

## The Role of Financial Literacy, Financial Attitudes, and Family Financial Education on Personal Financial Management and Locus of Control of University Students

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**Abstract** – The purpose of this study was to analyze the direct and indirect effects of financial literacy, financial attitudes, and family financial education on personal financial management with locus of control as an intervening variable. This study uses an explanatory research approach, which aims to explain the causal relationship between the research variables and hypothesis testing. This type of research is a type of associative and quantitative research. To examine how a variable relates or relates to other variables, or whether a variable is influenced by other variables. This type of research is a type of associative and quantitative research. Respondents in this study were university students in Banten as many as 321 students. Research data was obtained by distributing online questionnaires designed with a Likert scale of 1 to 7 via social media. The sampling method in this study used a non-probability sampling method which was determined by the simple random sampling method. Data collection techniques used online questionnaires, while data analysis techniques in this study used Structural Equation Modeling (SEM) analysis. The results of this study are financial literacy has a positive and significant effect on personal financial management, financial attitudes have a positive and significant effect on personal financial management, family financial education has a positive and significant effect on personal financial management, financial literacy has a positive and significant effect on locus Of Control, Financial Attitude has a positive and significant effect on Locus Of Control, Family Financial Education has a positive and significant effect on Locus Of Control, Locus Of Control has a positive and significant effect on Locus Of Control.

**Keywords** – Financial literacy; locus of control; personal financial management; family financial education; financial attitude; student

### Introduction

The level of financial literacy of the Indonesian people so far has not shown good conditions, based on the results of a survey conducted by the Financial Services Authority (OJK) in the 2013-2016 period, showing that Indonesia's financial literacy level is only 29.66%. The President of the Republic of Indonesia said that the level of financial literacy of the Indonesian people is currently very low when compared to countries that are members of ASEAN (Association of Southeast Asian Nations). According to [Chujan et al. \(2022\)](#) Good financial management must be supported by good financial literacy. Financial literacy also influences positive financial behavior. With proper management and also supported by good financial literacy, it is hoped that the standard of living will increase. This applies to every level of income, because no matter how high the level of income, without proper management, financial security is difficult to achieve. According to [Indana et al. \(2022\)](#) Knowledge about financial management can be obtained by following several lessons about financial management from an early age or obtaining information from trusted sources regarding financial management in everyday life, one of which is family. According to [Indriaswari et al. \(2022\)](#) Given the increasingly sophisticated technology nowadays, it is possible that everyone can get information about good financial management very easily, especially for the younger

generation, who are the most technology users in Indonesia. The level of knowledge about financial management can be seen from the large number of young people, especially students who already know and even use financial products, be it banking, insurance or investment products in their daily lives. Therefore, it can be assumed that students have adequate financial knowledge, but even so, not all individuals have good personal financial management skills. Several previous studies that have been conducted using students as research subjects show that most students experience financial problems caused by a lack of ability to control personal money, not in the habit of preparing financial plans, and the habit of hanging out with friends to just hang out or go out. These habits unknowingly become a factor causing the increase in student monthly expenses. Based on the results of the previous survey, it shows that most students already have sufficient knowledge, this can be seen from the number of students who have used banking products and know other types of banking products even though they don't use them, besides that they also know a lot about insurance. and investment even though they do not participate in investing or have insurance. However, there is interest from some students to invest in the future.

According to [Griffin et al. \(2022\)](#); [Indana et al. \(2022\)](#) Personal financial management is a person's ability to manage starting from planning, budgeting, checking, managing, controlling, finding and storing daily financial funds. income earned. Personal financial management can also be interpreted as a way of managing what is owned related to one's responsibility for managing his finances. With good financial management, a person will not be trapped in behavior to fulfill unlimited desires. According to [Chujan et al. \(2022\)](#); [Furrebøe et al. \(2022\)](#) Everyone wants to have the ability to make intelligent decisions about how to manage spending and investment and later when acquiring wealth. This practical approach to achieving goals involves learning about financial activities such as record keeping and budgeting, banking, using credit, saving, borrowing, paying taxes, making major expenses, buying insurance, investing and retirement plans. A comprehensive financial plan can improve the quality of life and increase satisfaction from the uncertainty of future resources and needs. Personal financial management is one of the important things, being able to make someone use money wisely provides benefits to the economy such as encouraging producers to make products and services that suit their needs. Someone can be said to have personal financial management if that person is able to manage budgets, save money, control finances, and invest. There are five components of good financial management, namely (1) controlling finances, (2) paying bills on time, (3) planning finances for the future, (4) saving, and (5) being self-sufficient According to [Indriaswari et al. \(2022\)](#) Locus of control is the last factor that is thought to influence personal financial management. Locus of control is an individual's point of view regarding an event and the level of the individual's ability to control the events they experience. Individuals who have self-control to use their money wisely are very likely that these individuals can carry out financial management well. In this study, the locus of control variable is located as an intervening variable, namely the variable that mediates the influence of the independent variables on the dependent variable as an indirect interaction. Based on the explanation of the variables above, it can be seen that these four factors have a high enough influence on personal financial management.

According to [Jufrizen et al. \(2022\)](#) put forward 6 (six) financial literacy core competencies, namely: a person's basic ability in financial management, allocating income and expenses, saving and planning, knowledge of loans and understanding in debt management, understanding financial and investment products, and students' ability to protect themselves Alone from financial risk. These competencies must be mastered by students, especially college students. Financial literacy can be influenced by several factors, one of which is Locus of Control, this variable is a psychological aspect that must be considered. Locus of Control was first proposed by [Mansor et al. \(2022\)](#) Locus of Control is oriented into two, namely internal Locus of Control and external Locus of Control. [Muttalib \(2022\)](#) states that internal Locus of Control is a person's perspective on an event as a predictable event, and individual behavior plays a role in it. This

means that a person believes that a success or failure that happens to him depends on attitude, personal responsibility and is the result of his own efforts. Financial literacy can also be influenced by the income received. Understanding income [Mansor et al. \(2022\)](#); [Muttalib \(2022\)](#) income can be obtained from various sources, including income obtained without providing any activity that is received by someone. Income can also be interpreted as a result obtained from a person's efforts at work and is assessed at a certain level or value. According to [Jufrizen et al. \(2022\)](#) income is the amount of income received by residents for their work performance during a certain period, whether daily, weekly, monthly or yearly.

**Method**

This study uses an explanatory research approach, which aims to explain the causal relationship between the research variables and hypothesis testing. This type of research is a type of associative and quantitative research. To examine how a variable relates or relates to other variables, or whether a variable is influenced by other variables. This type of research is a type of associative and quantitative research. Respondents in this study were university students in Banten as many as 321 students. Research data was obtained by distributing online questionnaires designed with a Likert scale of 1 to 7 via social media. The sampling method in this study used a non-probability sampling method which was determined by the simple random sampling method. Data collection techniques used online questionnaires, while data analysis techniques in this study used Structural Equation Modeling (SEM) analysis.

The hypothesis in this study is

- H1: Financial literacy has a positive and significant effect on personal financial management*
- H2: Financial attitude has a positive and significant effect on personal financial management*
- H3: Family financial education has a positive and significant effect on personal financial management*
- H4: Financial Literacy has a positive and significant effect on Locus Of Control*
- H5: Financial attitudes have a positive and significant effect on locus of control*
- H6: Family Finance Education has a positive and significant effect on Locus Of Control*
- H7: Locus of control has a positive and significant effect on locus of control*

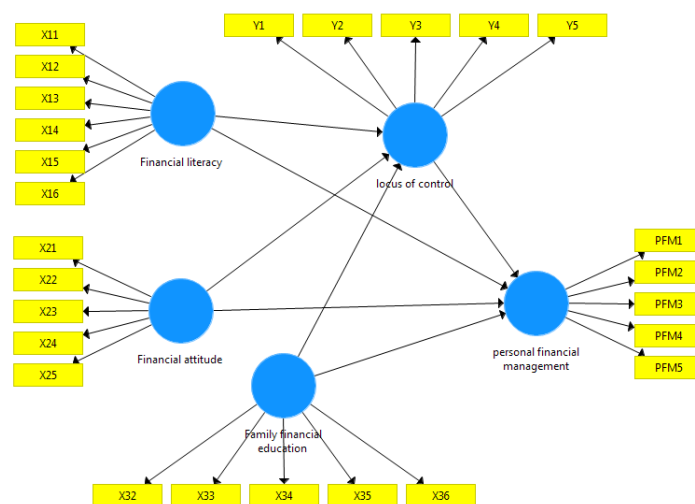


Fig 1. Research Model

**Result and Discussion**

**Validity and Reliability Test**

The model is said to be good if the AVE of each variable is greater than 0.50. The output results in this study indicate that the AVE value of all variables is greater than 0.50 so that the model can be said to be good.

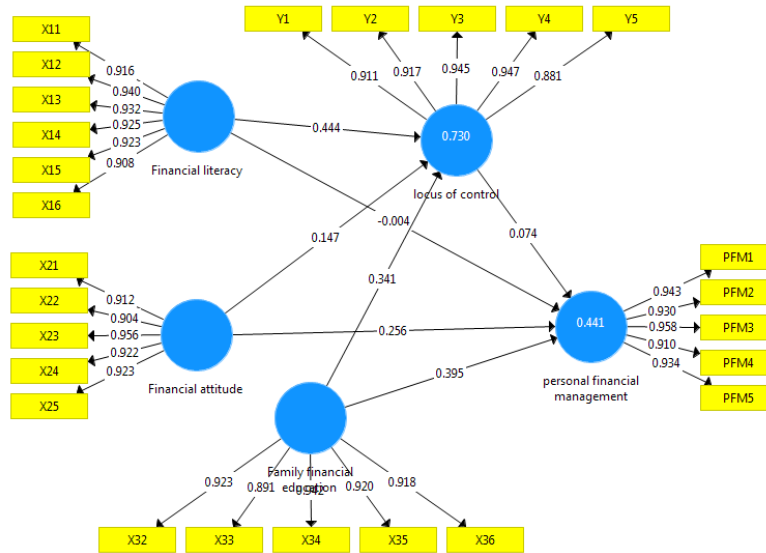


Fig 2. Validity Testing

**Reliability Test**

The reliability test was carried out to prove the accuracy, consistency and accuracy of the instrument in measuring constructs. Measuring reliability in PLS-SEM using SmartPLS 3.0 software can be conducted by looking at: 1) Composite Reliability Composite reliability is used to measure internal consistency. CR values of 0.60 – 0.70 are still acceptable for exploratory research. 2) Cronbach's Alfa Cronbach's Alfa is used to diagnose the consistency of the entire scale by looking at the reliability coefficient. Cronbach's Alpha value > 0.60 is still acceptable for exploratory research. The variable is declared reliable if the value of composite reliability or Cronbach's alpha is above 0.70.

Table 1. Reability Testing

	Cronbach's Al...	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Family financial education	0.954	0.955	0.964	0.845
Financial attitude	0.957	0.959	0.967	0.853
Financial literacy	0.966	0.967	0.972	0.854
locus of control	0.955	0.958	0.965	0.847
personal financial management	0.964	0.966	0.972	0.874

**Hypothesis Testing (Resampling Bootstrapping)**

The final step of the data that has been processed and analyzed by the researcher is to test the hypotheses that have been formulated. If the t-statistic value is smaller than the t-table value (t-statistic < 1.96), then Ho is accepted and Ha is rejected. If the t-statistic value is greater or equal to the t-table (t-statistic > 1.96), then Ho is rejected and Ha is accepted (Purwanto et al., 2019). Hypothesis testing is done by means of statistical tests. The statistical test used

is the t-test or p (probability). The t-test is used to prove the hypothesis whether there is an influence of each independent or exogenous variable individually on the dependent or endogenous variable.

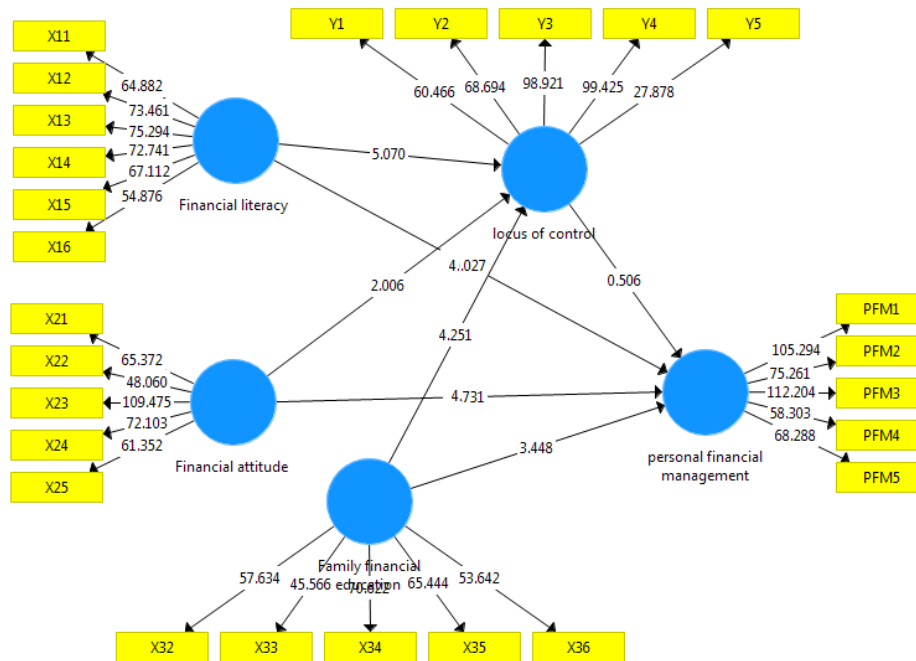


Fig 3. Hypothesis Testing

Table 3 . Hypothesis Testing

	T Statistics ( O...	P Values
Family financial education -> locus of control	4.251	0.000
Family financial education -> personal financial management	3.448	0.001
Financial attitude -> locus of control	2.006	0.045
Financial attitude -> personal financial management	3.731	0.001
Financial literacy -> locus of control	5.070	0.000
Financial literacy -> personal financial management	3.027	0.001
locus of control -> personal financial management	2.506	0.000

**Financial Literacy Influences Personal Financial Management**

Based on the tests carried out, it shows a calculated t value of 3.027 > t table value of 1.96 and sig 0.001 < 0.05. So, H<sub>1</sub> is accepted. The results of the study show that someone who has an adequate level of financial literacy will be able to manage his finances well and be able to make the right financial decisions

so that he can carry out personal financial management to the fullest. Good financial literacy can help someone to filter the information needed to carry out financial management in order to improve financial well-being. So that the better financial literacy, the better personal financial management, and vice versa if financial literacy is low, personal financial management is also low. Similar research results were obtained from research according to [Nair \(2022\)](#); [Nazah et al. \(2022\)](#); [Nisa et al. \(2022\)](#); [Purwanto et al. \(2021\)](#); [Rashid et al. \(2022\)](#) who concluded that personal financial management is influenced by financial literacy.

#### **Financial Attitudes Influencing Personal Financial Management**

Based on the tests that have been carried out, it shows that the t-count value of financial attitudes is  $3.731 >$  the t-table value is 1.96 and the sig value is  $0.001 < 0.05$ . So  $H_2$  is accepted. A good financial attitude will affect the mindset of individuals related to finance so that it can affect personal financial management. [Purwanto et al. \(2021\)](#); [Rashid et al. \(2022\)](#) argues that financial attitudes can affect financial problems, for example a lack of income to meet needs and the occurrence of arrears in paying bills. So someone with a good financial attitude will affect his personal financial management. So that if the financial attitude has increased then personal financial management has also increased, and vice versa if the financial attitude has decreased then personal financial management has also decreased. Previous research that produced research that was in line with [Nazah et al. \(2022\)](#); [Nisa et al. \(2022\)](#).

#### **Family Financial Education Influences Personal Financial Management**

Based on the test, the results obtained from family financial education obtained a t-count value of  $3.448 >$  t-table value of 1.96 and a sig value of  $0.001 < 0.05$ . So,  $H_3$  is accepted. Family financial education plays an important role in preparing individuals for financial management, saving and being frugal. According to [Irman \(2018\)](#) family financial education is the main place that plays a role in the socialization process of children regarding finances. Parents can educate their children by teaching various aspects of knowledge including those related to finance. So that the better the level of family financial education, the personal financial management will also increase. Likewise, if the family's financial education is low, personal financial management will also be lower. These results are in line with research according to [Rosalina et al. \(2022\)](#); [Sinaga et al. \(2023\)](#); [Yudha et al. \(2022\)](#) that personal financial management is influenced by family financial education.

#### **Locus Of Control Influences Personal Financial Management**

Based on the test, it shows that the t count is  $2.506 >$  the t table value is 1.96 and the sig is  $0.000 < 0.05$ . Means,  $H_4$  is accepted. Based on the results of the research that has been done, it shows that locus of control has a significant influence on personal financial management. Locus of control or control that is contained within each individual can influence his behavior in conducting personal financial management. The role of locus of control in this case is very much needed because having a good locus of control will help individuals in preventing overspending and wasteful behavior. According to [Rosalina et al. \(2022\)](#); [Sinaga et al. \(2023\)](#); [Yudha et al. \(2022\)](#) explained that locus of control is reflected in a person's belief in the ability to control events that can affect the individual's behavior. So that if the locus of control is getting better then personal financial management is also getting better, and conversely when the locus of control is low it means personal financial management will be even lower. The results of this study are supported by research according to [Rosalina et al. \(2022\)](#); [Sinaga et al. \(2023\)](#); [Yudha et al. \(2022\)](#) which states that personal financial management is influenced by locus of control.

#### **Financial Literacy Influences Locus Of Control**

Based on the test, the results obtained were t count of  $5.070 >$  t table value of 1.96 and sig of  $0.000 < 0.05$ . So,  $H_5$  is accepted. Based on the test results, it can be seen that the locus of control variable has an influence on financial literacy variables. Locus of control can help someone consider and behave wiser in the use of money. High financial literacy will create an even higher locus of control. So that the better financial literacy in individuals will increase self-control or locus of control such as making deposits or funding, and conversely if financial literacy is low then locus of control will also be lower. The results of this research are consistent with the results of research conducted by [Chujan et al. \(2022\)](#); [Furrebøe et al. \(2022\)](#); [Griffin et al. \(2022\)](#); [Indana et al. \(2022\)](#); [Indriaswari et al. \(2022\)](#) which states that financial literacy has a significant effect on locus of control.

### **Financial Attitude Influences Locus Of Control**

Based on the test, the calculated t value is 2.006 > the t table value is 1.96 and the sig is 0.000 < 0.05. So,  $H_6$  is accepted. Based on the tests that have been carried out, it shows that financial attitudes have an influence on locus of control. Financial attitude is an aspect that can support individuals to be rational in controlling finances. Someone who has a rational attitude and self-confidence in finance will affect self-control or locus of control in him. So that the higher the financial attitude, the higher the individual's locus of control, and conversely the lower the individual's financial attitude, the lower the locus of control. The results of this research are in line with the results of research by [Jufrizen et al. \(2022\)](#); [Khalisharani et al. \(2022\)](#); [Mansor et al. \(2022\)](#); [Muttalib \(2022\)](#) who concluded that financial attitudes have a significant influence on locus of control.

### **Family Financial Education Influences Locus Of Control**

Based on the test, the results obtained were a calculated t value of 4.251 > a t table value of 1.96 and a sig value of 0.001 < 0.05. So,  $H_7$  is accepted. Based on the test results, it can be seen that family financial education has an influence on locus of control. Family financial education plays an important role in preparing individuals to be intelligent in controlling finances and not to be extravagant. Someone who gets a good financial education from his family will increase his locus of control so that the individual will be wiser in making financial decisions and carry out financial management in a multiplicity of ways, and conversely the lower the family financial education one gets, the locus of control will also be lower and can affect poor financial management.

According to [Jufrizen et al. \(2022\)](#); [Khalisharani et al. \(2022\)](#) Personal financial management is a problem that is often discussed by the public, especially with regard to the behavior of Indonesian people who tend to be consumptive. Indonesian people often consume beyond their limits without strong consideration and look more at it from the side of wants than needs. Many people have sufficient income but still experience financial problems, this can occur due to irresponsible financial management. Less responsible financial management is usually characterized by a lack of interest in investing, saving, budgeting for the future, and emergency funds. Good financial management is a matter that is very important for everyone, especially for students. According to [Mansor et al. \(2022\)](#); [Muttalib \(2022\)](#) [Nuryana \(2020\)](#) Students belong to a group that is vulnerable to fashion, trends and lifestyles which can increase student opportunities in matters of personal financial management. Even though the majority of students are still dependent on their parents and do not have their own income, students should learn to do financial management well. If the younger generation, especially students, do not understand how to do financial management properly, this will result in difficulties in planning and controlling the use of money that will be used to meet all unlimited needs. Personal financial management can be influenced by various factors. According to [Indana et al. \(2022\)](#); [Indriaswari et al. \(2022\)](#) stated that personal financial management is influenced by financial literacy, financial self-efficacy, and the quality of financial learning. Furthermore, according to [Hidayat and Nurdin \(2020\)](#) financial attitude and financial literacy have an influence on personal financial management. Other research from [Indriaswari et al. \(2022\)](#) stated that financial management is influenced by financial education, spiritual intelligence, peers, parents' social economy, and family financial education. The first factor that is thought to influence personal financial management is financial literacy. Financial literacy is a level of confidence, as well as skills, that can influence attitudes and behavior that can impact financial decision making. According to [Griffin et al. \(2022\)](#); [Indana et al. \(2022\)](#); [Indriaswari et al. \(2022\)](#) a good level of financial literacy can help individuals become smarter in planning for the future and managing finances. Thus financial literacy plays a very important role in the financial well-being of individuals. Financial literacy can make it easier for individuals to manage personal finances so that they can improve financial well-being. Furthermore, there are also several previous studies which show different results, where the results of the research by [Griffin et al. \(2022\)](#); [Indana et al. \(2022\)](#); [Indriaswari et al. \(2022\)](#) stated that personal financial management is influenced by financial literacy, while different research results were obtained from research by [Rashid et al. \(2022\)](#); [Rosalina et al. \(2022\)](#); [Sinaga et al. \(2023\)](#); [Yudha et al. \(2022\)](#) who concluded that personal financial management is not influenced by financial literacy. The research results from [Jufrizen et al. \(2022\)](#) stated that personal financial management is influenced by financial attitudes, however, there are different results from [Nazah et al. \(2022\)](#); [Nisa et al., N. A. \(2022\)](#); [Purwanto et al. \(2021\)](#); [Rashid et al. \(2022\)](#) who found that personal financial management is not influenced by financial attitudes. Furthermore, research from [Selcuk \(2015\)](#) states that personal financial management

is influenced by family financial education, in contrast to the results of research from [Mansor et al. \(2022\)](#); [Muttalib \(2022\)](#); [Nair \(2022\)](#); [Nazah et al. \(2022\)](#); [Nisa et al. \(2022\)](#) stated that personal financial management is not influenced by family financial education. Research from [Yudha et al. \(2022\)](#) proved that locus of control is an intervening variable from financial literacy and financial attitudes towards personal financial management, but there are differences in the results of research by [Mansor et al. \(2022\)](#); [Muttalib \(2022\)](#); [Nair \(2022\)](#); [Nazah et al. \(2022\)](#) concluded that locus of control is not able to be an intervening variable of financial literacy and financial attitude towards personal financial management.

This positive influence explains, the higher a person's locus of control, the more regular his financial attitude will be. The indicators in the locus of control variable are self-control, having initiative, self-confidence, being able to solve all of life's problems, being easily influenced by the environment, and having difficulty solving problems. The results of this study are consistent with previous research by [Rosalina et al. \(2022\)](#); [Sinaga et al. \(2023\)](#); [Yudha et al. \(2022\)](#) that there is no influence of locus of control on financial behavior due to external and internal aspects. According to [Jufrizen et al. \(2022\)](#); [Khalisharani et al. \(2022\)](#); [Mansor et al. \(2022\)](#); [Muttalib \(2022\)](#); [Nair \(2022\)](#); [Nazah et al. \(2022\)](#) explained that locus of control is very relevant to financial behavior. This is because each individual is able to control his own financial and personal problems. When associated with existing indicator items, people who have good self-control are able to realize thoughts, control, manage and are able to solve every financial problem every day. However, during this pandemic, many young people find it difficult to control their finances when spending on non-essential items because young people are still used to buying cute and unique items, making it difficult for them to manage their personal finances. This habit must be changed so that today's youth can manage their finances well, such as buying needed goods and being able to solve their financial problems properly.

### Conclusion

The results of this study are financial literacy has a positive and significant effect on personal financial management, financial attitudes have a positive and significant effect on personal financial management, family financial education has a positive and significant effect on personal financial management, financial literacy has a positive and significant effect on locus Of Control, Financial Attitude has a positive and significant effect on Locus Of Control, Family Financial Education has a positive and significant effect on Locus Of Control, Locus Of Control has a positive and significant effect on Locus Of Control. tall. Based on the research results, it was found that there is a relationship between internal locus of control and income that affects student financial literacy. it happens because increased income is accompanied by a good internal Locus of Control, it will also form good financial literacy. Because someone who has an internal Locus of Control can plan as well as possible the use of their finances so that they can be useful in the future. Basically, people who have an internal locus of control believe that they are responsible and have control over the events they experience. As for the suggestions given 1) It is hoped that this research can be used as a source to increase knowledge and can be used as a consideration for further research. 2) It is hoped that future research will examine more varied independent variables that are not included in this study, for example pocket money, financial self-efficacy, demographic factors and other variables to see other aspects that can influence personal financial management. 3) Future research is expected to be able to add research objects and use more samples in order to produce research that is more generalized and better.

### References

Chujan, W., Ngoc, N. L. B., & Faizi, A. S. (2022). Locus of Control on Financial Behavior and Financial Risk Attitude. *Annals of Economics & Finance*, 23(2).



Furrebøe, E. F., & Nyhus, E. K. (2022). Financial self-efficacy, financial literacy, and gender: A review. *Journal of Consumer Affairs*, 56(2), 743-765.

Griffin, S. A., & Sibilang, N. P. (2022). The Influence of Financial Attitude and Financial Knowledge on Financial Management Behavior Moderated by Locus of Control in Generation Z. *Jurnal Multidisiplin Madani*, 2(12), 4141-4150.

Indana, R., & Pambekti, G. T. (2022). Does Financial Attitude Mediate Relationship Between Islamic Financial Knowledge, Internal Locus of Control and Islamic Financial Behavior?. *Jurnal Ilmiah Ekonomi Islam*, 8(3), 3599-3612.

Indriaswari, I., Ulupui, I. G. K. A., & Warokka, A. (2022). Financial knowledge, financial attitude, and locus of control: Reviewing their influence on financial management behavior using financial literacy as moderation variable. *The International Journal of Social Sciences World (TIJOSSW)*, 4(2), 431-443.

Jufrizen, J., & Ariza, C. (2022). Mediation Role of Financial Attitude on The Influence of Financial Knowledge on Financial Behavior. *Journal Of Management Analytical and Solution (JoMAS)*, 2(3), 121-139.

Khalisharani, H., Johan, I. R., & Sabri, M. F. (2022). The Influence of Financial Literacy and Attitude Towards Financial Behaviour Amongst Undergraduate Students: A Cross-Country Evidence. *Pertanika Journal of Social Sciences & Humanities*, 30(2).

Mansor, M., Sabri, M. F., Mansur, M., Ithnin, M., Magli, A. S., Husniyah, A. R., ... & Janor, H. (2022). Analysing the Predictors of Financial Stress and Financial Well-Being among the Bottom 40 Percent (B40) Households in Malaysia. *International Journal of Environmental Research and Public Health*, 19(19), 12490.

Muttalib, A., & Nasrullah, M. (2022, August). The Influence of Financial Knowledge and Financial Attitudes on Financial Management Behavior on Culinary sector MSME Actors at Maros Regency. In *ICBAE 2022: Proceedings of the 3rd International Conference of Business, Accounting, and Economics, ICBAE 2022, 10-11 August 2022, Purwokerto, Central Java, Indonesia* (p. 395). European Alliance for Innovation.

Munir, M. (2022). Effect of financial literacy and locus of control on MSME performance in Maesan district, Bondowoso regency. *JPIM (Jurnal Penelitian Ilmu Manajemen)*, 7(2), 240-251.

Nair, G. K. (2022). Dynamics of Locus of Control, Financial Knowledge, Financial Behaviour and Financial Position: An Empirical Study. *EMAJ: Emerging Markets Journal*, 12(1), 58-66.

Nazah, K., Syahlina, M., Salsabila, G., Munthe, H., & Banuari, N. (2022). Efforts to Improve Student Financial Management Behavior through Lifestyle and Financial Knowledge and Financial Attitude. *Enrichment: Journal of Management*, 12(4), 2931-2939.

Nisa, F. K., & Haryono, N. A. (2022). Pengaruh Financial Knowledge, Financial Attitude, Financial Self Efficacy, Income, Locus of Control, dan Lifestyle terhadap Financial Management Behavior Generasi Z di Kota Surabaya. *Jurnal Ilmu Manajemen*, 10(1), 82-97.

Purwanto, A., Asbari, M., & Santoso, T. I. (2021). Education Management Research Data Analysis: Comparison of Results between Lisrel, Tetrad, GSCA, Amos, SmartPLS, WarpPLS, and SPSS For Small Samples. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*.

Purwanto, A., Asbari, M., Santoso, T. I., Haque, M. G., & Nurjaya, N. (2020). Marketing research quantitative analysis for large sample: comparing of Lisrel, Tetrad, GSCA, Amos, SmartPLS, WarpPLS, and SPSS. *Jurnal Ilmiah Ilmu Administrasi Publik: Jurnal Pemikiran dan Penelitian Administrasi Publik*.

Purwanto, A., & Sudargini, Y. (2021). Partial least squares structural equation modeling (PLS-SEM) analysis for social and management research: a literature review. *Journal of Industrial Engineering & Management Research*, 2(4), 114-123.

Purwanto, A., Asbari, M., Santoso, T. I., Sunarsi, D., & Ilham, D. (2021). Education research quantitative analysis for little respondents: comparing of Lisrel, Tetrad, GSCA, Amos, SmartPLS, WarpPLS, and SPSS. *Jurnal Studi Guru Dan Pembelajaran*, 4(2).

Rashid, A., Zakaria, Z., Saling, S., Pasalo, F., & Saroge, J. (2022). The Effect Of Financial Literatur On Financial Welfare with Financial Management Behavior as a Mediation in The Papua Mama Market. *Media Trend*, 17(1), 59-70.

Rosalina, E., Andriani, W., Santi, E., & Rahmi, A. (2022). Household financial management with personality factors and locus of control through mental budgeting. *Economics, Business, Accounting & Society Review*, 1(3), 132-141.

Sahara, Y., Fuad, M., & Setianingsih, D. The role of financial attitude, financial experience, financial knowledge and personality on student's personal financial management behavior. *SOROT*, 17(3), 167-176.

Sinaga, S. A., & Wibowo, S. S. A. (2023, January). The Effect of Financial Knowledge, Financial Attitude, and Personality on Financial Management Behavior on Small Medium Micro Business Actors in Batam City. In *Proceedings of the 4th International Conference on Applied Economics and Social Science, ICAESS 2022, 5 October 2022, Batam, Riau Islands, Indonesia: ICAESS 2022* (p. 60). European Alliance for Innovation.

Yudha, A., & Pradana, A. (2022). Combination of Financial Knowledge and Financial Attitude in Establishing Good Financial Management Behaviour for Students After the COVID-19 Pandemic.