction of various scientific disciplines is inherent and continuously integrates so that the discussion is not carried out isolation.

In this study, to assess the level of financial behavior, the researcher establishes several statements relating to one's financial behavior, such as making a budget, saving money and controlling spending, investing and paying obligations on time.

C. Financial Attitude

Financial attitude is an application of financial principles to create and maintain value through appropriate decision making and resource management. The financial attitude is a state of mind, opinion and financial judgment [5]. According to [16], attitudes are evaluative statements both pleasant and unpleasant towards objects, individuals and events.

Every individual who always applies the financial attitude in his life will make it easier for the individual to determine attitudes and behavior in financial matters, such as managing finances, arranging personal budgets and making the right investment decisions.

D. Gender Theory

In terminology according to [4] gender is defined as a concept related to the role of men and women at a time and certain cultures that are constructed socially not biologically. Whereas According to [11] gender is a trait inherent in both men and women that is constructed socially and culturally. Furthermore, gender is defined as a set of roles that include appearance, clothing, attitude, personality, working inside and outside the household, sexuality, responsibility, which convey to others that someone is feminine or masculine [17].

[18] revealed that the role of gender to be entered by women and that distinguishes women in various countriestend to offer less opportunities for ownership of wealth and other assets, political power, education, health, and to get a decent income. Therefore, there is a need for gender awareness in all aspects of life.

Gender awareness refers to gender-sensitive attitudes and commitment to placing women's needs and priorities at the center of planning and development programs [19]. In other words gender awareness refers to gender equality and justice. [19] explains that the issue of gender equality is considered to be closely related to social justice in a broader sense. Furthermore, it was also explained that gender equality is defined as the similarity of conditions for men and women in obtaining opportunities and their rights as human beings, in order to be able to play a role and participate in political activities, law, economy, social culture, etc.

III. RESEARCH METHODS

The object of the present research was the students of Bali State Polytechnic. The population comprised 4,630

students. The number of samples taken was 98 students. The recruitment of the respondents was done using proportionate stratified random sampling. According to [20]. this technique is used if the population has elements that are not homogeneous and have proportional proportions. Data were collected using questionnaires and documentation. The collected data were then analyzed using partial least squares-SEM (PLS-SEM) with the help of the SmartPLS 3.2.8 program.

A. Research Conceptual Framework

Based on the theories and research findings that have been described above, it was possible to describe a concept and the development of hypotheses in this study. The research model can be determined as shown in Fig. 1 below:
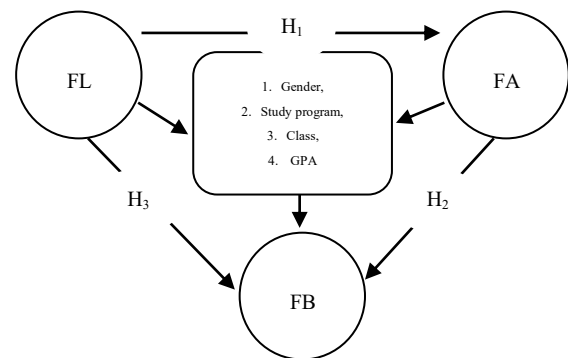

Fig. 1. Research conceptual framework.

B. Hypothesis

- H1: Financial Literacy will have a positive and significant effect on Financial Attitude;
- H2: Financial Attitude will have a positive and significant effect on Financial Behavior;
- H3: Financial Literacy will have a positive and significant effect on Financial Behavior;

C. Measurement of The Variables

The variables in this study were measured from the constructs (latent variables) Financial Literacy (X1), Financial Attitude (X2), and Financial Behavior (Y). Each construct consists of several measurable variables as shown in Table I.

IV. RESULTS AND DISCUSSIONS

A. Assessment of The Measurement (outer) Model

The measurement (outer) model shows how each indicator block relates to its latent variable (construct). There are several tests that can be used to see the significance of each indicator making up a construct, namely test of validity and test of reliability.

1) Test of Validity

To determine the validity of each indicator of a construct can be seen from the convergent validity and determinant validity. Convergent validity of a measurement model with reflective indicators can be seen from the correlation between item / indicator scores and the construct scores. Individual indicators are considered reliable in a research, if

the loading scales range 0.50 to 0.6, and thus are still acceptable. Table II shows that all indicators in the Financial literacy, Financial behavior and Financial attitude constructs were valid constructs because they have a loading factor of more than 0.50.

TABLE I. IDENTIFICATION OF RESEARCH VARIABLES

Variables	Defenitions	Indicators
Financial literacy (X_1)	The ability of an individual to make decisions in terms of financial arrangements	1. Fundamentals of finance (X_{11}) 2. Money management (X_{12}) 3. Credit and savings (X_{13}) 4. Savings and investasi (X_{14}) 5. Risk (X_{15})
Financial attitude (X_2)	Application of financial principles to create and maintain value through appropriate decision making and resource management	1. Management thinking pattern money well (X_{21}) 2. Attitude of satisfaction shop (X_{22}) 3. Owning comfort money (X_{23}) 4. Attitude doesn't feel enough towards income (X_{24}) 5. Attitude doesn't want to spend money (X_{25}) 6. Independence of management money (X_{26})
Financial behavior (Y)	Behavior related to financial practices and applications	1. Budgeting (Y_1) 2. Money savings and patterns shopping (Y_2) 3. Savings and investment (Y_3) 4. Payment of obligations (Y_4)

TABLE II. OUTER LOADING COEFFICIENT FOR EACH INDICATOR

	FA	FB	FL
X_{21}	0.824		
X_{22}	0.852		
X_{23}	0.904		
X_{24}	0.868		
X_{25}	0.800		
X_{26}	0.841		
Y_1		0.907	
Y_2		0.902	
Y_3		0.923	
Y_4		0.910	
X_{11}			0.896
X_{12}			0.901
X_{13}			0.894
X_{14}			0.961
X_{15}			0.899

Another way to measure the validity of each indicator of a construct is to look at the discriminantt validity by looking at the AVE value. The model is considered good if the AVE value of each construct is more than 0.50. Table III shows the AVE values for all constructs (Financial literacy (FL), Financial behavior (FB), and Financial attitude (FA) were greater than 0.50.

TABLE III. AVE VALUES

	AVE	√AVE
FA	0.720	0.848
FB	0.830	0.911
FL	0.829	0.910

2) Test of Reability

The construct reliability test was carried out with two criteria, namely composite reliability and Cronbach alpha from the indicator block. Constructs are said to be reliable if the composite reliability and Cronbach alpha values are greater than 0.70. Table IV shows that the constructs Financial literacy, Financial attitude, and Financial behavior.

TABLE IV. COMPOSITE RELIABILITY AND CRONHBACH ALPHA COEFFICIENTS

	Composite Reliability	Cronbachs alpha
FA	0.939	0.922
FB	0.951	0.932
FL	0.960	0.948

B. Assessment of the Structural Model (Inner Model)

The assessment of the structural model was done by looking at the R-square value which is a goodness-fit model test. The model of the effect of Financial Literacy on Financial Behavior yielded a value of 0.272 (27.2 percent) and 0.673 (67.3 percent) was influenced by Financial Attitude, as seen in Fig. 2.
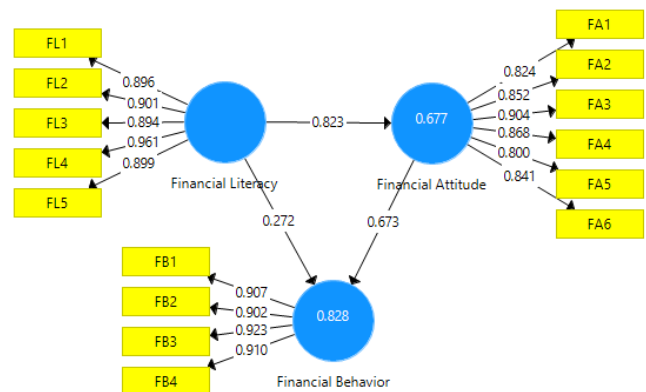

Fig. 2. Outer loading and path analysis.

C. Hypothesis Testing

This research was conducted to examine the students financial model through financial behavior, financial attitude and financial literacy at Bali State Polytechnic. The significance of the effect of the construct can be seen from the results of statistical tests as shown in Fig. 3 and Table V:
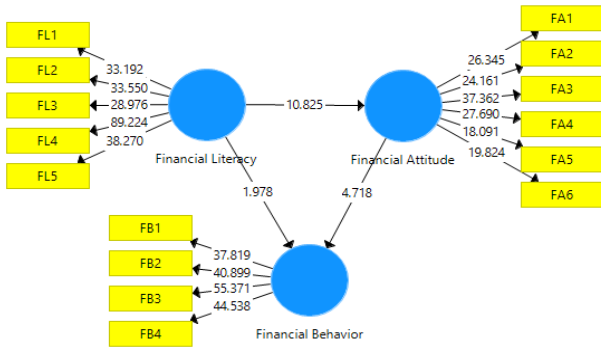
Fig. 3. Bootstrapping model

TABLE V. PATH COEFFICIENTS (MEAN, STDEV, T-VALUES)

	Original sample (o)	Sample mean (m)	Standard deviation (stdev)	t- Statistics (o/stdev)
FA to FB	0.673	0.629	0.143	4.718
FL to FA	0.823	0.822	0.076	10.825
FL to FB	0.272	0.316	0.137	1.978

The relationship between Financial literacy and Financial attitude was positive and significant. This can be seen from the t-statistics value of 10.825 (more than 1.96). Thus it can be concluded that there was a positive and significant effect of Financial literacy on Financial attitude, and this Means that the H_1 hypothesis was accepted.

The relationship between Financial attitude and Financial behavior was positive and significant. This can be seen from the t-statistics value of 4.718 (more than 1.96). Thus it can be concluded that there was a positive and significant effect of Financial attitude on Financial behavior, and this means that the hypothesis H_2 was accepted.

The relationship between Financial literacy and Financial behavior was positive and significant. This can be seen from the t-statistics value of 1.978 (more than 1.96). Thus it can be concluded that there was a positive and significant effect of Financial literacy on Financial behavior, and this means that the H_3 hypothesis was accepted.

D. Comparative Testing of Variable

Financial literacy and financial attitude had a positive and significant effect on Financial behavior. Path analysis showed that the magnitude of the effect of Financial literacy was 0.272 and that of Financial attitude was 0.673. This shows that the effect of Financial attitude is greater than the effect of Financial literacy. This is in accordance with the theory of social learning that Financial literacy as a cognitive process affect the Financial behavior. Relevant earlier research is done by [15], [21], and [22] that Financial literacy has a significant positive effect on Financial behavior. The higher the level of Financial literacy owned by the student then the behavior of personal financial management will also be better. Conversely, the lower level of Financial literacy students, then the level of personal financial management behavior is also getting worse.

This study is also relevant to the research of [23-25] that the Financial attitude influence to Financial management behavior. A very good Financial attitude will have an impact on the Financial management behavior is also good, students will be more responsible in managing personal finances.

V. CONCLUSION

On the basis of the discussion above, it can be concluded that: (1) there is a positive and significant impact of Financial literacy on Financial attitude; (2) there is a positive and significant influence of Financial attitude on Financial behavior; (3) there is a positive and significant impact of Financial literacy on Financial behavior. The suggestions that can be given are (1) additions or changes to campus subjects and programs such as seminars so that students can better understand financial knowledge, behavior and attitudes; (2) further research needs to follow up the findings of this research by adding other variables included in the model, such as the role of the college to provide scholarship.

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