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The Effect Financial Knowledge, Financial Attitude, And Income On Financial Behavior Through Locus Of Control In Students

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ABSTRACT

This research aims to determine the effect of financial knowledge, financial attitude, and income towards financial behavior through locus of control as an intervening variabel in students. This research uses a quantitative approach by distributing questionnaires to 240 respondents from the Faculty of Economics and Business, majoring in Management and have taken financial management courses at private campus in Surabaya. The research is tested using SmartPLS 4 student version with Partial Least Sqsuare Strucktural Equation Modeling (PLS-SEM) analysis.

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1. Introduction

Knowledge opens the main window to an individual's life. With knowledge, we can face all the challenges that arise in life. The diversity of knowledge in various fields is crucial in every aspect of human life, especially in financial matters. Understanding finance is a crucial foundation for individuals in managing their financial aspects. Financial knowledge can be acquired from various sources, whether formal, such as through education in schools, training, seminars, or through non-formal channels, such as parental influence, work experience, interactions with friends, and personal experiences.

The ability to manage finances has become a crucial skill for every individual to plan their finances effectively for the sake of well-being (OJK, 2017). Based on the OJK survey results in 2022, the level of financial literacy among the Indonesian population reached 49.68%. This figure indicates an increase from the 2019 survey, which recorded a rate of 38.03%. Despite the improvement, the figure has not yet reached a satisfactory standard. As revealed by the Program for International Student Assessment (PISA) published by the Organization for Economic Co-operation and Development (OECD) in 2019, Indonesia is ranked 62nd out of 70 countries in terms of financial literacy. This suggests that Indonesia is among the 10 countries with a still-low level of financial literacy.

The high level of financial inclusion but low literacy indicates a potentially high risk. Despite having financial access, survey results show a lack of understanding of financial service products. This suggests that a generally consumptive lifestyle occurs in Indonesian society, leading to less prudent and directed financial management. Some individuals retain information, some prefer gathering information before making purchases, while others tend to buy based on their instincts. This fact highlights the unrealistic financial management behavior of some students, indicating the presence of consumptive behavior that is part of the culture and leads to social problems.

The phenomenon of consumptive behavior related to financial management is an inevitable issue currently, especially in the context of societal consumption behavior. Financial management behavior, is an individual's ability to organize their daily financial planning, budgeting, examination, and fund storage [1]. In financial behavior theory, psychological aspects have a significant influence on an individual's financial behavior [2]. The financial behavior approach aims to explain what, why, and how individuals manage their finances from the perspective of humans as financial decision-makers.

Knowing the differences between savings, deposits, and investments is crucial for individuals. With a clear understanding of these three financial functions, individuals can redirect their financial behavior towards a more productive direction. Financial behavior can be seen through four aspects: consumption, cash flow, savings and investment, and debt management .

The level of someone's financial behavior can be influenced by their level of financial knowledge. Financial knowledge refers to an individual's basic understanding and mastery of financial topics [1]. The broader an individual's financial knowledge, the better decisions they make regarding finances. This knowledge serves as a source of information that shapes a person's intention to take action. Financial knowledge comes from various sources, both formal channels such as formal education in schools, training, seminars, and non-formal channels such as parental influence, work experience, interactions with friends, and personal experiences [3].

In addition to financial knowledge, one's attitude towards finances also influences their financial behavior. Individuals with a positive financial attitude tend to manage their finances well to achieve financial stability. This indicates that someone who can act rationally and wisely towards their finances will demonstrate their ability in financial planning, organization, management, and control (Budiono, 2020). Positive financial behavior begins with applying a positive financial attitude in daily life. Without good financial attitudes in managing personal finances, it is difficult to have financial surplus for future savings. The better someone's financial attitude, the better their ability to make decisions. Making informed decisions will have a positive impact on personal financial behavior.

Income has an influence on financial behavior because of its level A person's income can influence the size of their needs and wants them, which in turn influences how they manage their finances. Income is one factor that can influence a person's behavior managing finances, both positively and negatively [4]. Students generally get income or pocket money from their parents who need to be managed efficiently by prioritizing goods or most important services, resulting in the well-being of individual students can increase. Income that is obtained, a person can fulfill his financial obligations . The higher it is a person's income level, the easier it is for them to meet their financial obligations and increasingly responsible in managing them their income, so that their financial management behavior becomes better.

Another factor that influences personal financial behavior is locus of controls. Locus of control is a person's way of viewing and controlling events that happened in his life. The concept of self-control, as defined by [5], as an influencing factor incident. This is in line with the Theory of Reasoned Action which states that Behavior is influenced by the individual's desire to do it or not perform an action. Locus of control can be divided into two [1]: 1) Internal locus of control which believes that ability and effort determine the outcome of a person's life. 2) External locus of control which sees that life is influenced by external factors surrounding environment. In conclusion, the better self-control an individual has, the better their personal financial behavior will be.

This research has significant relevance in a management context individual finances.. Understanding of financial knowledge and how financial knowledge can shape financial thinking and actions students are important in preparing the younger generation in manage their own finances. Furthermore, the influence of attitudes towards Finance provides an important perspective, a positive or negative attitude about money can influence everyday financial decisions. Income has a significant role in financial decisions, because it can affects the way a person saves, invests, or manages their expenses. This research also includes locus of control, which describes the extent to which individuals believe they have control over their life and financial decisions. In this research, we will look at how locus of control mediates between these factors, provides a deeper picture of how individuals believe about control influences their financial behavior. Therefore, this research can provide valuable insights for development more effective financial education programs and provide direction to students and the general public about how to improve financial health them as a whole.

There is also several previous studies regarding financial behavior with the variables that influence it. Financial knowledge, financial attitude, Locus of control has a significant effect on financial behavior [6]. By adding the income variable, it states that income has an effect positive and significant towards financial behavior [7], [8]. Financial knowledge, income and locus of control does not have a significant effect on financial behavior [1]. Financial knowledge has a positive influence but the variables are locus of control and income has a negative influence on financial behavior [3]. Financial knowledge and income have an influence positive but the financial attitude variable has a positive influence on financial behavior [9].

Based on this explanation, it shows that there is a gap results of research that has been carried out previously. This research aims to find out the truth about the variables financial knowledge, financial attitude, and Income can influence financial behavior through locus of control as an intervening variable for students.

2. Theory Review

2.1. Financial Knowledge

Financial knowledge is a person's understanding of various aspects in the financial realm. Financial knowledge is an important part of literacy finance is described as the main dimension [1]. Financial literacy includes dimensions in which individuals must have skills and the confidence to use their financial knowledge in depth make financial decisions [10]. In this context, knowledge Finance can be seen as a core concept of financial literacy. Sources of knowledge can be obtained from varying levels of reliability and quality, including formal education (e.g higher education, seminars and training programs outside of school) as well as education informal (through the influence of parents, friends, and work environment) [3].

Financial knowledge has been proven to have a significant impact on financial management, especially when various policies are implemented [11]. Individuals who have a rational attitude and stronger self-confidence related to financial knowledge tends to indicate good financial behavior more profitable. There are three criteria that are used to measure financial knowledge as follows [12]: (1) General Knowledge of Finance, General financial knowledge can be described as an understanding of how a person manages personal financial assets. The limitation that financial knowledge includes ability manage income, expenses, and understand basic financial principles [13]. The hope is that individuals can manage their finances well, making use of them the money he has to achieve the desired financial goals. (2) Savings and Loan Knowledge, Knowledge about savings refers to an individual's deep understanding manage and save a certain amount of money or funds for future use coming. The purpose of this knowledge about savings is to anticipate possible unforeseen future needs requires a certain amount of funds. On the other hand, knowledge about loans refers to the understanding of borrowing funds from other parties with taking into account certain factors. Someone who submits Loans should consider the ability to repay these funds. (3) Insurance Knowledge, Knowledge about insurance is an understanding of protection finance that provides reimbursement for unforeseen events or possible risks. This is done by paying a certain amount of funds (known as a premium) to the insurance company through the insurance policy. The purpose of insurance is to transfer risk individuals to insurance companies [14]. The hope is that through insurance, the risks faced by individuals can be reduced, providing protection from those risks diverse in society. (4) Investment Knowledge, Knowledge about investments includes understanding actions releasing a certain amount of funds at this time in the hope of getting an influx of funds bigger in the future. Essentially, investment knowledge includes the flow of funds to various assets in the hope of gaining profits in the future coming. Investment can be divided into two main forms, namely investment in real assets as well as investments in financial assets such as shares and bonds [15].

2.2. Financial Attitude

Attitude is something directs individuals to certain goals that can be realized in the form of a person's actions, words, deeds, or emotions [16]. There are five components in financial attitudes [17], that is: (1) Power-prestige, refers to the way an individual views money as a resource power, an attempt to gain status, a means of being noticed by other people, competition, and as a means of owning things luxurious. This reflects a mindset that associates wealth with influence, social status, recognition from other people, and ownership of objects that are considered luxurious (2) Retention-time, This mindset emphasizes that money is considered a factor crucial in life that needs to be managed carefully in order to achieve future interests. This involves careful planning as well wise management of expenses to ensure financial sustainability in the future. (3) Distrust, This mindset refers to the view that money can be cause suspicion and give rise to doubt and distrust when going used. This can influence individual confidence in decisions should be taken regarding the use of money, perhaps because of concerns about consequences or impacts that may arise from these expenditures. (4) Quality, This mindset describes the view that money is perceived as a symbol of success or a quality of life indicator that reflects achievement individual. Money is seen as a marker of achievement in life, becoming a representation of a person's level of success or achievement in various aspects life. (5) Axienty, referring to a situation where money is considered a cause of anxiety that can lead to stress for those who possess it, it becomes crucial to engage in financial management. An individual's financial attitude or financial attitude will help determine their behavior in financial matters, including financial management, personal budgeting, and the financial decisions they make.

2.3. Income

Financial management is a practice carried out by society in their daily lives, playing a crucial role in fulfilling the needs and desires of individuals. Income plays a primary role in meeting these needs and desires, also serving as an indicator of well-being for individuals, families, households, and communities. The economic progress of a community can be reflected in the level of income present. Income is defined as the total money received by an individual or household within a specific period of time [18].

Income significantly influences an individual's financial spending patterns, making it one of the key variables that affect how individuals manage their finances. The income earned enables individuals to fulfill their financial obligations. The higher an individual's income level, the easier it is for them to meet financial obligations and be more careful in managing their money. Classifies indicators or measures of income into [19]: (1) Financial literacy or Income Utilization, A skill and knowledge set that enables an individual to make decisions with their financial resources. (2) Parental Giving, financial assistance provided by parents, where a student is required to manage the received pocket money effectively to meet their needs until a specified period. (3) Personal Income, an individual's own economic addition used to fulfill their needs. The earned income is typically used for consumption due to lifestyle changes.

2.4. Locus of Control

Locus of control, also known as self-control, is the ability of an individual to be sensitive to their own situation and the environment they are in . It also includes the ability to manage and control behavioral factors, according to the context and conditions, to interact with others, present oneself, and maintain compatibility with others while restraining or adjusting internal feelings. Locus of control has the potential to regulate and direct behavior in a positive direction by involving both physical and psychological aspects, and it can have a positive impact on the individual.

Individuals with a high level of locus of control tend to pay attention to appropriate ways of behaving in various situations [3]. They can adapt their behavior according to the demands of different social situations to create a suitable impression, become more flexible, facilitate social interactions, and display warm, open, and responsive attitudes to situational cues. This ability helps individuals to be accepted in their social environment. Based on these expert definitions, it can be concluded that locus of control is the ability of individuals to regulate behavior, make decisions, and act effectively, enabling them to make appropriate decisions in consumption and prevent consumptive behavior. There are several indicators of locus of control [3]: (1) There is absolutely no way I can solve my problems. (2) I am driven by the life around me. (3) There is little I can do to change important things in my life. (4) I can do anything that comes to my mind. (5) What happens to me in the future depends on me. (6) Powerless in facing life problems. (7) I have little control over things that happen to me.

2.5. Financial Behaviour

Financial behavior refers to how an individual manages their daily funds, including planning, budgeting, monitoring, and storing their money [1] . The emergence of behavioral patterns in managing finances is influenced by how much someone desires to meet their living needs in line with their earned income. Financial behavior is closely related to an individual's responsibility in managing their finances [3]. Financial responsibility is interpreted as the process of managing money and other assets in a way considered productive. The financial behavior theory is revolves around four key aspects, namely [20]: (1) Consumption, Consumption refers to expenditures to obtain goods and services. In the context of financial behavior management, we can observe how an individual engages in consumption, including what items they purchase and the reasons behind those purchases. (2) Cash Flow Management, Cash flow is a key indicator to assess an individual's financial health by measuring their ability to cover expenses. This includes aspects such as timely bill payments, maintaining records or proof of payments, and creating financial budgets for the future. (3) Saving and Investment , define savings as funds accumulated from the habit of consuming less than the income received. This means savings are a portion of income not used for consumption within a specific period. It is important because the future is unpredictable, so having funds available to face unforeseen costs is crucial. On the other hand, investment involves placing funds with the aim of generating greater profits in the future. In short, investment is allocating funds in the present with the expectation of benefiting in the future. (4) Credit Management, Credit management refers to an individual's ability to use debt wisely and effectively, avoiding the risk of bankruptcy or financial difficulties. In this context, credit management also involves using debt with the goal of improving financial well-being, not just letting debt become a heavy burden.

2.6. Financial Knowledge Towards Financial Behaviour

Financial knowledge is the fundamental knowledge and basic ability of an individual to understand and manage financial resources effectively for financial well-being. Individuals with sufficient financial knowledge tend to exhibit better financial management behavior, such as paying bills on time, keeping records of monthly expenses, and having emergency funds [21]. Therefore, the better the financial knowledge, the better someone is at managing their finances.
H1: Financial Knowledge Influences Financial Behavior

2.7. Financial Attitude Towards Financial Behaviour

Financial attitude is the state of mind, opinions, and evaluations about finances [22]. Financial attitude is how an individual perceives and acts towards their personal financial matters. Understanding financial attitude will help an individual comprehend what is believed about their relationship with money. Someone who is not prudent in responding to their personal financial issues tends to have poor financial management behavior.
H2: Financial Attitude Influences Financial Behavior

2.8. Income Towards Financial Behaviour

Income is defined as the total money received by an individual or household within a specific period [18]. With the income obtained, individuals can fulfill their financial obligations. The higher the level of income an individual possesses, the easier it is for them to meet financial obligations and the more responsible they become in managing their income. Consequently, their financial management behavior improves.
H3: Income Influences Financial Behavior

2.9. Locus of Control Towards Financial Behavior

Locus of control, often referred to as self-control, as an individual's skill in being sensitive to reading their own situation and the environment in which they are situated [23]. Individuals with a high locus of control pay significant attention to appropriate ways of behaving in various situations [3]. Locus of control is about how an individual makes decisions based on their abilities and the external environment. This can shape a person's belief in their ability to perform good financial management behavior. Someone with good financial management behavior skills undoubtedly believes that they can control the decisions they make themselves.
H4: Locus of Control Influence Financial Behavior

2.10. Financial Knowledge Towards Locus of Control

Financial knowledge as an individual's mastery of various aspects of the financial world, financial instruments, and financial skills [1]. Individuals with adequate financial knowledge tend to exhibit better financial management behavior, such as paying bills on time, keeping records of monthly expenses, and having emergency funds [21]. It can be said that someone with good financial knowledge also forms a good locus of control. Such individuals will self-regulate to consistently make informed and prudent decisions based on their knowledge.

H5: Financial Knowledge Influences Locus of Control

2.11. Financial Attitude Towards Locus of Control

Financial attitude shapes how people spend time, save, hoard, and waste money. Financial attitude influences locus of control. Individuals with a positive financial attitude are likely to have a strong locus

of control [24]. Such individuals will self-regulate to always engage in financially beneficial activities. Therefore, the better the financial attitude an individual has, the stronger their locus of control will be, influencing their decision to engage or not engage in certain behaviors. The inclination to support or not support a particular behavior will shape an individual's locus of control. Hence, the higher the level of financial attitude, the higher the level of locus of control an individual possesses.
H6: Financial Attitude Influence Locus of Control

2.12. Income Towards Locus of Control

Income is the amount of earnings received by individuals for their work achievements over a period, whether daily, weekly, monthly, or annually. The received income can determine how responsible someone is in paying bills to meet their needs. On the other hand, locus of control is a psychological concept concerning an individual's belief in how much they control events that affect them. The income one possesses will encourage self-control, limiting actions that could lead to wastefulness, and refraining from spending beyond what has been planned. Therefore, the higher the income an individual receives, the stronger their self-control is likely to be. Consequently, with an increase in income level, the individual's locus of control is also likely to rise.
H7: Income Influnces Locus of Control

2.13. Financial Knowledge on Financial Behavior Through Locus of Control

Financial knowledge as an individual's mastery of various aspects of the financial world, financial instruments, and financial skills [1]. Individuals with adequate financial knowledge tend to exhibit better financial management behavior, such as paying bills on time, keeping records of monthly expenses, and having emergency funds [21]. Financial attitude is how an individual perceives and acts towards their personal financial matters. Someone who is not prudent in responding to their personal financial issues tends to have poor financial management behavior. Locus of control is a factor that should be considered by students. In addition to financial knowledge, there is another factor, namely locus of control, which can impact financial behavior.
H8: Financial Knowledge influences Financial Behavior Through Locus of Control

2.14. Financial Attitude on Financial Behavior Through Locus of Control

Financial attitude is the state of mind, opinions, and judgments about finance [22]. Financial attitude is how an individual perceives and acts towards their personal financial matters. Understanding financial attitudes helps someone comprehend what is believed regarding their relationship with money. Financial attitude is how someone approaches and acts on their personal financial issues. Someone who is not prudent in responding to their personal financial matters tends to have poor financial management behavior. Locus of control is a factor that should be considered by students. In addition to financial attitude, there is another factor, namely locus of control, which can impact financial behavior.
H9: Financial Attitude Influences Financial Behavior Through Locus of Control

2.15. Income on Financial Behavior Through Locus of Control

Income is defined as the total money received by an individual or household within a specific period [18]. The income obtained, individuals can fulfill their financial obligations. The higher the level of income an individual has, the easier it is for them to meet financial obligations and the more responsible they become in managing their earnings, resulting in better financial management behavior. Locus of control is something that should be considered by students. Besides income, there is another factor, namely locus of control, which can impact financial behavior.
H10: Income Influences Financial Behavior Through Locus of Control

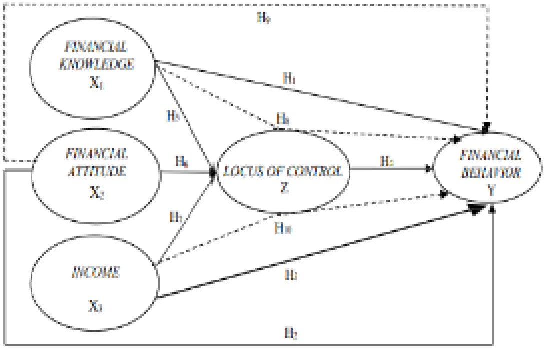

Fig. 1. Conceptual Framework

3. Method

3.1. Research Design

This type of research is as quantitative research because data collection is carried out using a questionnaire, allowing for the measurement and numerical analysis of data. Based on its problem statement, this research falls into the category of causal research as it focuses on the cause-and-effect relationship between two or more variables. The method applied in this research is the survey method.

3.2. Population and Samples

In this research, the identified population consists of students from the Faculty of Economics at a private university in Surabaya. The reason for selecting students as the research population is that, at this stage, they are first given the responsibility to manage their personal finances. Therefore, it is expected that they will begin to be independent in managing finances and making responsible decisions.

From several variations commonly used, the basic sample size criterion should be more than 10 times the total number of inner and outer variables in the model [25]. In this study, the determination of the sample size follows the recommendation provided by Hair [26], which is the number of indicators multiplied by 5-10. With 23 indicators in this research, the minimum sample size would be 23 x 10 = 230 samples.

3.3. Data Analysis Technique

Data analysis is the process of searching and organizing transcripts of interviews, observations or surveys, questionnaires, existing studies, and other materials collected to enhance understanding of these materials and enable the presentation of the discovered data [25], [27]. This research analyzes data using a trial instrument calculated with Microsoft Excel. Furthermore, data analysis involves techniques such as model evaluation, including evaluating the outer model or measurement model, and evaluating the structural model or inner model. All of these data analysis techniques are computed using the SmartPLS 4.0 program.

3.4. Data Analysis And Discussion

Evaluation of Measurement Model (Outer Model)

The outer model is responsible for defining how latent variables are related to their indicators. Within the outer model, there are three assessments, namely convergent validity and composite reliability [28].

Convergent Validity

The outcomes of the convergent validity test indicate a favorable correlation with the measurements of other theoretically positively correlated concepts. This is evident from the loading values falling between 0.40 and 0.70 and the AVE measurements having values greater than 0.05.

Table 1. Results Combined-Loading

	X1	X2	X3	Y	Z	Information
X1.1	0.680					Valid
X1.2	0.702					Valid
X1.3	0.850					Valid
X1.4	0.858					Valid
X2.1		0.879				Valid
X2.2		0.917				Valid
X2.3		0.925				Valid
X2.4		0.901				Valid
X2.5		0.872				Valid
X3.1			0.894			Valid
X3.2			0.935			Valid
X3.3			0.921			Valid
Y1				0.870		Valid
Y2				0.873		Valid
Y3				0.855		Valid
Y4				0.869		Valid
Z1					0.844	Valid
Z2					0.714	Valid
Z3					0.879	Valid
Z4					0.888	Valid
Z5					0.882	Valid
Z6					0.878	Valid
Z7					0.825	Valid

Source: Processed Data (2024)

Table 1. indicates that the requirements for the loading factor >0.70 values of each indicator have been fulfilled. In Table 2. it is shown that the Average Variance Extracted (AVE) values meet the criteria, with AVE values exceeding 0.5.

Table 2. Average Variance Extracted (AVE)

	***Average Variance Extracted* (AVE)**
Financial Knowledge	0.603
Financial Attitude	0.809
Income	0.840
Locus of Control	0.751
Financial Behavior	0.716

Source: Processed Data (2024)

Based on Tables 1 and 2 which demonstrate that the loading factor values and AVE values meet the criteria, all indicators can be considered valid measures for the research variables.

Discriminant Validity

Discriminant validity, or discriminant validity, can be considered valid when the cross-loading values are greater than those of other constructs.

Table 3. Cross Loading

Indikator	X1	X2	X3	Y	Z
X1.1	**0.680**	0.526	0.466	0.508	0.552
X1.2	**0.702**	0.458	0.455	0.478	0.502
X1.3	**0.850**	0.782	0.646	0.679	0.650
X1.4	**0.858**	0.649	0.603	0.635	0.636
X2.1	0.739	**0.879**	0.669	0.644	0.667
X2.2	0.701	**0.917**	0.701	0.710	0.676
X2.3	0.690	**0.925**	0.737	0.664	0.681
X2.4	0.735	**0.901**	0.690	0.721	0.687

X2.5	0.691	**0.872**	0.707	0.731	0.772
X3.1	0.570	0.633	**0.894**	0.607	0.596
X3.2	0.653	0.690	**0.935**	0.646	0.676
X3.3	0.707	0.805	**0.921**	0.717	0.766
Y.1	0.684	0.739	0.683	**0.870**	0.719
Y.2	0.680	0.678	0.662	**0.873**	0.756
Y.3	0.599	0.603	0.537	**0.855**	0.667
Y.4	0.627	0.656	0.605	**0.869**	0.722
Z.1	0.674	0.689	0.729	0.696	**0.844**
Z.2	0.513	0.542	0.566	0.580	**0.714**
Z.3	0.605	0.621	0.636	0.681	**0.879**
Z.4	0.643	0.659	0.657	0.708	**0.888**
Z.5	0.656	0.696	0.575	0.722	**0.882**
Z.6	0.653	0.664	0.530	0.694	**0.878**
Z.7	0.716	0.709	0.711	0.794	**0.825**

Source: Processed Data (2024)

In Table 3, the cross-loading values for each indicator are higher than those of other constructs, indicating that these indicators meet the criteria for discriminant validity and can be used to measure the research variables.

Cronbach’s Alpha and Composite Reliability

Cronbach's alpha and Composite Reliability can be considered reliable or consistent if the Cronbach's alpha value is greater than 0.60 (>0.60) and Composite Reliability is greater than 0.70 (>0.70).

Table 4. Cronbach’s alpha and Composite Reliability

	Cronbach’s alpha	**Composite reliability**
X1	0.777	0.858
X2	0.941	0.955
X3	0.905	0.940
Y	0.890	0.924
Z	0.933	0.946

Source: Processed Data (2024)

In Table 6, it is shown that the values of Cronbach's alpha and Composite Reliability for each variable are already above 0.60 and 0.70, respectively, indicating that the indicators meet the reliability criteria.

Evaluation Structural Model (Inner Model)

The inner model testing in this study is conducted to measure and predict the accuracy of the relationship model among variables. The structural model test is performed to examine the relationships between latent constructs.

1. R-Square

R-Square, symbolized as R2, is used to measure how strong the influence of the research model and the influence of independent variables on the mediating variable and dependent variable, namely locus of control (Z) and financial behavior (Y). Three levels of R-Square strength are categorized as weak for values between 0.19-0.32, moderate for values between 0.33-0.66, and strong for values >0.67 After the testing, the calculation of Average Adjusted R-Square (AARS) is conducted.

Table 5. R-Square Test Result

Variabel	**R^2**	**Precentage**	**Information**
Y	0.736	74%	Strong

Z	0.685	69%	Strong
Average Adjusted R-*Square* (AARS)	0.710	71%	Strong

Source: Processed Data (2024)

In Table 5, the R-Square values for financial knowledge, financial attitude, and income on locus of control and financial behavior are presented. The influence of financial knowledge, financial attitude, and income on locus of control is 0.685, categorized as "Strong," indicating that these variables can explain 69% of the locus of control, while the remaining 31% is explained by variables outside the scope of this study. The influence of financial knowledge, financial attitude, and income on financial behavior is 0.736, categorized as "Strong," showing that, with locus of control, they can explain 74% of financial behavior, while the remaining 26% is explained by variables beyond the study's focus.

2. Predictive Relevance (Q-Square),

Denoted as Q2, is used to measure how well the predictions generated from this research model perform. A Q-Square value greater than zero (Q2 > 0) indicates that the model has predictive relevance. The three levels of Q-Square strength are weak (0.02-0.14), moderate (0.15-0.34), and strong (>0.35). The calculation results for Q-Square in this study are as follows:

Table 6. Q-Square Test Results

Variables	Q-Square	Precentage	Information
Y	0.649	65%	Strong
Z	0.676	67%	Strong

Source: Processed Data (2024)

Based on the table above (Table 4.16), the obtained Q2 value is > 0, indicating that the model has predictive relevance with a value of 0.651. The Variable Q-Square Percentage is 0.676, suggesting that the research model is considered strong.

3. Goodness of Fit

The Goodness of Fit (GoF) is used to measure the overall fit of the structural model and validate the testing of the outer model and inner model. The three levels of GoF strength are: a value <0.24 is considered small, a value between 0.25-0.35 is considered moderate, and a value >0.36 is considered large.

Table 7. AVE and R2

Variables	AVE	R^2
Financial Knowledge	0.603	
Financial Attitude	0.809	
Income	0.840	
Locus of Control	0.751	0.736
Financial Behavior	0.716	0.685
Average	0.744	0.710

Source: Processed Data (2024)

Table 7. shows the average values of AVE and R2. The results of the Goodness of Fit calculation for the study are obtained using Formula 2.1.

$$GoF = \sqrt{\mathbf{AAVE\ x\ AARS}}$$
$$= \sqrt{\mathbf{0.744\ x\ 0.710}} = \sqrt{\mathbf{0.528}} = 0.726 \qquad (2.1)$$

Based on the above calculation, the obtained GoF value is 0.726, indicating that the model can explain information up to 73%. Subsequently, a model fit test was conducted.

Table 8. Model Fit

	Saturated Model	**Ideal Value**
SRMR	0.063	<0.8
NFI	0.843	0-1

Source: Processed Data (2024)

Table 8. shows that the SRMR value is 0.063, where this value corresponds to a perfect fit, and the Normed Fit Index is 0.843, which is close to one, indicating that the model is considered reasonably fitting.

Hypothesis Testing

Table 9. Direct and Indirect Effect

	Sample mean	***T-statistics***	***P-values***	**Results**
X1 -> Y	0.165	2.351	0.019	Significant
X2 -> Y	0.205	2.127	0.033	Significant
X3 -> Y	0.084	0.984	0.325	Not Significant
Z -> Y	0.480	6.854	0.000	Significant
X1 -> Z	0.320	4.056	0.000	Significant
X2 -> Z	0.304	3.671	0.000	Significant
X3 -> Z	0.282	4.204	0.000	Significant
X1-> Z -> Y	0.153	3.604	0.000	Significant
X2 -> Z -> Y	0.147	2.995	0.003	Significant
X3 -> Z -> Y	0.135	3.842	0.000	Significant

Source: Processed Data (2024)

Hypothesis testing in this study is conducted using the bootstrapping method to determine the direct effects or indirect effects between variables. The hypothesis can be accepted if the t-statistic value is greater than the t-table (1.96), and the p-values are less than 0.05 (p-values < 0.05) with a significance level of 5%.

4. Results and Discussion

H1: Financial knowledge significantly influences financial behavior.

Variables Financial knowledge, influential significant against variable interest in financial behavior that can be observed through the value of the path coefficient, were positive is by 0.165, with T-Statistics 2.351 > 1.96 and P-Values 0.019 < 0.05 so that the financial knowledge has the effect that

significant to the interest of financial behavior. Based on these results, the hypothesis that " Financial Knowledge Influential Against the Interests of Financial Behavior " declared acceptable.
H2: Financial attitude significantly influences financial behavior.

Variables Financial Attitude, influential significant against variable interest in financial behavior that can be observed through the value of the path coefficient, were positive is by 0.205, with T-Statistics 2.127 > 1.96 and P-Values 0.033 < 0.05 so that the financial attitude has the effect that significant to the interest of financial behavior. Based on these results, the hypothesis that " Financial Attitude, Influential Against the Interests of Financial Behavior " declared acceptable.
H3: Income significantly influences financial behavior.

Variables Income, influential significant against variable interest in financial behavior that can be observed through the value of the path coefficient, were positive is by 0.084, with T-Statistics 0.984 > 1.96 and P-Values 0.325 < 0.05 so that the income has the effect that not significant to the interest of financial behavior. Based on these results, the hypothesis that " Income Influential Against the Interests of Financial Behavior " declared not acceptable.
H4: Locus of control significantly influences financial behavior.

Variables Locus of control, influential significant against variable interest in financial behavior that can be observed through the value of the path coefficient, were positive is by 0.480, with T-Statistics 6.854 > 1.96 and P-Values 0.000 < 0.05 so that the locus of control has the effect that significant to the interest of financial behavior. Based on these results, the hypothesis that " locus of control Influential Against the Interests of Financial Behavior " declared acceptable.
H5: Financial knowledge significantly influences locus of control.

Variables Financial knowledge, influential significant against variable interest in locus of control that can be observed through the value of the path coefficient, were positive is by 0.320, with T-Statistics 4.056 > 1.96 and P-Values 0.000 < 0.05 so that the financial knowledge has the effect that significant to the interest of locus of control. Based on these results, the hypothesis that " Financial Knowledge Influential Against the Interests of Locus of control " declared acceptable.
H6: Financial attitude significantly influences locus of control.

Variables Financial attitude, influential significant against variable interest in locus of control that can be observed through the value of the path coefficient, were positive is by 0.304, with T-Statistics 3.671 > 1.96 and P-Values 0.000 < 0.05 so that the financial attitude has the effect that significant to the interest of locus of control. Based on these results, the hypothesis that " Financial Attitude Influential Against the Interests of Locus of control " declared acceptable.
H7: Income significantly influences locus of control.

Variables Income, influential significant against variable interest in locus of control that can be observed through the value of the path coefficient, were positive is by 0.282, with T-Statistics 4.204 > 1.96 and P-Values 0.000 < 0.05 so that the Income has the effect that significant to the interest of locus of control. Based on these results, the hypothesis that " Income Influential Against the Interests of Locus of control " declared acceptable.
H8: Financial knowledge significantly influences financial behavior through locus of control.

Variables Financial knowledge significant against the interest in financial behavior to be mediated by locus of control that can be observed through the value of the path coefficient, were positive is by 0.153, with T-Statistics 3.604 > 1.96 and P-Values 0.000 < 0.05 so that the financial knowledge has the effect that significant to the interest of financial behavior mediated by locus of control. Based on these results, the hypothesis that "Financial knowledge significantly influences financial behavior through locus of control " declared acceptable.
H9: Financial attitude significantly influences financial behavior through locus of control.

Variables Financial attitude significant against the interest in financial behavior to be mediated by locus of control that can be observed through the value of the path coefficient, were positive is by 0.147, with T-Statistics 2.995 > 1.96 and P-Values 0.003 < 0.05 so that the financial attitude has the effect that significant to the interest of financial behavior mediated by locus of control. Based on these results, the hypothesis that "Financial attitude significantly influences financial behavior through locus of control " declared acceptable.

H10: Income significantly influences financial behavior through locus of control.

Variables Income significant against the interest in financial behavior to be mediated by locus of control that can be observed through the value of the path coefficient, were positive is by 0.135, with T-Statistics 3.842 > 1.96 and P-Values 0.000 < 0.05 so that the Income has the effect that significant to the interest of financial behavior mediated by locus of control. Based on these results, the hypothesis that "Income significantly influences financial behavior through locus of control "declared acceptable.

Testing and Mediation Analysis

Mediation testing is employed to determine the role of mediation, classified into three levels of Variance Accounted For (VAF) values. A VAF value less than 20% is considered as not mediating, a value between 20-80% is categorized as partially mediating, and a Variance Accounted For (VAF) value exceeding 80% is classified as fully mediating (Hair, 2014). Table 12 Path Analysis Results.

Table 10. Path Analysis

	Y	Z
X1	0.159	0.312
X2	0.205	0.305
X3	0.088	0.288
X4	0.482	

Source: Processed Data (2024)

On Table 10 represents the results of path analysis of direct and indirect effects, with the following results:

1. The mediating role of locus of control in the influence of financial knowledge on financial behavior using Formula 2.2.

$$\text{VAF} = \frac{(0.312 \text{ x } 0.482)}{0.159+(0.312 \text{ x } 0.482)} = 0.485 = 49\% \qquad (2.2)$$

The Value of Adjusted Fraction (VAF) for the mediating role in the influence of financial knowledge on financial behavior is 49%, categorizing it as partially mediating.

2. The mediating role of locus of control in the influence of financial attitude on financial behavior using Formula 2.2.

$$\text{VAF}=((0.305\text{x } 0.482))/(0.205+(0.305 \text{ x } 0.482)) = 0.417 =42\% \qquad (2.2)$$

The Value of Adjusted Fraction (VAF) for the mediating role in the influence of financial attitude on financial behavior is 42%, categorizing it as partially mediating.

3. The Value of Adjusted Fraction (VAF) for the mediating role in the influence of financial attitude on financial behavior is 42%, categorizing it as partially mediating.

$$\text{VAF}=((0.288\text{x } 0.482))/(0.088+(0.288 \text{ x } 0.482)) = 0.61 =61\% \qquad (2.2)$$

The VAF (Variance Accounted For) value for the mediating role in the influence of financial attitude on financial behavior is 42%, categorizing it as partially mediating.

5. Conclusions

Based on the results of the study, it can be concluded that financial knowledge influences financial behavior (H1), the financial attitude has an influences on financial behavior (H2), income has not influences on financial behavior (H3), locus of control has influence on financial behavior (H4), financial knowledge has an influences on locus of control (H5), financial attitude has an influences on locus of control (H6), income has an influences on locus of control (H7), financial knowledge has an influences on financial behavior mediated by locus of control (H8), financial attitude has an influences on financial behavior mediated by locus of control (H9), income has an influences on financial behavior mediated by locus of control (H10). Based on the results of the study, it can be seen that all variables have a significant relationship except income income on financial behavior (H3).

Suggestions for the object of research are for students, it is expected that they have the ability to apply the knowledge gained in financial management courses. Consequently, it is hoped that students can implement better, smarter, and more responsible financial behaviors. Additionally, it is necessary to develop better self-control so that students can reduce impulsive shopping behaviors. With strong self-control, students are expected to address personal financial issues, avoid unnecessary debts, and build a more stable and sustainable financial foundation for the future.

Suggestions for further research are to discuss other variables outside of this research to get much insight into what variables can affect financial behavior. Not only that, further research can use other objects such as Small and Medium Entreprises (SMEs) or Emplyoess.

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