

# Combination of Financial Knowledge and Financial Attitude in Establishing Good Financial Management Behaviour for Students After the COVID-19 Pandemic

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## Abstract

**Objective:** This study aims to investigate the factors influencing student financial management behaviour after the COVID-19 pandemic. Financial management behaviour is believed to be a driving factor in managing good finances during a difficult financial condition.

**Design/Methods/Approach:** This study applied quantitative methods by distributing questionnaires using google forms. A total of 173 data were declared valid. The data was then processed using SEM GSCA Pro software to test its validity and reliability. Then measurements of the fit model and hypothesis test were carried out. The mediation test was carried out using the Sobel test.

**Findings:** The results of this study indicate that financial knowledge and financial attitude have a significant effect on financial management behaviour. However, locus of control and materialism do not influence financial management behaviour. This study also revealed that financial attitude mediates the effect of financial knowledge on financial management behaviour.

**Originality:** This research applied the Theory of Planned Behaviour in predicting factors that influence student financial management. This research also contributes to financial literacy and reveals the influence of financial knowledge, financial attitude, locus of control, and materialism. The difference between this research and the previous one is that this study tried to discuss the antecedents of student financial management behaviour after the COVID-19 pandemic. Financial management behaviour research after the COVID-19 pandemic is rarely examined, so this research filled the existing gaps.

**Practical/Policy implication:** Practitioners and policymakers should focus on good financial education, so students have good financial knowledge. In addition, inner attitudes must also be formed with periodic training to form a good financial attitude.

**Keywords:** COVID-19, Financial Management Behaviour, Financial Knowledge, Financial Attitude

**JEL Classification:** G53, I2



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## I. Introduction

The COVID-19 pandemic has spread all around the world. This pandemic has an impact on the condition of the community. During the COVID-19 pandemic, the level of depression, anxiety, and stress felt by the community increased (Ben Hassen et al., 2022). Most people lost their jobs, resulting in a lack of income and changing spending habits where people only bought basic needs (Kumar & Abdin, 2021). Changes also occurred in households where they became wiser in spending, consumption, planning, and investment. In addition, individuals were more likely to enjoy life as much as they could or did not borrow (Alhenawi & Yazdanparast, 2022). The financial impact of the COVID-19 pandemic has led to higher spending than income. Although all communities felt the impact, people with lower-middle income were more concerned with financial conditions than those with upper-middle income (Goyal et al., 2021). If the community did not have good financial education, their financial condition would worsen. Chhatwani & Mishra (2021) suggested that financial literacy reduces financial fragility. The community would be able to manage their finances properly by prioritizing what is needed so that they can reduce their unnecessary expenditures.

However, Indonesian people's financial literacy level is still at level 37.72, much lower compared to other countries such as Singapore, which is at level 61 (OCBC NISP, 2021). Based on the data from Indonesian Statistics, the current labour force is dominated by the younger generation. The younger generations are known to have financial problems. This can result from the lack of financial knowledge that impacts inaccurate financial decisions (Yahaya et al., 2019). The impact of the COVID-19 pandemic will further complicate them in determining their financial priorities.

The previous literature related both poor financial priorities and financial literacy. Potrich et al. (2016) explained that an important component in financial literacy is the level of financial knowledge because it becomes the main factor in influencing individual behaviour in financial planning. Suggests Yong et al. (2018) that attitudes strongly influence one's behaviour. It is because a person's behaviour can be seen from their attitude. The same goes for financial behaviour. Good or bad financial planning depends on the high or low financial attitude. Rizkiawati & Asandimitra (2018) suggested that someone who truly believes that financial problems result from actions can solve financial problems, influencing financial management behaviour. This belief is called the locus of control. The study conducted by Bapat (2020) supported this argument that locus of control influences financial management behaviour. This means that the higher the locus of control, the better the financial management behaviour. A person's level of materialism can also determine financial decisions. Someone with a high level of materialism tends to buy things impulsively. These materialists will always compare with others and not hesitate to continue buying new products (Pradhan et al., 2018). The higher the level of materialism, the worse the level of financial management behaviour will be, and in the end, they cannot manage their finances properly.

However, this statement still contradicts the results of a previous study. She et al. (2022) suggested that financial knowledge directly influences financial behaviour. However, Bapat (2020) explained that there is no correlation between financial knowledge and financial management behaviour. Bapat (2020) suggested that financial attitude can mediate financial knowledge and financial management behaviour. Yahaya et al. (2019) suggested that financial attitude influences financial management behaviour directly.

In contrast, Agarwal et al. (2015) findings suggest that financial attitude is negatively correlated with financial behaviour. She et al. (2022) suggests that locus of control can influence financial behaviour. However, Perry & Morris (2005) suggested the opposite, where the locus of control has a negative influence on financial management behaviour. Arofah et al. (2018) suggested that materialism has a positive influence on financial behaviour. Meanwhile, Lučić et al. (2021) suggested no correlation between materialism and financial behaviour. The inconsistency of these results becomes a gap to be examined further in the relationship between financial knowledge, financial attitude, locus of control, and materialism with financial management behaviour.

A previous study by Bapat (2020) described the influence of financial knowledge, financial attitude, locus of control, and financial risk tolerance on financial management behaviour. This study only discusses psychological beliefs but has not included the materialism variables. Previous research suggested that materialism can influence one's financial behaviour (Helm et al., 2019). Post-pandemic research on the financial management behaviour of students is still rarely conducted, so this study attempts to fill in the existing gap. Therefore, this study aimed to analyze the effect of financial knowledge, financial attitude, locus of control, and materialism on financial management behaviour. This research is expected to be able to contribute to the literature of financial literacy literature for students after the COVID-19 Pandemic.

This study gives several significant contributions. First, this study examines the factors that influence the financial management behaviour of students after the COVID-19 pandemic. Previous studies focus more on the impact of COVID-19 on the financial behaviour of households or employees. Some literature focus on students, so this study fills the existing gap. Second, this study incorporates financial knowledge, financial attitude, locus of control, and materialism variables that have never been studied before to broaden the understanding of the factors that influence financial management behaviour. Third, this study was conducted because of the phenomenon of the younger generation in Indonesia, especially students, who still have low financial literacy. Therefore, it is necessary to conduct a study to improve financial management behaviour. This is important because good financial management behaviour may equip students to deal with uncertain financial situations. Fourth, this study was conducted because there are gaps in the

results of previous studies, which provide an opportunity for this study to examine them further. Fifth, this study develops the literature theory of planned behaviour by applying the theory to this study. Finally, this study contributes to determining policies that can improve the financial literacy of the younger generation, especially students, after the COVID-19 pandemic.

In this study, we explain the impacts of the COVID-19 pandemic, which cause the increasing level of depression, anxiety and stress the community feels. There is a change in the patterns of managing finances in the community. At the household level, they are wiser in managing expenses, consumption, planning, and investment. At the individual level, they prefer to live according to their standards. Nevertheless, the impact of the COVID-19 pandemic hits lower to middle-income people harder. Despite the differences in income, previous studies showed that people who have good financial literacy would be able to manage finances well.

Additionally, it was found that the level of financial literacy of Indonesian people is still very low. Moreover, the current labour force is dominated by the younger generation. The younger generation is known to have financial problems. The impact of the COVID-19 pandemic will further complicate them in determining their financial priorities. Therefore, efforts are needed to improve their understanding of financial priorities—the previous literature associated financial priority issues with financial literacy. One of the important factors in financial literacy is financial knowledge. In addition, financial attitude can also influence one's financial behaviour. Another factor that can influence financial management behaviour is a locus of control. Locus of control is one's belief in dealing with their problem. Materialism can also influence financial management behaviour. The higher one's materialism, the lower their level of financial management behaviour. However, those findings are still inconsistent. There are still differences in the results of previous studies between variables which become a gap for this study to fill. The difference between the previous and current studies is that this study used the financial knowledge, financial attitude, locus of control, and materialism variables against financial management behaviour. Meanwhile, previous studies did not include the materialism variable. In addition, previous studies investigate people who already had income, while this study investigates students after the COVID-19 pandemic.

## **2. Literature Review and Hypotheses Development**

### **Theory of Planned Behaviour**

Planned behaviour theory is the development of the theory of reasoned action. The main idea of this theory is that one's intentions as a key factor in behaving. The intention is assumed to explain the factors that motivate a person to behave. This shows that the stronger one's intentions are, the more realistic he/she behaves. However, intentions are not the only factor because many factors can still influence one's behaviour, such as the availability of opportunities and resources (money, energy, friends, and so on). Attitude and subjective norms influence the intention in this theory and perceived behavioural control. Attitude towards the behaviour refers to evaluating the profit or loss of behaviour carried out by a person. Secondly, the subjective norm is the social pressure a person feels due to their behaviour. Thirdly, perceived behavioural control refers to behaviour that someone controls. Perceived behavioural control plays an important role in this theory. Perceived behavioural control and behavioural intention can predict behavioural achievement. This is because it has a fixed intent and the perceived behavioural control shows that successful behaviour will increase much more. For example, if two people play football, one of them who strongly believes in having the capability will practice harder than the one who does not believe in his own ability. However, perceived behavioural control in this theory depends on the information and resources possessed by the person. It means that if there is insufficient information and resources, perceived behavioural control is less likely to impact one's behaviour. Theoretically, a higher attitude towards the behaviour, subjective norm, and perceived behavioural control will increase one's intention to behave. Some studies show that mostly attitude is the only thing that influences intention.

Nevertheless, the three independent factors influence a person's behaviour at the same time (Ajzen, 1991)). This theory was proven by Sumaedi et al. (2021), where the attitude toward behaviour, subjective norms, and perceived behavioural control influenced people's intentions so that they were willing to implement the policy of staying at home during the COVID-19 pandemic. Therefore, as proposed by this theory, someone involved in financial planning is actually because they have an intention, which is cultivated by their attitude, that leads to the behaviour and their self-confidence in behaving.

### **The Influence of Financial Knowledge on Financial Attitude and Financial Management Behaviour**

Financial knowledge is defined as one's understanding of financial information. Meanwhile, a financial attitude refers to one's character towards financial problems and financial management behaviour to explain income, outcome, and investment management (Bapat, 2020). Previous research has shown that financial knowledge is proven to be one of the factors for someone to have good financial behaviour (Yong et al., 2018). Someone with better financial knowledge will have better financial behaviour and financial well-being. Financial knowledge is seen as important for employees. This

is because high financial knowledge will give confidence to the employees in making financial decisions (She et al., 2022). Someone with a good attitude will also be good at saving (Minibas-Poussard et al., 2018). Financial attitude is also known to influence individual behaviour in investing, where the higher the financial attitude, the riskier the investment they would take. These risky assets include savings, deposits, mutual funds, and stocks (Shih & Ke, 2014). The reason risky assets are chosen is that they are for long-term investment purposes and financial objectives to be achieved (Agarwal et al., 2015).

A better person's financial knowledge leads to better financial management behaviour. Yong et al. (2018) explained that financial knowledge has a positive effect on financial management behaviour. For students, financial knowledge may constitute a prerequisite for entry into the world of work. This is because students with good financial knowledge will have good financial behaviour (Çoşkun & Dalziel, 2020). Financial knowledge is very important for employees with a high level of financial literacy will make them capable of making smart financial decisions (She et al., 2022)). Bapat (2020) proved that financial knowledge could influence financial attitude while making financial attitude a financial mediator of knowledge on financial management behaviour. Yong et al. (2018) supported the study's results where attitude plays an important role in turning knowledge into a useful behaviour. Yahaya et al. (2019) suggest that students' financial behaviour can be significantly improved when financial knowledge and financial attitude are combined. Then, at the employee level, financial knowledge and financial attitude will make someone aware of setting the environment of their life while proving that financial attitude is a significant contributor to financial behaviour (She et al., 2022). The theory of planned behaviour suggests that attitude is a significant mediator in the relationship between knowledge and behaviour (Ajzen, 1991). Therefore, based on the explanation mentioned above, the following hypothesizes are proposed:

**H1: The better the financial knowledge, the better the financial management behaviour**

**H2: The better the financial knowledge, the better the financial attitude**

**H3: The higher the financial attitude, results in the better financial management behaviour**

**H4: Financial attitude mediates the influence of financial knowledge on financial management behaviour**

### **The Influence of Locus of Control on Financial Management Behaviour**

Locus of control is defined as an individual's thought in this world. Locus of control is measured by the individual's beliefs about the causes of events in their life. The locus of control is divided into two, namely, the external locus of control and the internal locus of control. External locus of control is an individual's belief that there are factors beyond their ability to control their actions, decisions, and behaviours. On the other hand, an internal locus of control is an individual's belief that they have the ability, expertise, and knowledge to determine the desired result. Individuals with an internal locus of control are goal-oriented and earnest in decisions related to their finances (Grable et al., 2009). Thus, individuals who have an internal locus of control are known to be in a position to behave well in the regulation of their finances (Bapat, 2020). Bapat (2020) suggests that locus of control influences financial management behaviour. Rizkiawati & Asandimitra (2018) also supported the statement that locus of control influences financial management behaviour. She et al. (2022) suggested the same thing in that locus of control influences financial behaviour. Therefore, based on the explanation mentioned above, the following hypothesizes are proposed:

**H5: The higher the locus of control, the better the financial management behaviour**

### **The Influence of Materialism on Financial Management Behaviour**

Materialism is identical to how the individual likes to spend more to make him or herself happy, whether for needs or desires. Materialism proves to be an individual barrier to saving (Helm et al., 2019). This is because materialism will lead individuals to compulsive purchases and ultimately lead to the possibility of indebtedness (Potrich et al., 2016). Materialism among students can happen for several reasons. First, materialism is considered a form of success where students perceive success when they have luxury goods, so they want to buy only to impress others. Second, the materialism of students causes them to buy things that make them happy, love luxury, and buy things that are not needed. Third, materialism will make students buy continuously and agitated if they cannot afford it. Excessive materialism will lead to poor financial behaviour. Materialism will lead to wasteful actions and the inability to manage their finances (Arofah et al., 2018). Materialism is negatively correlated with saving behaviour. Helm et al. (2019) and Potrich & Vieira (2018) suggested that materialism leads to compulsive buying, so it can be concluded that the higher materialism of a person signifies a low level of financial management behaviour. Therefore, based on the explanation mentioned above, the following hypotheses are proposed:

**H6: The higher the materialism, the worse the financial management behaviour**

Based on the explanation of the hypotheses above, the research model is presented in Figure 1 below.

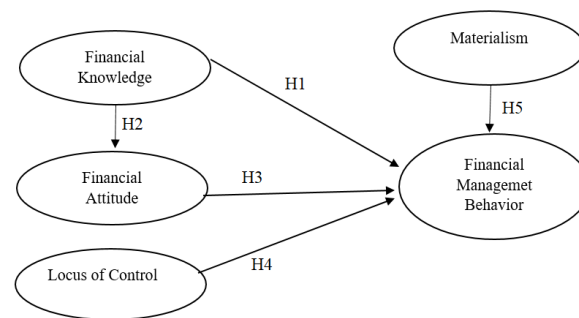


Figure 1. Research Model

### 3. Method

The samples in this study were 313 active students at the OSCP of Diponegoro University Rembang Campus. The reason for selecting the research objects was because students are considered to be mature and able to think carefully in planning. In addition, students are considered to be able to represent the community from different backgrounds and places. This study is classified as a quantitative study. The questionnaire was distributed to students through Google forms. The collection of this questionnaire was carried out from May to June 2022. The total number of questionnaires returned was 263, and 173 questionnaires were declared valid. The respondents' answers used a closed questionnaire with a Likert scale of 1–5, where one means strongly disagree, and five means strongly agree. A total of 24 indicators were used in this study.

This study used GSCA Pro 1.1 software. The use of GSCA (Generalized Structured Component Analysis) aims to obtain a strong structural model for prediction purposes. This study used GSCA to test the validity and reliability. The convergent validity technique measures the validity test, which describes the correlation between reflective indicator values and latent variables. If the estimated value of loadings of each indicator is above 0.5, it can be declared to have good convergent validity and pass the validity test (Ghozali, 2008). The reliability test used the internal consistency reliability. Sugiyono (2006) suggests that the alpha value indicates an identical Cronbach alpha with a reliability measurement (internal consistency), and the required alpha value is 0.6. In addition, there is a PVE (Proportion of Variance Explained) value, which is the sum of the average total variance value of the indicators described by the corresponding components. Dimensionality indicates an eigenvalues value of more than 1 for the total indicator per variable. If the indicator value is more than 1, it indicates the possibility of more than one variable for the total indicator (Hwang et al., 2021).

Furthermore, the measure of fit structural model was based on FIT and AFIT, and the measure of the overall fit model was based on goodness of fit. The FIT value indicates the measure describing the variant of the data. AFIT (Adjusted FIT) shows the complexity of the free degree model (degree of freedom) for the null model and is the tested free degree and free parameter (Ngatno, 2019). FIT and AFIT values range from 0 – 1; the closer to 1, the better the structural model in this study. FITs show the total variance of all components described by the structural research model. FITm shows the total indicator variance described by the structural research model. The GFI value criteria (Goodness of Fit Index) and SRMR (Standardized Root Mean Square Residual) in this study refer to Cho et al. (2020), where for samples above 100, the GFI value received is  $\geq 0.93$  and  $SRMR \geq 0.08$ . The bootstrap resampling method was used for the hypothesis test, which is said to be significant if the correlation coefficient value is  $> 0.1946$  or above 5%. OPE indicates the predictive power of the model for invisible observations. OPEs indicate predictions of structural model strength. OPEm indicates the prediction of the strength of the measurement model. The mediation test in this study used the Sobel test. The criterion used is that if the z value is greater than 0.1946, it can be said that there is mediation in this study. The operational definitions in this study are presented in Table 1 below.

Table 1. Operational Definition of the Variables

Variable	Inquiry Items	Source
Financial Knowledge	FK1 I know the amount of interest on a bank or other financial institution loan	Bapat (2020)
	FK2 I understand why the bank evaluates the ability of its borrowers to pay.	
	FK3 I understand the basics of managing personal finances	
	FK4 I know how to invest.	
	FK5 I know my bank statement account in detail	
Financial Attitude	FA1 Building a saving pattern is very important for me	Bapat (2020)
	FA2 Taking notes on each expense is very beneficial to me	

	FA3	Pension planning is very important in order to maintain the finances of seniors	
	FA4	I've planned my financial goals that help me determine spending priorities	
	FA5	I believe planning for the next 5 – 10 years is the key to success	
Internal Locus of Control	LOC1	I'm good at solving a lot of problems	Bapat (2020)
	LOC2	I can change the things that are important to my life on my own	
	LOC3	I can change my destiny	
Materialism	M1	I'd rather have the money and spend it on myself	Helm et al. (2019)
	M2	I like to buy more expensive items	
	M3	The job I want is a high-paying job	
	M4	I really enjoy buying new items	
Financial Management Behaviour	FMB1	I compare prices when buying products or services	Bapat (2020)
	FMB2	I pay my bills on time	
	FMB3	I record each expense	
	FMB4	I shop according to the plan	
	FMB5	I returned the item to a friend in time (whenever I borrowed)	
	FMB6	I allocate emergency funds	
	FMB7	I save money for the long term (for example, buying a cell phone, tuition, home, etc.)	

## 4. Result and Discussion

### 4.1. Descriptive Analysis of Respondents

The student respondents involved in this study consisted of 65 (37.6%) males and 108 (62.4%) females. The age group of respondents who took part in this study were 63 people aged 19 years old (36.4%), 20 years old, as many as 54 people (31.2%), 18 years old, as many as 28 people (16.2%), 21 years old, as many as 18 people (10.4%), and age 22 years, as many as 10 people (5.8%). Therefore, it can be concluded that respondents in this study were dominated by women aged 19 to 20 years.

### 4.2. Instrument Validity and Reliability Testing

Table 2. Loadings

	Estimate	SE	95% CI	
FK1	0.834	0.02	0.804	0.881
FK2	0.757	0.036	0.689	0.818
FK3	0.682	0.064	0.532	0.782
FK4	0.721	0.049	0.606	0.799
FK5	0.729	0.05	0.617	0.805
FA1	0.856	0.023	0.808	0.901
FA2	0.726	0.06	0.599	0.828
FA3	0.793	0.036	0.712	0.85
FA4	0.757	0.04	0.675	0.843
FA5	0.757	0.049	0.637	0.838
LOC1	0.808	0.031	0.746	0.861
LOC2	0.852	0.037	0.759	0.907
LOC3	0.658	0.079	0.478	0.777
M1	0.715	0.063	0.594	0.808
M2	0.778	0.04	0.684	0.845
M3	0.556	0.094	0.283	0.709
M4	0.71	0.049	0.596	0.805
FMB1	0.629	0.076	0.409	0.743
FMB2	0.746	0.05	0.642	0.829
FMB3	0.638	0.052	0.531	0.724
FMB4	0.687	0.045	0.586	0.751
FMB5	0.798	0.026	0.743	0.847
FMB6	0.74	0.034	0.673	0.808
FMB7	0.766	0.032	0.699	0.83

Table 2 shows the estimated values, bootstrap standard error (SE) and bootstrap 95% confidence intervals (95% CI) loading estimates. An estimate of loadings is used in measuring the validity of each indicator. Loading estimate was used to test the convergent validity of a construct formed with reflective indicators. Table 2 shows that the estimated value of loadings of all indicators is above 0.5, so it can be concluded that all indicators of this research are valid.

Table 3. Construct Quality Measures

	<b>FK</b>	<b>FA</b>	<b>LOC</b>	<b>M</b>	<b>FMB</b>
PVE	0.557	0.607	0.603	0.483	0.515
Alpha	0.799	0.837	0.666	0.637	0.841
Rho	0.862	0.885	0.819	0.786	0.881
Dimensionality	1.0	1.0	1.0	1.0	1.0

Source: GSCA Output, 2022

Table 3 shows construct quality measures where there are PVE, alpha, Rho and Dimensionality values. The reliability test in this study used the alpha coefficient. Table 3 shows that all variables have alpha values above 0.6, so it can be concluded that they passed the reliability test.

#### 4.3. Overall Model Evaluation

Table 4. Fit Measures Model

<b>FIT</b>	<b>AFIT</b>	<b>FITs</b>	<b>FITm</b>	<b>GFI</b>	<b>SRMR</b>	<b>OPE</b>	<b>OPEs</b>	<b>OPEm</b>
0.489	0.482	0.204	0.548	0.963	0.072	0.522	0.81	0.462

Source: GSCA Output, 2022

Table 4 shows the FIT value of 0.489, which means that the diversity of financial knowledge, financial attitude, locus of control, materialism and financial management behaviour explain the phenomenon studied by 48.9% and the remaining 51.1% is explained by other variables outside the study. The AFIT value is 0.482, which means that the diversity of financial knowledge, financial attitude, locus of control, materialism, and financial management behaviour in this study can explain 48.2% of the phenomena studied, and the remaining 51.8% is explained by other variables. The value of FITs showed 0.204, which means as many as 0.204 variants in the components taken into account in the research model. The FITm value shows 0.548, which means as many as 0.548 variants in the indicator calculated in the research model. GFI (goodness of fit index) and SRMR (standardized root mean square residual) show the proportion of differences between sample covariates and covariates produced by parameters estimated from structural analysis. The GFI value is  $0.963 \geq$  cut-off 0.90, and the SRMR value is  $0.072 \leq$  cut-off 0.08. The results showed that the overall research model is said to be good. OPE in this study showed 0.522. OPEs in this study were 0.81. The OPEm in this study was 0.462.

#### 4.4. Hypothesis Testing

Table 5. Path Coefficients

Hypothesis		<b>Estimate</b>	<b>SE</b>	<b>95% CI</b>		<b>Description</b>
H1	FK – FMB	0.285	0.071	0.122	0.423	Accepted
H2	FK – FA	0.638	0.046	0.568	0.724	Accepted
H3	FA - FMB	0.577	0.063	0.449	0.707	Accepted
H4	LOC – FMB	-0.019	0.071	-0.14	0.127	Rejected
H5	M - FMB	0.016	0.06	-0.103	0.134	Rejected

Source: GSCA Output, 2022

Based on table 5, if the estimated value is above 0.1946, then the hypothesis is accepted, so there is a relationship between variables. Meanwhile, if the estimated value is below 0.1946, then the hypothesis is rejected so that it can be said that there is no relationship between variables.

#### 4.5 Correlation Between Variables

Table 6. Component Correlations

	<b>FK</b>	<b>FA</b>	<b>LOC</b>	<b>M</b>	<b>FMB</b>
FK	1.0	0.638	0.504	0.214	0.647
FA	0.638	1.0	0.522	0.206	0.752
LOC	0.504	0.522	1.0	0.306	0.431

M	0.214	0.206	0.306	1.0	0.19
FMB	0.647	0.752	0.431	0.19	1.0

Source: GSCA Output, 2022

4.6. Mediation Test

Mediation test results using the Sobel test in this study obtained a z value of 7.64 or greater than 1.96. This shows that financial attitude mediates the effect of financial knowledge on financial management behaviour. Based on the statistical results that have been presented, Figure 2 presents a research model with statistical results.

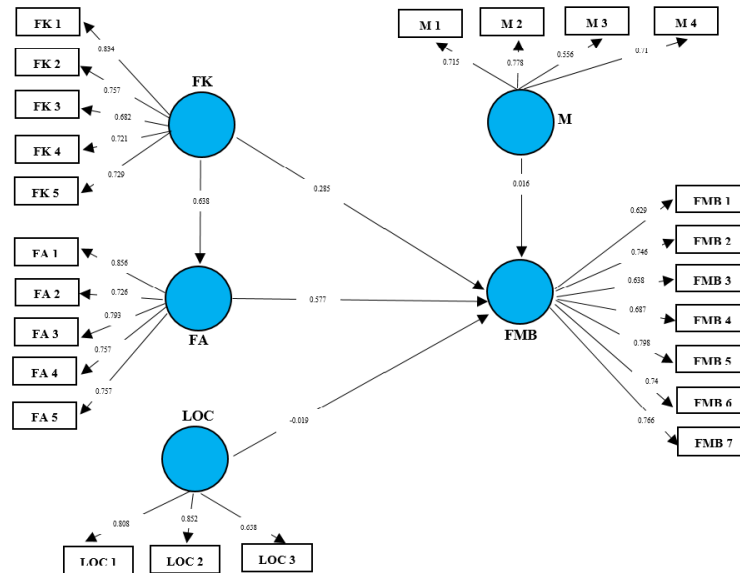


Figure 2. Research Framework with Statistical Result

4.7. Discussion

This study contributes to the development of financial management behaviour literature, including 1) the factors influencing financial management behaviour are financial knowledge and financial attitude. 2) validated the research indicators developed by Bapat (2020), namely indicators for financial knowledge, financial attitude, locus of control, and financial management behaviour, and Helm et al. (2019) indicators for materialism variables. 3) confirmed the theory of planned behaviour in explaining the effect of attitude on student behaviour. 4) examined financial knowledge, financial attitude, locus of control, and materialism of post-pandemic students.

The results showed that financial knowledge had a positive influence on financial management behaviour and attitude. The results of this study are in accordance with previous research conducted by Yong et al. (2018). When viewed from the value of the loading, it is known that the interest on bank loans or other financial institutions has the greatest value. This shows that the financial condition of students will be more severe if they do not know the number of interest expenses of either banks or other institutions, especially in difficult times such as the pandemic. Credit cards and pay-later systems that are developing today certainly make it easy for students to buy the desired items without having to collect money first. However, the impact of the student must bear the principal debt and interest charged at the end of the month. By having good financial knowledge, students will be more selective before acting. However, it does not mean that it is only focused on the knowledge of the interest of banks or other institutions alone. Knowledge in managing finances independently and investment also influence students' financial knowledge to achieve optimal financial behaviour. Çoşkun & Dalziel (2020) suggest that universities should provide sufficient financial education for students. This aims to equip them with good financial knowledge because they will face financial decisions daily, such as investment decisions. Researchers suggest that universities create a curriculum that contains financial education. Financial education can be in the form of differences between income and expenditure, types of investment, financial literacy seminars, and so on that are carried out periodically. For practitioners, financial education can be done by working with universities or holding seminars, webinars, and financial literacy mentoring programs aimed at students. Students must work and manage their finances independently.

The results demonstrated that financial literacy positively influenced financial management behaviour and attitude. The results of this study are in accordance with previous research conducted by Çoşkun & Dalziel (2020). Good financial knowledge will lead students to have a wise attitude towards their finances. This is necessary due to the effects of the pandemic, which is causing a high level of anxiety in the community (Ben Hassen et al., 2022). A better financial understanding of students will enable them to be better prepared to think rationally about their finances under difficult



conditions. Awareness of the interest expense faced by borrowers and investment decisions can encourage students to behave by prioritizing the post-pandemic circumstances. Therefore, students need to be trained to become more familiar with saving, recording expenses, and planning long-term financial plans. Practitioners may act as mentors by supervising students to be accustomed to having a disciplined attitude to practice with a good financial attitude.

This study shows that financial attitude influences financial management behaviour. The results of this study support the research conducted by Bapat (2020), which explains that financial attitude has a positive and significant effect on financial management behaviour. The highest loadings value indicates the importance of building saving patterns. This demonstrates the awareness that the importance of saving will have an impact on how well someone manages their finances. Savings patterns designed since adolescence will accustom students not to be wasteful and selective in their choices. The pandemic demands that someone prioritize their spending (Kumar & Abdin, 2021). Having an economical attitude and continuing to form a good savings pattern can prevent post-pandemic financial difficulties. However, it is not just the habit of saving patterns that are prioritized. Taking notes on the outcomes, planning pension funds, and planning long-term finances also contribute to students' good financial attitude. Therefore, there is a need for a learning method and practice to become familiar with being wise in deciding financial problems among students.

The results of this study simultaneously proved that financial attitude mediates the relationship between financial knowledge and financial management behaviour. This proves the theory of planned behaviour which explains that attitude is the most significant factor in influencing one's intention to act. The results of this study are also in accordance with research conducted by Bapat (2020) which suggests that financial attitude mediates the effect of financial knowledge on financial management behaviour. When looking at the Sobel test value, the effect of financial attitude mediation is very high. The estimated value in the coefficient path also shows the effect of financial knowledge more strongly through financial attitude on financial management behaviour than the effect of financial knowledge on financial management behaviour directly. Students should be educated about the importance of having good financial knowledge and begin to be trained to become familiar with having good financial attitudes to maximize good financial management behaviour among the students. Education can be in the form of an education curriculum that distinguishes between income and outcome, long-term investment, and profits if it has good finances.

Moreover, seminars and periodical courses may also be organized. Ensuring students have a good financial attitude can be done by familiarizing students with consistently saving, recording each expenditure, planning financial priorities, and planning long-term finances. As a result, practitioners should emphasize the combination of financial education and training students' attitudes in financial management. Practitioners can combine good financial education and training students to become accustomed to saving and remember the importance of long-term investment. Practitioners can provide pre-test and post-test when providing training to find out about improving financial management behaviour for students. The combination is expected to help and equip students to face the financial situation after the pandemic.

This study proves that locus of control does not influence financial management behaviour. Although the estimated value is negative, it has not been able to influence financial management behaviour. In table 6, the correlation value of locus of control to financial management behaviour is low, namely 0.431. This may be since students still lack confidence in themselves to control events in their lives. According to the age of the respondents, the majority of them are still between the ages of 19 and 20, which influences their psychology and their belief that they are dealing with complex financial situations. Students need guidance from parents or more experienced people because they are still in the stage of seeking their own identity. This makes them doubt when faced with financial decisions in post-pandemic conditions. Financial education and encouragement are required for students to feel ready to manage their finances. Another factor that can influence financial management behaviour is financial confidence. High confidence turns out to be able to influence one's financial behaviour. This is in accordance with the theory of planned behaviour, where in behaving, one is influenced by a high level of confidence. Ramalho & Forte (2019) show that high confidence influences financial behaviour. However, the influence of locus of control cannot be ruled out. The more mature students have income, the role of internal locus of control will increase towards financial management behaviour. Bapat (2020) proved that the internal locus of control plays an important role in changing one's behaviour when growing up. Employees with an internal locus of control believe they can manage their finances (She et al., 2022).

This study proves that materialism does not influence financial management behaviour. Based on table 6, the correlation value of materialism to financial management behaviour is very low, namely 0.19. The results of this study are in accordance with research conducted by Lučić et al. (2021), who suggest no correlation between materialism and financial behaviour. Materialism does not prevent students from having good financial management behaviour. This study only revealed a phenomenon of 48.9%, and the remaining 51.1% was explained by other variables outside this study. The very severe conditions of the Covid-19 pandemic seem to have influenced the mindset of students. Students are more cautious and rational under challenging conditions. Students think shopping and buying expensive items does not make them enjoy it. In addition, students also do not set a job in a high-paying company; they prefer a sufficient job. The consequences of financial difficulties will be felt by students who do not set their priorities wisely. It will lead them to become easily anxious and depressed. However, the impact of materialism cannot be equal when the economy is Helm et al. (2019) growing. Suggests that materialism can hinder one's financial behaviour. This means that the higher the materialism, the less financial behaviour. Therefore, in good economic conditions, there is a need for massive financial education to suppress materialism.

## 5. Conclusion

Financial management behaviour is seen as a solution to managing finance. The impact of the pandemic will be very noticeable for young students who require financial guidance and do not yet have income. Based on the theory of planned behaviour supported by previous research results, financial management behaviour is influenced by financial knowledge, financial attitude, locus of control, and materialism. The results of this study show that financial knowledge is proven to influence financial management behaviour. In addition, this study also shows that financial knowledge influences financial attitude. This study proves that financial attitude partially mediates financial knowledge on financial management behaviour. This study found no correlation between locus of control and financial management behaviour. However, as students grow up and earn their income, they will be more confident in controlling their financial situation and will better manage finances. Materialism is also known to have no impact on financial management behaviour. However, if economic conditions recover, there is a possibility that materialism influences financial management behaviour in students.

The results of this study have several implications. Financial management behaviour is a good solution for students to overcome their financial problems after the COVID-19 pandemic. The results of this study indicated that financial management behaviour could be improved by improving students' financial knowledge. In this study, financial knowledge plays an important role because it becomes a basic provision for the students to solve their financial problems wisely. Good financial knowledge will lead to good financial management behaviour. This study found that knowledge about loans provided by banks or other financial institutions is the most significant. The results of this study also revealed that to optimize financial knowledge, students can be taught about knowledge of managing finances independently and invest. Therefore, the researchers suggest that universities create a financial education curriculum. Financial education can be in the form of differences between income and expense, types of investment, financial literacy seminars, and the like that are carried out periodically.

For practitioners, financial education can be done by collaborating with universities or holding seminars or webinars and financial literacy mentoring programs aimed at students. These must be done before the students work and manage their finances independently. In addition, the results of this study revealed that financial knowledge also influences financial attitude. Students with better financial knowledge will be more prepared for difficult situations. Therefore, they can think rationally about dealing with their finances. Knowledge of the amount of interest borne by borrowers and investment decisions can encourage students to behave by determining their priorities during post-pandemic situations. Therefore, students need to be trained to become more familiar with saving, recording expenses, and planning long-term financial plans. Practitioners may act as mentors by supervising students to be accustomed to having a disciplined attitude to practice having a good financial attitude.

The results of this study showed that financial attitude influences financial management behaviour. The results of this study confirmed the theory of planned behaviour. The results of this study proved that attitude plays an important role in predicting one's behaviour. Statistical test results showed that the influence of financial knowledge on financial management behaviour would be much stronger through financial attitude. Students should be educated about the importance of having good financial knowledge and begin to be trained to be accustomed to having a good financial attitude to maximize their good financial management behaviour. The education can be in the form of an education curriculum that distinguishes between income and expense, long-term investments, and the benefits of having good finances.

Moreover, seminars and courses may be held periodically. Ensuring students have a good financial attitude can be done by making them accustomed to consistently saving, recording each expense, planning financial priorities, and planning long-term finances. Consequently, practitioners should focus on combining financial education and shaping the students' attitudes towards financial management. Practitioners can combine good financial education, train the students to become accustomed to saving and remind them of the importance of long-term investment. Furthermore, practitioners can provide pre-test and post-test during the training to identify how to improve the financial management behaviour of students. The combination is expected to help and equip students to deal with financial situations after the pandemic.

This study has several limitations. Among them, the number of student samples was few, so further studies are encouraged to include more samples at universities in large cities such as Jakarta, Semarang, or Surabaya. Therefore, the results of this study can be generalized. Further studies should include other variables, such as financial confidence and student economic factors. The theory of planned behaviour suggests that confidence can also influence one's behaviour. As a result, including the financial confidence variable will complement the application of this theory in predicting student financial behaviour. In addition, economic conditions may influence the financial management behaviour of students. Differences in economic conditions felt by students during the pandemic can also influence their financial management behaviour. Including this variable will provide a comprehensive understanding of this study.

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## Author Contribution

Author 1: conceptualization, writing original draft, data curation, formal analysis, investigation, methodology.

Author 2: collecting data

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## Conflict of Interest

The authors declare that the research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest.

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