Factors Affecting Financial Behaviors:
Studies in Students Who Do Venture Creation

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Abstract—**This study was conducted to determine the effect of financial knowledge, financial attitude, locus of control, risk tolerance, motivation, and mental accounting on financial behavior. The population was 168 students majoring in International Business Management at Universitas Ciputra Surabaya. The characteristics of the respondents are students who are in the 6th semester and above at the time of taking the sampling with purposive sampling method. The data obtained were analyzed using Partial Least Square (PLS). The result shows that the factors of financial knowledge, locus of control, motivation, have no effect on financial behavior. While the factors of financial attitude, risk tolerance, and mental accounting have an effect on financial behavior.**

Keywords— *Financial Knowledge, Financial Attitude, Locus of Control, Risk Tolerance, Motivation, Mental Accounting, Financial Behavior, Students.*

1. Introduction

The National Financial Literacy Survey (SNLIK) conducted by the Financial Services Authority (OJK) in 2019 showed that the financial literacy index reached 38.03%, an increase from the 2016 OJK survey results, which was 29.7% (Otoritas Jasa Keuangan (OJK), 2019). Low when compared to other ASEAN countries such as Singapore (98%), Malaysia (85%), Thailand (82%) (Afifa, 2020). Financial literacy is the ability to obtain information, analyze, manage, communicate about personal financial conditions that affect a person's welfare (Mouna & Jarboui, 2015). A person who has good financial literacy will affect his financial management which includes investment decisions, funding, and asset management. Furthermore, financial management can be seen from how his financial behavior (financial behavior), and good financial behavior will certainly improve a person's welfare.Several studies have found that there are factors that influence the financial behavior, namely financial knowledge, financial attitude, locus of control, risk tolerance, motivation, and mental accounting.

The urgency of this research is that financial behavior is very important for business people because financial behavior affects a person in making financial decisions such as investment (Arianti, 2018). The decisions taken well will lead to good business development and personal well-being and the employees who work in the business. Therefore, it is very important to know what factors influence financial behavior. This study responds to the need to know the importance of knowing the factors that influence financial behavior.

2. Literature Review
2.1. Previous Research

In addition to influencing financial behavior, it turns out that financial attitude also mediates the relationship between financial knowledge and financial behavior (Yong et al., 2018). Research that analyzes factors that influence financial behavior in students shows that financial attitude and financial knowledge affect financial behavior (Ahmad et al., 2019). Other research studies several factors that influence financial behavior and the results show that financial attitude affects financial behavior while financial knowledge and locus of control do not affect financial behavior (Prihartono & Asandimitra, 2018). Tolerance to risk is one of the important factors that influence a person's behavior towards financial management. Tolerance to risk affects financial behavior, especially in making investment decisions (Nur Aini & Lutfi, 2019). Another study examines the relationship between financial behavior and motivation. Motivation is an impulse or reason that becomes the basis of a person's enthusiasm to do something to achieve certain goals. Motivation can affect a person's financial behavior (Wardani & Lutfi, 2016). Wardani's

findings support several other research findings, namely Mandell and Klein (2007) & Angulo-Ruiz and Pergelova, (2015). Mental accounting is a phenomenon of how someone divides money into several separate accounts or accounts based on the purpose and source of the money to ensure financial activities. According to initial planning (Thaler, 1999). Mental accounting will control someone in spending their money as well as how to manage their finances (Santi et al., 2019) and mental accounting affects a person's financial behavior (Zhang & Sussman, 2017).

2.2. Theoretical basis

2.2.1. Financial Behavior

Financial behavior is a person's ability to manage (planning, budgeting, checking, managing, controlling, searching and storing) daily financial funds. The emergence of financial management behavior, is the impact of a person's desire to fulfill their needs in accordance with the level of income earned (Kholilah & Iramani, 2013).

2.2.2. Financial Knowledge

Financial knowledge is what individuals know about personal financial matters, as measured by their level of knowledge about various personal finance concepts (Herdjiono & Damanik, 2016). Several indicators are included in financial knowledge. General knowledge about personal finance, savings and loans, insurance, and investment.

1. Savings and Borrowing, is collecting funds from the wider community which is then stored in bank deposits.
2. Insurance, is a guarantee provided by insurance companies to customers for the risk of loss as specified in the agreement letter in the event of undesirable things, such as fire, loss, damage, accident, and loss of life.
3. Investment, is a commitment to a number of funds made at this time for the purpose of obtaining a number of benefits in the future.

2.2.3. Financial Attitude

Attitude is a state of mind, opinion, and judgment about the world they live in, and financial attitude can be interpreted as a person's state of mind, opinion, and assessment of his personal finances which is applied to one's attitude (Amanah et al., 2016).

2.2.4. Locus of Control

The concept of locus of control was first put forward by Rotter (1966), a social learning theorist. Locus of control is a person's perspective on an event whether he can or cannot control the events that occur to (Ida & Dwinta, 2010). Rotter divides locus of control into two, namely: internal locus of control and external locus of control. Internal locus of control means having a tendency for individuals to assume that their own skills, abilities, and efforts determine the outcome. While external locus of control means that someone thinks that life is determined by fate, destiny, luck, or other people.

2.2.5. Risk Tolerance

Risk Tolerance is an acceptable level of ability in taking an investment risk. There are three types of people in decision making, namely people who tend to like high risk (risk seekers), people who like to avoid risk (risk averter), and moderate (people who tend to be between risk seekers and risk averters (Wardani & Lutfi, 2016). is one of the very strong determinants in making investment decisions, having an impact on a person's prudence in making financial decisions or financial management (Yohnson, 2008).A person who has a high risk profile will be different from others who have a low risk profile in managing finances as well as in taking financial risks (Ayu Wulandari & Iramani, 2014).This is very visible when someone makes a decision to invest (Nur Aini & Lutfi, 2019).

2.2.6. Motivation

Motivation is an impulse or reason that becomes the basis of a person's enthusiasm to do something to achieve certain goals. Motivation has long been recognized as the prime mover in an individual's behavior. Based on the theory of motivation and goal setting, financial literacy programs will be more effective when a person is motivated by his perceptions and concerns about his financial well-being in the future (Mandell & Klein, 2007). found that motivation is a very important driver in financial literacy. Motivated individuals are able to control spending and purchase impulses, start or increase the contribution of savings or investments that have a certain expected return (Wardani & Lutfi, 2016).

2.2.7. Mental Accounting

Mental Accounting is one aspect of behavioral finance that is often experienced by decision makers, referring to the tendency to group finances in different accounts based on subjective criteria, such as sources of funding and the purpose of using income (Hidayati, 2016). Mental accounting affects a person's behavior in managing their finances (Santi et al., 2019), for example when someone gets money from different sources they will treat it differently and spend the money in different ways. Mental budget and self-control which are part of mental accounting have the highest influence on financial behavior Haryana (2017) & Zhang and Sussman (2017) found that mental accounting affects a person's behavior in managing his finances. Mental accounting specifically affects how a person manages the budget, manages his expenses, and how to make investments properly (Haryana, 2017; Santi et al., 2019; Zhang & Sussman, 2017).

3.   Research Methods
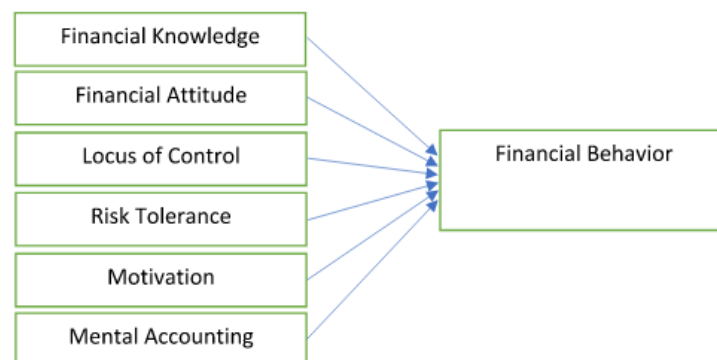## 3.1.   Analysis Model

Figure 3.1. Research Analysis Model

3.2.   Research Hypothesis

Based on the conceptual framework of the research above, it can be proposed hypothesis as follows:
- H1: Financial Knowledge has a significant effect on Financial Behavior
- H2: Financial Attitude has a significant effect on Financial Behavior
- H3: Locus of Control has a significant effect on Financial Behavior
- H4: Risk Tolerance has a significant effect on Financial Behavior
- H5: Motivation has a significant effect on Financial Behavior
- H6: Mental Accounting has a significant effect on Financial Behavior

3.3.   Research Approach

This research is a quantitative explanatory research that aims to determine the factors that influence financial behavior through hypothesis testing where the research data is in the form of numbers and analysis using statistical testing. The population in this study were students majoring in International Business Management – Regular Class (IBM-RC) at Universitas Ciputra Surabaya who when this research was conducted were in their 3rd and 4th year of study, and these students were starting a business or doing venture creation. The number of respondents in this study were 470 active students. The sample used in this study was obtained by purposive sampling technique with the aim that the sample taken later is in accordance with the research objectives and provides a more representative value. Some of the requirements for sampling in this study are:

1. Students of the 3rd and 4th year IBM (International Business Management) study program studying
2. Students who are starting a business / doing venture creation
3. Students who are willing to fill out the questionnaire

The type of data used is quantitative data, namely data in the form of numbers or qualitative data that is numbered. Data obtained from the results of questionnaires distributed to research respondents. The data from the questionnaire is in the form of qualitative data, but then the data is numbered so that it becomes quantitative data. This study uses primary data sources, namely data obtained from the results of measuring responses from respondents using questionnaires. The questionnaire was prepared based on operational definitions that have been carried out to explain each variable in the study.

3.4.   Operational Definition of Research Variables

The operational definitions of variables in this study are as follows:

1. The independent variables in this study are Financial Knowledge, Financial Attitude, Locus of Control, Risk Tolerance, Motivation, Mental Accounting.
2. The dependent variable in this study is Financial Behavior.

3.5.   Data Test

3.5.1.   *Validity and Reliability Test*

In this study, the validity test was carried out by conducting a bivariate correlation between each indicator score and the total score of the variable construct. The results of the validity test are seen from the Pearson correlation and Sig. (2-tailed). The Pearson product moment correlation coefficient value is more than 0.5 indicating a strong correlation. This value shows a strong positive correlation between the predictor and the outcome variable. On the other hand, if the value of the Pearson product moment correlation coefficient is less than 0.5, it indicates a low or weak correlation. In addition, a significant correlation can be seen from the value of Sig.(2-tailed) smaller than 0.05. So, the value of the correlation coefficient of the Pearson product moment test is more than 0.5 and the value of Sig.(2-tailed) is less than 0.05, indicating that the indicators for each variable are valid.

Reliability test is a test to determine the consistency of a questionnaire (Purnomo, 2016, p. 79). Consistency here means that the questionnaire can show constant measurement results repeatedly. The test is a continuation of the validity test because the items tested in this reliability test are items that have passed the validity test only. In testing this reliability, the researcher used Cronbach's alpha. A good Cronbach's alpha coefficient value is at least 0.70 but a value of 0.60 is still acceptable. When the Cronbach's alpha coefficient is close to 1, this indicates that the reliability of internal consistency is high (Hair et al., 2014). Based on the table below, all variables show the coefficient value of Cronbach's alpha & > 0.60 where this value is still accepted and can be declared reliable.

3.5.1.   *Data analysis*

The data analysis method used in this study is multiple linear regression analysis, because the purpose of this study is to determine the relationship between two or more independent/independent variables with one dependent/dependent variable and only uses one regression model. The equation of the multiple linear regression formula in the study is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon \qquad (1)$$

Description::

Y	= Financial Behavior
α	= Constant
$\beta_1, ... \beta_6,$	= Regression Coefficient
X_1	= Financial Knowledge Variable
X_2	= Financial Attitude Variable
X_1	= Variable Locus of Control
X_2	= Variable Risk Tolerance
X_1	= Motivation Variable
X_2	= Mental Accounting Variable
ε	= Standard Error

a. Test Statistics (F)

The F test is a method to test whether or not the multiple linear regression analysis model is suitable (Ghozali, 2018, p. 98). The criteria for the F test results are as follows:

1. If the value of sig. F $\geq$ 0,05 it can be concluded that the independent variables (X_2, X_3, X_4, X_5, X_6) simultaneously have no significant effect on the dependent variable (Y).
2. If the value of sig. F $\leq$ 0,05 it can be concluded that the independent variables (X_2, X_3, X_4, X_5, X_6) simultaneously have a significant effect on the dependent variable (Y).

b. Partial Test (t)

If the value of sig t test & <0.05, it can be concluded that the independent variable (X) individually or partially has a significant effect on the dependent variable (Y). The t test or also called the partial regression coefficient test is a testing technique to determine the level of influence of the independent variable on the dependent variable in partial/individual (Ghozali, 2018, p. 98). The purpose of the t-test is to determine the acceptance limit of a research hypothesis.

c. Test Correlation Coefficient (R) and the coefficient of determination (R ^{2})

The correlation coefficient test aims to determine the magnitude of the strength of the relationship between the independent variables and the dependent variable simultaneously (Mudrajad, 2013, p. 246). The value of the correlation coefficient which has a strong relationship will be close to number 1. The coefficient of determination test is a test used to explain the percentage of the influence of the dependent variable (Ghozali, 2018, p. 97). The criteria for the coefficient of determination are as follows: If R ^{2} or adjusted R ^{2} has a value of 1 then the model has a match with the research population data, on the other hand if R ^{2} or adjusted R ^{2} has a value of 0 then the model does not have a match with the population data study. So it can be concluded that the smaller the coefficient of determination means the more limited the ability of the independent variable in explaining the variation of the dependent variable.

d. Classic assumption test

Normality is the most fundamental assumption in multivariate analysis which is a form of data distribution on a single metric variable to produce a normal distribution (Hair et al., 2014). This normality test is carried out to see if the assumption of normality is met or not so that the data can be processed further. In this study, the normality test was tested using the skewness and kurtosis values of the residuals. The statistical z value for skewness can be calculated by the following formula,

$$Zskewness = \frac{Skewness}{\sqrt{\frac{6}{N}}} \qquad (1)$$

While the z value of kurtosis can be calculated by the following formula,

$$Zkurtosis = \frac{Kurtosis}{\sqrt{\frac{24}{N}}} \qquad (2)$$

Where the value of N is the number of samples, if the value of Z count > Z table which is 2.58 at a significance level of 0.01 then the distribution is not normal.

The multicollinearity test aims to determine whether the relationship between independent variables has multicorrelation or not. Multicorrelation is a very high or very low correlation that occurs in the relationship between independent variables (Sarjono & Julianita, 2011). The criteria for a good regression model is if there is no correlation coefficient value. or is zero. The smaller the correlation coefficient, the better. Data that does not have multicollinearity is data that has a Variance Inflation Factor (VIF) value of < 10 and a tolerance value of > 0.1.

4. Result and Discussion
4.1. Description of Research Results

The samples used in this study were undergraduate students majoring in International Business Management at Universitas Ciputra Surabaya who were undergoing semester 6 and 8 of college who were starting a business in their lectures. A total of 93.4% of respondents were aged 20-22 years and the rest were under 20 years old and over 22 years old. Based on the UMR value of the city of Surabaya in 2020 of Rp. 4,200,479, the amount of expenditure or pocket money per month for respondents can be classified as follows:

1. Expenditures below the minimum wage were 111 respondents (66%).
2. Expenditures above the minimum wage were 57 respondents (34%).

Through the results of the questionnaire, it can be concluded that the majority of respondents consist of students aged 20-22 years with the amount of expenditure or pocket money with a middle economic level.

Based on the statements in the questionnaire, the results of the statements per variable can be seen in the following table:

Table 4.1. Description Answer per variable

No.	Variable	mean	Standard Deviation
1	Financial Knowledge	0.64	0.517
2	Financial Attitude	6.28	1.058
3	Locus of control	5.26	1.385
4	Risk Tolerance	4.16	1,742
5	Motivation	6.10	1.132
6	Mental Accounting	4.91	1,612
7	Financial Behavior	5.44	1.464

Source: **Data by researcher**

Based on table 5.1, the results show that:
1. The mean value of the financial knowledge variable is 0.64. This shows that the respondent's knowledge of the calculation of interest, time value of money, and investment is slightly above the average.
2. The mean value of the financial attitude variable is 6.28. This shows that most of the respondents have exercised financial control, already have financial planning in terms of consumption, investment, and savings. This variable also has a standard deviation of 1.058, which means that the respondents' answers are quite homogeneous compared to other variables.
3. The mean value of the locus of control variable is 5.26. This shows that most of the respondents tend to the external locus of control.
4. The mean value of the risk tolerance variable is 4.16 and the standard deviation is 1.742. This shows that respondents do not tend to high or low risk profiles and the most heterogeneous answers are indicated by the highest standard deviation compared to other variables.
5. The mean value of the motivation variable is 6.10. This shows that the majority of respondents are motivated to have a better financial condition, try to do financial planning and try to manage their finances better.
6. The mean value of the mental accounting variable is 4.91 and the standard deviation is 1.612. This shows that the average respondent tends to be neutral in the behavior of recording and controlling finances, although they tend to do financial recording and control. The standard deviation of this indicator is the second highest among other variables, indicating that respondents' answers tend to be heterogeneous in this variable.
7. The average financial behavior variable is 5.44. This shows that the majority of respondents tend to regulate their financial behavior

4.2. Results

4.2.1. *Validity test*

The output results of the validity of this study can be seen in the following table:

Table 4.2. Initial Validity Test Results

Variable	Indicator	Validity		Conclusion
		Pearson Correlations	Nilai Sig. (2-tailed)	
Financial Attitude	FA1	0,695	0,000	Valid
	FA2	0,804	0,000	Valid
	FA3	0,693	0,000	Valid
	FA4	0,768	0,000	Valid
	FA5	0,734	0,000	Valid
	FA6	0,635	0,000	Valid
	FA7	0,745	0,000	Valid
	FA8	0,692	0,000	Valid
Locus of Control	L1	0,699	0,000	Valid
	L2	0,548	0,000	Valid
	L3	0,748	0,000	Valid
	L4	0,768	0,000	Valid
	L5	0,597	0,000	Valid
	L6	0,778	0,000	Valid
Risk Tolerance	R1	0,296	0,000	Invalid
	R2	0,571	0,000	Valid
	R3	0,644	0,000	Valid
	R4	0,686	0,000	Valid
	R5	0,679	0,000	Valid

Variable	Indicator			
Motivation	M1	0,765	0,000	Valid
	M2	0,645	0,000	Valid
	M3	0,601	0,000	Valid
	M4	0,758	0,000	Valid
	M5	0,618	0,000	Valid
	M6	0,543	0,000	Valid
Mental Accounting	A1	0,572	0,000	Valid
	A2	0,649	0,000	Valid
	A3	0,739	0,000	Valid
	A4	0,495	0,000	Invalid
	A5	0,446	0,000	Invalid
	A6	0,709	0,000	Valid
	A7	0,508	0,000	Valid
	A8	0,567	0,000	Valid
	A9	0,549	0,000	Valid
Financial Behavior	FB1	0,598	0,000	Valid
	FB2	0,632	0,000	Valid
	FB3	0,744	0,000	Valid
	FB4	0,412	0,000	Invalid
	FB5	0,525	0,000	Valid
	FB6	0,577	0,000	Valid
	FB7	0,455	0,000	Invalid
	FB8	0,575	0,000	Valid
	FB9	0,454	0,000	Invalid

Source: **Data processed by researchers**

Table 4.2 shows that there are 6 indicator items that are not valid because there is a Pearson correlation value of less than 0.5 on indicators R1, A4, A5 FB4, FB7, and FB9. So it is necessary to re-analyze by eliminating indicators R1, A4, A5 FB4, FB7, and FB9 whose values are below 0.50 so as to obtain the results as shown in Table 4.2. From the final validity column, it can be seen that each indicator item already has a Pearson correlation value above 0.50 and meets the requirements to be tested for the next stage, namely reliability testing.

Table 4.3. Final Validity Test Results

Variable	Indicator	Validity		Conclusion
		Pearson Correlations	**Nilai Sig. (2-tailed)**	
Financial Attitude	FA1	0,695	0,000	Valid
	FA2	0,804	0,000	Valid
	FA3	0,693	0,000	Valid
	FA4	0,768	0,000	Valid
	FA5	0,734	0,000	Valid
	FA6	0,635	0,000	Valid
	FA7	0,745	0,000	Valid
	FA8	0,692	0,000	Valid
Locus of Control	L1	0,699	0,000	Valid
	L2	0,548	0,000	Valid
	L3	0,748	0,000	Valid
	L4	0,768	0,000	Valid
	L5	0,597	0,000	Valid
	L6	0,778	0,000	Valid
Risk Tolerance	R2	0,571	0,000	Valid
	R3	0,644	0,000	Valid
	R4	0,686	0,000	Valid
	R5	0,679	0,000	Valid
Motivation	M1	0,765	0,000	Valid
	M2	0,645	0,000	Valid
	M3	0,601	0,000	Valid
	M4	0,758	0,000	Valid
	M5	0,618	0,000	Valid

	M6	0,543	0,000	Valid
Mental Accounting	A1	0,572	0,000	Valid
	A2	0,649	0,000	Valid
	A3	0,739	0,000	Valid
	A6	0,709	0,000	Valid
	A7	0,508	0,000	Valid
	A8	0,567	0,000	Valid
	A9	0,549	0,000	Valid
Financial Behavior	FB1	0,598	0,000	Valid
	FB2	0,632	0,000	Valid
	FB3	0,744	0,000	Valid
	FB5	0,525	0,000	Valid
	FB6	0,577	0,000	Valid
	FB8	0,575	0,000	Valid

Source: **Data processed by researchers**

Here are the test results for each variable:

1. Financial Attitude (X_2)

Based on the results of the validity test, it can be concluded that the Pearson correlation value on each indicator of the financial attitude variable is more than 0.5 with a Sig. (2-tailed) value of less than 0.05 indicating a strong and significant positive correlation value, meaning that each indicator financial attitude variable is valid.

2. Locus of Control (X_3)

Based on the results of the validity test, it can be concluded that the Pearson correlation value on each locus of control variable indicator is more than 0.5 with a Sig value. (2-tailed) less than 0.05 indicates a strong and significant positive correlation value, meaning that each indicator locus of control variable is valid.

3. Risk Tolerance (X_4)

Based on the results of the validity test, it can be concluded that there is a Pearson correlation value of less than 0.5 on the R1 indicator. The R1 indicator has a Pearson correlation value of 0.296 with a Sig. (2-tailed) value of less than 0.05 indicating a low or weak correlation value, meaning that the R1 indicator on the risk tolerance variable is invalid. So, the researcher discarded the R1 indicator and re-tested the validity of the risk tolerance variable so that it could carry out the test to the next stage, namely the reliability test. The results of the re-validity test on each indicator R2, R3, R4, R5 show that each indicator is valid.

4. Motivation (X_5)

Based on the results of the validity test, it can be concluded that the Pearson correlation value for each motivation variable indicator is more than 0.5 with a Sig. (2-tailed) value of less than 0.05 indicating a strong and significant positive correlation value, meaning that each indicator variable motivation is valid.

5. Mental Accounting (X_6)

Based on the results of the validity test, it can be concluded that there is a Pearson correlation value of less than 0.5 on indicators A4 and A5. Indicator A4 has a Pearson correlation value of 0.495 and A5 has a Pearson correlation value of 0.446 with a Sig value. (2-tailed) less than 0.05 indicates a low or weak correlation value, meaning that indicators A4 and A5 on mental accounting variables are invalid. . So, the researcher eliminated indicators A4 and A5 which was then re-tested the validity of the mental accounting variable. The results of the re-validity test on each mental accounting indicator (A1, A2, A3, A6, A7, A8, and A9) indicate that each result is valid.

6. Financial Behavior (Y)

Based on the results of the validity test, it can be concluded that there is a Pearson correlation value of less than 0.5 on the indicators FB4 (0.412), FB7 (0.455) and FB9 (0.454) with a Sig. (2-tailed) value of less than 0.05 indicating a value low or weak correlation. This shows that the indicators FB4, FB7, and FB9 on the Financial Behavior variable are not valid. So, the researcher eliminated the indicators FB4, FB7, and FB9 which was then re-tested the validity of the financial behavior variables (indicators FB1, FB2, FB3, FB5, FB6, and FB8). The results of the retest show that the indicator is valid.

4.2.2. Reliability Test

Reliability test is carried out to measure the reliability of a tool measure and assess the level of consistency and stability of the measurement scale (Hair et al., 2014). In testing this reliability, the researcher used Cronbach's alpha. A good Cronbach's alpha coefficient value is at least 0.70 but 0.60 is still acceptable. When the coefficient value of Cronbach's alpha is close to 1, this indicates that the reliability of internal consistency is high (Hair et al., 2014). Table 4.4 shows the results of the reliability test on each variable.

Table 4.4. Reliability Test Results

Variabel	Jumlah Indikator	*Cronbach's alpha*	Kesimpulan
Financial Attitude (X_2)	8	0,858	Reliabel
Locus of Control (X_3)	6	0,779	Reliabel
Risk Tolerance (X_4)	4	0,627	Reliabel
Motivation (X_5)	6	0,701	Reliabel
Mental Accounting (X_6)	7	0,760	Reliabel
Financial Behavior (Y)	6	0,710	Reliabel

Sumber: **Data processed by researchers**

Based on the table above, all variables show Cronbach's alpha coefficient value > 0.60 where the value is still accepted and can be declared reliable.

4.2.3. Classic Assumption Test Results

Table 4.5. Normality Test

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Unstandardized Residual	168	,0000000	376,373,108	-,572	,187	1,397	,373
Valid N (listwise)	168						

Descriptive Statistics

Sumber: **Data processed by researchers**

From the skewness and kurtosis values, the Zskewness and Zkurtosis values can be calculated as follows,

$$Zskewness = \frac{-0,572}{\sqrt{\frac{6}{168}}} = -3,026 \qquad (1)$$

$$Zkurtosis = \frac{1,397}{\sqrt{\frac{24}{168}}} = 3,696 \qquad (2)$$

The result of Zswekeness calculation is -3.026 smaller than 2.58 and Zkurtosis is 3.696 greater than 2.58. So it can be concluded that the residual data is not normally distributed. Therefore, the researcher used the PLS data analysis method to complete the analysis test using abnormal data.

4.2.4. PLS Analysis

a. Testing Measurement (Outer) Model

The first step in testing the measurement model is the validity test. An indicator is declared valid if it has a loading factor above 0.6 for the intended construct. The SmartPLS output for the loading factor shows that all indicators have a loading factor value of more than 0.6. That is, overall the validity conditions have been met. A detailed description of the results of testing the validity of the data is as follows.

Table 4.6. Loading Factor

Var.	Fin. Attitude	Fin Behavior	Fin Knowledge	Locus of Control	Mental Accounting	Motivation	Rist Tolerance
A1					0.653		
A2					0.714		
A3					0.788		
A4					0.455		
A5					0.323		

A6					0.738		
A7					0.460		
A8					0.520		
A9					0.507		
FA1	0.740						
FA2	0.826						
FA3	0.674						
FA4	0.808						
FA5	0.709						
FA6	0.635						
FA7	0.706						
FA8	0.677						
FB1		0.612					
FB2		0.668					
FB3		0.761					
FB4		0.420					
FB5		0.510					
FB6		0.620					
FB7		0.345					
FB8		0.595					
FB9		0.430					
K1			0.808				
K2			0.516				
K3			-0.034				
K4			0.697				
K5			-0.059				
L1				0.749			
L2				0.517			
L3				0.724			
L4				0.778			
L5				0.634			
L6				0.739			
M1						0.837	
M2						0.682	
M3						0.577	
M4						0.820	
M5						0.433	
M6						0.557	
R1							-0.063
R2							0.583
R3							0.609
R4							0.819
R5							0.750

Source: **Data processed by researchers**

From Table 4.6. it appears that the indicators A4, A5, A7, A8, A9, FB4, FB5, FB7, FB8, FB9, K2, K3, K5, L2, M3, M5, M6, R1, R2 have outer loading <0.6. So these indicators must be eliminated and reprocessed. Table 5.7. the following is a table after some of the previous indicators are removed.

Table 4.7. New Loading Factor

Var.	Fin. Attitude	Fin. Behavior	Fin. Knowledge	Locusof Control	Mental Accounting	Motivation	Risk Tolerance
A1					0.714		
A2					0.794		
A3					0.835		
A6					0.790		
FA1	0.751						
FA2	0.815						
FA3	0.685						
FA4	0.821						
FA5	0.696						
FA6	0.629						
FA7	0.695						
FA8	0.681						
FB1		0.714					
FB2		0.726					

FB3	0.827					
FB6	0.694					
K1		0.660				
K4		0.907				
L1			0.756			
L3			0.757			
L4			0.781			
L5			0.661			
L6			0.744			
M1					0.849	
M2					0.774	
M4					0.816	
R3						0.622
R4						0.852
R5						0.764

Source: **Data processed by researchers**

Reflective indicators are suitable for measuring perception, so this study uses reflective indicators. loading factor gives a value above the recommended value of 0.6 (table 4.7.). This shows that the indicators used in this study are valid or have met convergent validity.
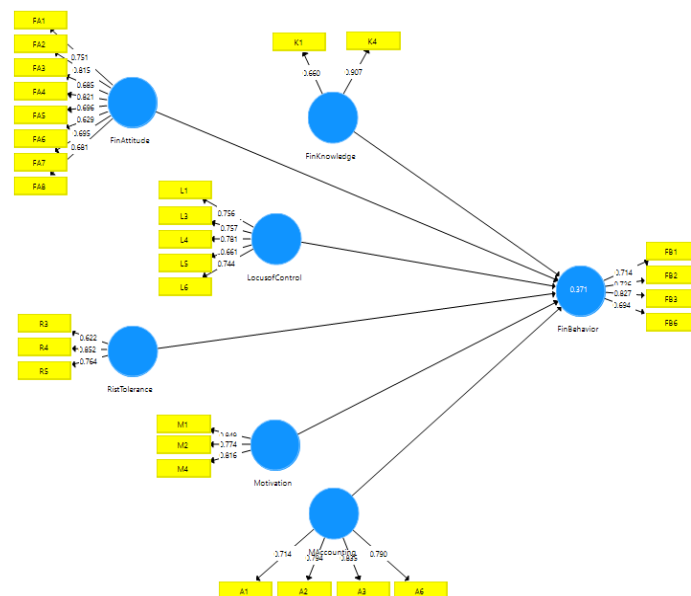

Figure 4.1. Load Factor Value

After testing the indicator level, the researcher tested the latent variable, namely testing discriminant validity by looking at the value of the square root of average variance extracted (AVE). The recommended value is above 0.5. Table 4.8. presents the results of the analysis of the AVE.

Table 4.8. Average Variance Extracted (AVE)

Variable	AVE	Condition	Model Evaluation
Financial Attitude	0.525		
Financial Behavior	0.551		
Financial Knowledge	0.629		
Locus of Control	0.549	>0.5	Good
Mental Accounting	0.616		
Motivation	0.662		
RistTolerance	0.566		

Source: **Data processed by researchers**

It can be seen in Table 4.8. that the AVE is above 0.5 for all constructs contained in the research model. Thus, it can be seen that the overall factor loading of each indicator and AVE has fulfilled the principle that the manifest variables of a construct should be highly correlated. The next test is the reliability test. The reliability test is carried out by looking at the composite reliability value of the indicator block that measures the construct. The results of composite reliability are said to be satisfactory if the value is greater than 0.7. Table 4.8. presents a summary of the reliability test results.

Table 4.9. Composite Reliability

Variabel	Composite Reliability	Cronbach's Alpha
Financial Attitude	0.898	0.870
Financial Behavior	0.830	0.726
Financial Knowledge	0.768	0.440
Locus of Control	0.859	0.795
Mental Accounting	0.865	0.796
Motivation	0.854	0.745
RistTolerance	0.794	0.609

Source: **Data processed by researchers**

Table 4.9. shows that the composite reliability value for all constructs is greater than the provision value, which is 0.7. That is, all constructs in the estimated model meet the discriminant validity criteria. The lowest composite reliability value is 0.832 in the financial knowledge construct. The reliability test can also be strengthened with Cronbach's Alpha which is in the same table. A good Cronbach's alpha has a value above 0.5 and is said to be sufficient if the value is> 0.3. Table 5.8 shows that Cronbach's alpha financial knowledge is 0.440 so it is still in the sufficient category. The two test tools concluded that the variables were reliable.

b. Structural Model Testing

Table 4.10. Outer Model Test Results

No	Variable	R Square	R Square
1	Financial Behavior	0,371	0,348

Source: **Data processed by researchers**

In Table 4.10. it can be seen that the value of R^2 on the Financial Behavior (adjusted) construct is 0.348. That is, financial knowledge, financial attitude, risk tolerance, motivation, mental accounting, and locus of control affect financial behavior by 34.8%. The next step is hypothesis testing using t test. The path coefficient value or t-value indicates the level of significance in hypothesis testing. The path coefficient score indicated by the t-statistic value, this value must be above 1.96 for the 2-tailed hypothesis. Based on the bootstrapping calculation of education staff carried out on SmartPLS Software with 5000 subsamples, the t-value is obtained as follows:

Table 4.11. Path Coefficients Hypothesis Testing

Variable	Coefficient	t-stats.	P-value	Evaluation
Financial Attitude Financial Behavior	0.250	2,394	0.009	Significantly influential
Financial Knowledge Financial Behavior	0.052	0.717	0.237	No significant effect
Locus of Control Financial Behavior	0.129	1,467	0.072	No significant effect
Mental Accounting Financial Behavior	0.275	3.139	0.001	Significantly influential
Motivation Financial Behavior	0.072	0.782	0.217	No significant effect
RiskTolerance Financial Behavior	0.149	2,140	0.016	Significantly influential

Source: **Data processed by researchers**

Table 4.11 shows that not all variables have a positive effect on financial behavior. Financial Attitude, Mental Accounting, and Risk Tolerance have a significant positive effect on Financial Behavior. This can be seen from t-stat > 1.96 and P-Value < 0.05. That is, all proposed hypotheses are proven for the three variables. Meanwhile, Financial knowledge, Locus of Control, and Motivation have no significant effect on Financial Behavior. This can be seen from t-sta t< 1.980 and P-Value > 0.05. This means that the proposed hypothesis cannot be proven for the three variables.

5. Conclusions and Practical Implication
5.1. Conclusion

Based on the results of data analysis and discussion, it can be concluded as follows: Financial Knowledge does not have a significant influence on financial behavior. Thus we can conclude that H$_1$ in this acceptance is rejected. Financial attitude has a significant positive effect on financial behavior. It can be concluded that H$_2$ in this acceptance is received. Locus of Control does not have a significant effect on financial behavior. Thus we can conclude that H$_3$ in this acceptance is rejected. Risk Tolerance has a significant positive effect on financial behavior. Thus we can conclude that H$_4$ in this acceptance is received. Motivation does not have a significant influence on financial behavior. Thus we can conclude that H$_5$ in this acceptance is rejected. Mental Accounting has a significant influence on financial behavior. Thus it can be concluded that H$_6$ in this acceptance is accepted. Based

on the description above, it can be seen that the financial behavior of Universitas Ciputra Surabaya students is influenced the most by mental accounting factors, followed by financial attitudes and risk tolerance, while financial knowledge, locus of control and motivation factors have no influence on financial behavior.

5.2. Practical Implication

Looking at the results of this study, there are several implications as follows: The financial knowledge factor has no significant effect on financial behavior, but mental accounting has a significant effect on financial behavior. The respondents of this study were students of the economics faculty who in the curriculum received an introductory accounting course, so it is better if the weight of students' understanding of accounting and financial statements should be considered in the project they are working on because according to research mental accounting has an effect on financial behavior. The highest loading factor among mental accounting indicators is recording expenses. So it is better if the understanding of accounting is also given to non-economic students as their provision when they graduate from college. When someone makes financial records, it will encourage him to evaluate his financial condition which will then affect his decision making and attitude towards his financial problems. The risk tolerance factor has a positive influence on financial behavior in student respondents, so the introduction of risk tolerance can improve their financial behavior. Therefore, students should be equipped to recognize their own risk profile, by introducing them to forms of investment with various levels of risk, it will indirectly make students aware of their respective risk profiles, which will indirectly improve their financial behavior. The introduction of investment forms can be done in collaboration with financial institutions such as banks, insurance, capital markets, and so on. The age of 20-30 years is the time when people begin to build a financial foundation. At this age a person is in the process of pursuing a career in any field and shaping his financial behavior, starting to manage finances, making investments, buying property, buying insurance, and even starting to plan a pension plan. The form that can be used is to provide personal financial planning training to students. If in a more formal form, students may also be required to attend training with simplified financial planner (CFP) certification materials. Financial behavior is influenced by financial attitude, mental accounting and risk tolerance, therefore educational institutions should provide training on finance, financial planning, financial evaluation, investing to equip students before entering the world of work.

6. References

Afifa, L. (2020). *Jokowi points out Indonesia's low literacy, financial inclusion*. Tempo.Co. https://en.tempo.co/read/1300743/jokowi-points-out-indonesias-low-literacy-financial-inclusion

Ahmad, A., Butt, B. S., Moazzam, & Iram, S. (2019). Drivers influencing financial behavior among management students in Narowal. *International Journal of Academic Research in Business and Social Sciences*, 9(2), 656–666. https://doi.org/10.6007/IJARBSS/v9-i2/5602

Amanah, E., Rahadian, D., & Iradianty, A. (2016). Pengaruh financial knowledge, financial attitude dan external locus of control terhadap personal financial management behavior pada mahasiswa s1 universitas telkom. *E-Proceedings of Management*, 3(2), 1228–1235.

Angulo-Ruiz, F., & Pergelova, A. (2015). An empowerment model of youth financial behavior. *Journal of Consumer Affairs*, 49(3), 550–575. https://doi.org/10.1111/joca.12086

Arianti, B. F. (2018). The influence of financial literacy, financial behavior and income on investment decision. *EAJ (Economic and Accounting Journal)*, 1(1), 1–10. https://doi.org/http://dx.doi.org/10.32493/eaj.v1i1.y2018.p1-10

Ayu Wulandari, D., & Iramani, R. (2014). Studi experienced regret, risk tolerance, overconfidance dan risk perseption pada pengambilan keputusan investasi dosen ekonomi. *Journal of Business and Banking*, 4(1), 55–66. https://doi.org/10.14414/jbb.v4i1.293

Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25*. Undip.

Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. https://doi.org/10.1108/EBR-10-2013-0128

Haryana, R. D. T. (2017). Pengaruh mental accounting dan psychological factors terhadap perilaku konsumen dalam penggunaan kartu kredit. *Jurnal Akuntansi*, *2*(3), 553–571. https://doi.org/10.30736/jpensi.v2i3.108

Herdjiono, I., & Damanik, L. A. (2016). Pengaruh financial attitude, financial knowledge, parental income terhadap financial management behavior. *Jurnal Manajemen Teori Dan Terapan/ Journal of Theory and Applied Management*, *9*(3), 226–241. https://doi.org/10.20473/jmtt.v9i3.3077

Hidayati, S. A. (2016). Mental accounting dan dampaknya terhadap kinerja perusahaan melalui penempatan modal kerja pada usaha kecil dan menengah di Pulau Lombok. *JMM UNRAM - Master of Management Journal*, *16*(1), 1–19. https://doi.org/10.29303/jmm.v16i1.14

Ida, I. D. A., & Dwinta, C. Y. (2010). Pengaruh locus of control, financial knowledge, income terhadap financial management behavior. *Jurnal Bisnis Dan Akuntansi*, *12*(3), 131–144. https://doi.org/https://doi.org/10.34208/jba.v12i3.202

Kholilah, N. Al, & Iramani, R. (2013). Studi financial management behavior pada masyarakat surabaya. *Journal of Business and Banking*, *3*(1), 69–80. https://doi.org/10.14414/jbb.v3i1.255

Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. *Financial Services Review*, *16*(2), 105–116.

Mouna, A., & Jarboui, A. (2015). Financial literacy and portfolio diversification: An observation from the Tunisian stock market. *International Journal of Bank Marketing*, *33*(6), 808–822. https://doi.org/10.1108/IJBM-03-2015-0032

Mudrajad, K. (2013). *Mudah memahami dan menganalisis indikator ekonomi*. Yogyakarta: UPP STIM YKPN.

Nur Aini, N. S., & Lutfi, L. (2019). The influence of risk perception, risk tolerance, overconfidence, and loss aversion towards investment decision making. *Journal of Economics, Business & Accountancy Ventura*, *21*(3), 401–413. https://doi.org/10.14414/jebav.v21i3.1663

Otoritas Jasa Keuangan (OJK). (2019). *Siaran pers survei OJK 2019 indeks literasi dan inklusi keuangan meningkat*. Otoritas Jasa Keuangan (OJK). https://www.ojk.go.id/id/berita-dan-kegiatan/siaran-pers/Pages/Siaran-Pers-Survei-OJK-2019-Indeks-Literasi-Dan-Inklusi-Keuangan-Meningkat.aspx

Prihartono, M. R. D., & Asandimitra, N. (2018). Analysis factors influencing financial management behaviour. *International Journal of Academic Research in Business and Social Sciences*, *8*(8), 308–326. https://doi.org/10.6007/IJARBSS/v8-i8/4471

Purnomo, R. A. (2016). *Analisis statistik ekonomi dan bisnis dengan SPSS*. CV. WADE GROUP bekerjasama dengan UNMUH Ponorogo Press. https://books.google.co.id/books?id=MQCGDwAAQBAJ

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, *80*(1), 1–28. https://doi.org/10.1037/h0092976

Santi, F., Sahara, N. V., & Kamaludin. (2019). The effect of mental accounting on student's invesment decision : A study at Invenstment Gallery (GI) FEB University of Bengkulu and Syariah Investment Galleru (GIS). *Journal of Business Economics*, *24*(2), 152–167. https://doi.org/10.35760/eb.2019.v24i2.1907

Sarjono, H., & Julianita, W. (2011). *SPSS vs LISREL: sebuah pengantar, aplikasi untuk riset*. Jakarta: Salemba Empat.

Thaler, R. H. (1999). Mental accounting matters. *Journal of Behavioral Decision Making*, *12*(3), 183–206.

Wardani, A. K., & Lutfi, L. (2016). Pengaruh literasi keuangan, experienced regret, risk tolerance, dan motivasi pada keputusan investasi keluarga dalam perspektif masyarakat Bali. *Journal of Business & Banking*, *6*(2), 195–214. https://doi.org/10.14414/jbb.v6i2.996

Yohnson, Y. (2008). Regret aversion bias dan risk tolerance investor muda Jakarta dan Surabaya. *Jurnal Manajemen Dan Kewirausahaan (Journal of Management and Entrepreneurship)*, *10*(2), 163–168. https://doi.org/https://doi.org/10.9744/jmk.10.2.pp.%20163-168

Yong, C.-C., Yew, S.-Y., & Wee, C.-K. (2018). Financial knowledge, attitude and behaviour of young working adults in Malaysia. *Institutions and Economies*, *10*(4), 21–48.

Zhang, C. Y., & Sussman, A. B. (2017). The role of mental accounting in household spending and investing decisions. *Client Psychology. New York: Wiley, Chicago Booth Research Paper*, *No. 19-07*.