



Locus of control, financial knowledge, financial attitude, financial self-efficacy, and social economic status as antecedents of financial management behavior

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ARTICLE INFO

Article History

Received: 01-11-2023

Revised: 12-11-2023

Accepted: 13-11-2023

Keywords

Locus of Control;
Financial Knowledge;
Financial Attitude;
Financial Self-Efficacy;
Social Economic Status;
Financial Management Behavior.

Paper Type: Research paper

ABSTRACT

Purpose-This study aims to investigate past trends in financial management practices. Factors such as locus of control, financial literacy, financial mindset, financial self-efficacy, and socioeconomic standing are thought to influence financial management practices.

Design/Methodology/Approach-In this study, a sample of 92 students from the Faculty of Economics and Business in the Daerah Istimewa Yogyakarta who responded to questionnaires as part of a quantitative approach to data collection. Purposive sampling is the sampling method employed, and the Likert scale is the scale measurement instrument. Using the SPSS analysis tool, multiple linear regression analysis is used to test hypotheses.

Findings-All factors assumed to influence financial management behavior were shown to be advantageous, according to the study's findings. Evidence has shown that locus of control, financial knowledge, financial attitude, financial self-efficacy, and social economic standing positively influence the financial management behavior of students at the Faculty of Economics and Business in the Daerah Istimewa Yogyakarta.

Research limitations/implications-The results of the research are expected to serve as a guide and a source of knowledge for everyone, particularly for children and students who are trying to develop or maintain good money management habits. This study found that a variety of factors, including locus of control, financial knowledge, financial attitude, financial self-control, and social economic status, can influence a person's financial management behavior.

Originality/value-There is currently a dearth of research on students in Daerah Istimewa Yogyakarta who practice sound financial management. This study aims to identify the variables influencing the financial management practices of Daerah Istimewa Yogyakarta students enrolled in the Faculty of Economics and Business.

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1. The Introduction

Numerous groups have expressed concern about the current situation of Indonesia's financial management procedures, which have taken a very dangerous turn (Mien & Thao, 2015). According to Hilgert et al. (2003), financial management knowledge is essential for students to possess since it may be used as a savings account and is required in daily life to balance income and expenses in accordance with demands. A culture of debt, fostered by expensive lifestyles, the introduction and use of basic credit cards, and other causes, often leaves young people entering college without source responsibility or sound financial management practices (Borden et al., 2008). Anybody handling money needs to have a basic understanding of finance, especially the younger generation of today (Borden et al., 2008).

People use financial management behavior, which is fundamentally a type of money management, in order to achieve a prosperous everyday existence. People who want to live prosperous lifestyles need to be able to appropriately manage their finances and use them wisely to meet their basic needs. Financial intelligence is needed to avoid financial problems (Ben-Caleb et al., 2017). Good planning, management, and financial management demonstrate healthy financial management behavior. The way or brush of people who control cash outflows, manage credit, save money, and invest it can be a good indicator of successful financial conduct (Hilgert et al., 2003). The competence and understanding of those who possess the financial ideas known as financial literacy are directly tied to the wisdom of personal financial management.

One psychological aspect that can influence financial management behavior is the locus of control hypothesis, which was first proposed by social learning expert Rotter (1966). The locus of control is an attitude, expectation, or belief about how one's actions and outcomes are related. A person's perception of an event and his capacity to regulate how it impacts him are referred to as his locus of control. When one can control one's impulses to spend money, one can also implement sound financial management practices. In this manner, good personal locus of control will result in good monetary conduct. Locus of control has a favorable effect on financial management behavior, according to research by Chuhan et al. (2022).

Financial literacy is another element that affects behavior in financial management. According to Lone & Bhat (2022), having financial knowledge gives one the capacity to handle money responsibly. According to Marsh (2006), financial knowledge is the extent to which people are knowledgeable about matters relating to their personal finances. Research done by earlier researchers, such as that by Qamar et al. (2016), demonstrates that financial knowledge has a favorable effect on financial management behavior. People with strong financial knowledge typically comprehend and are knowledgeable about a variety of money-related topics, which promotes appropriate financial management behavior. The quality of financial decisions people make will increase with their level of financial knowledge, ensuring that their lives always reflect appropriate financial management behavior (Asaff et al., 2019).

Financial mindset has an impact on financial management behavior as well. A study on financial attitude found that people's beliefs about money influence their attitudes (Rajna & Anthony, 2011). Individuals that have a positive financial attitude will be better able to manage their money, create budgets, and make decisions (Mars, 2006). Financial attitude has been linked to better financial management behavior, according to studies by Pham et al. (2012). People who are financially responsible will always strive to handle their money wisely in their thoughts and future financial plans (Asaff et al., 2019).

Financial self-efficacy has an impact on financial management behavior as well. The ability to successfully manage one's finances is referred to as financial self-efficacy (Brandon & Smith, 2009). Everyone needs to have faith in their own ability. Therefore, students who have high financial self-efficacy will result in higher or better students in managing their finances, so that the behavior caused will be better and have an impact on financial well-being. Financial self-efficacy is one aspect developed from the theory of self-efficacy about positive beliefs in the ability to successfully manage personal finances appropriately. Research undertaken by earlier researchers, such as those by Arofah (2019) reveals a beneficial influence of financial self-efficacy on financial management behavior.

In addition to the four factors mentioned above, social and economic standing has an impact on how money is managed by behavior. When comparing students with high, medium, and low socioeconomic status, Singh et al. (2017) found that there were differences in their financial knowledge, financial attitudes, and financial behavior. This suggests that students with high socioeconomic status will also have high financial knowledge, high financial attitudes, and high financial behavior. Social economic status is defined as an individual's place in the hierarchical social structure of Gutter et al. (2009). According to studies by earlier academics Albeerd & Gharleghi (2015) social economic status has a favorable impact on financial management behavior.

The subjects of this study were students of the Faculty of Economics and Business in the Daerah Istimewa Yogyakarta. The following are the justifications for the study's use of the study's context: first, according to the findings of a survey by the Financial Services Authority in 2019, Indonesia's level of financial literacy and inclusion is 38.03%, which is still considered low and makes further study interesting. Second, because Daerah Istimewa Yogyakarta, a unique region of Indonesia, is known as the "city of students" and has the second-highest financial literacy rate in Indonesia, behind Jakarta, researchers are interested in studying students at various Faculties of Economics and Business in Daerah Istimewa Yogyakarta. The city's financial literacy index is 58.53%. Third, students in the Faculty of Economics and Business take previously studied courses in finance, like financial management. It might be argued that students are knowledgeable about and have a comprehension of money.

2. Literature Review and Hypotesis Development

The idea of locus of control is beliefs, expectations, or attitudes on the relationship between one's actions and consequences was first presented by Rotter (1966). There are two different types of loci of control: the internal and exterior loci of control. The internal locus of control is the idea that one's abilities and effort level determine what happens in life. Locus of control is something that must be owned by every individual because with the locus of control each individual will have a sense of responsibility for all the behavior he does (Mien & Thao, 2015). Without a proper locus of control, it is difficult for individuals to control themselves (Asih & Khalid, 2020). High locus of control individuals can manage their finances according to the financial plan, allowing them to reach their goals without encountering difficulties (Goyal et al., 2023). According to Chujan et al. (2022), financial management behavior is positively correlated with locus of control, suggesting that an individual's financial management behavior increases with their locus of control. If someone can control himself from within himself to use money as needed or use money as needed, then someone will do good financial management behavior as well. **H₁: Locus of Control Has a Positive Effect on Financial Management Behavior**

Social learning theory and planned behavior (TPB) theory. The social learning theory developed by Bandura (2006) argues that behavior is driven by cognitive processes in humans that play a role in learning. According to this theory, behavior is influenced by cognitive processes, where the cognitive process in this study is financial knowledge. Meanwhile, The theory of planned conduct, as stated by Ajzen (1991), holds that attitudes, subjective norms, and perceived behavioral control which is represented by financial knowledge all influence intention and behavior. Financial knowledge is the concept of managing individuals in their financial control. A high level of control based on the knowledge that individuals have will indicate that they take into account in advance in conducting financial transactions. These considerations will cause individuals to behave more selectively in their financial management behavior (Ajzen, 1991). Financial knowledge is inferred to be relative knowledge of direct financial facts and is key to financial management behavior (Garman & Forgue, 2006). The importance of financial literacy is because it is generally used as input as an example of determining the need for financial education and describes variations in financial behavior and output such as saving, investing, and credit behavior (Idris et al., 2013). According to research, Asaff et al. (2019) found that financial knowledge positively impacted financial management behavior. This means that people with

strong financial knowledge will essentially understand and be knowledgeable about a wide range of topics related to the financial world. Given that money is an integral part of today's world, it is therefore appropriate to designate financial literacy as one of the necessities in the financial sector (Asaff et al., 2019). implying that despite the fact that a large number of people are still stuck in consumerism and are unable to manage their money, money has evolved into a crucial instrument for transactions to satisfy wants (Asaff et al., 2019). In essence, people who are financially literate will be able to establish and organize plans for the future, budget their money, and perform other tasks (Asaff et al., 2019). According to Asaff et al. (2019), having sound financial knowledge will influence each person's financial management practices and foster self-awareness in order to consistently manage finances well. A higher degree of financial literacy is positively correlated with better financial decision-making and the demonstration of sound financial management practices in one's personal life. **H₂: Financial Knowledge Has a Positive Effect on Financial Management Behavior**

Ajzen (1991) states attitude is considered a prime example of behavioral interaction. Attitude is a positive or negative belief to manifest a particular behavior. If the behavior is perceived to have a positive value, then the individual will have the intention to show the behavior. This attitude is caused by an individual's beliefs about the effects of exhibiting behavior, also known as behavior belief. This attitude is thought to have a direct impact on behavioral intentions and relate to subjective norms. According to Ajzen (1991), this subjective norm is a function of beliefs that indicate individuals agree or disagree with a behavior or action. Individuals with a positive attitude or good financial mentality will form good financial management behavior and make the right and wise decisions. According to Furnham (1984) Financial attitudes shape the way individuals save, hoard, spend, and dispose of money. Financial attitude is a person's assessment, opinion, and state of mind about financial attitudes that are applied to his behavior (Rajna & Anthony, 2011). Individuals will try to think about how to get money and how to use the money they have when the individual is obsessed with money. Thus, it will encourage individuals to have a perception of their finances in the future. According to Rajna & Anthony (2011) stated that it is likely that the better the financial attitude, the better the financial management behavior of individuals. Based on research conducted by Akben-Selcuk (2015) states that financial attitude has a positive effect on financial management behavior. In general, individuals who have a good financial attitude will have a good mindset about finances in the future and tend to always try to process their finances well. The better the financial attitude, the better the financial management behavior (Asaff et al., 2019). **H₃: Financial Attitude Has a Positive Effect on Financial Management Behavior**

Brandon & Smith (2009) expressed positive confidence in the ability of individuals to manage their finances. Every individual must have confidence in himself in his abilities including financial management abilities, if someone has a strong and positive belief in his finances then the behavior carried out in his financial decisions will also be good and wise. Forbes & Kara (2010) define financial self-efficacy as a person's self-assurance in his capacity to meet financial objectives, which is impacted by a number of elements including his financial know-how, social skills, and personality. Qamar et al. (2016) found that an individual's financial management behavior is positively impacted by their financial self-efficacy. People who have high financial self-efficacy are less likely to experience depression and have higher levels of financial optimism in the future. Financial self-efficacy is a person's confidence in managing their finances. So that the mindset formed is the belief that individuals will succeed in managing their finances. The high level of individual efficacy to carry out financial management, it will be more responsible in processing finances where financial management behavior can help individuals to avoid financial problems. **H₄: Financial Self-Efficacy Has a Positive Effect on Financial Management Behavior**

Status or position determines a person's position in the social structure, meaning that he determines relationships with others. The status or position of a person, whether from the upper

class or from the lower class of the status of others, affects his role (Nasution & Zahra, 2014). The role of an individual's economic social status with that of other individuals is different. But if a person has a good social then he will be responsible for all decisions taken, both financial and other decisions. According to Henslin (2006) Three elements become different lifestyles, the ability to live different lives and different points of view in assessing themselves and seeing the world. Based on research conducted by Albeerdy & Gharleghi (2015) show the positive influence of social economic status on financial management behavior. It was determined that teaching good behavior, including financial behavior, from an early age is the most effective strategy to enhance behavior (Nababan, 2012). A person's ability to manage his finances will improve with increasing social and economic position.

H₅: Social Economic Status Has a Positive Effect on Financial Management Behavior

A questionnaire distribution was used to gather the study's data, and SPSS statistical tools were used to analyze the locus of control, financial knowledge, financial attitude, financial self-efficacy, and social economic status of financial management behavior. This leads to the illustration of the conceptual framework for this study in figure 1 below.

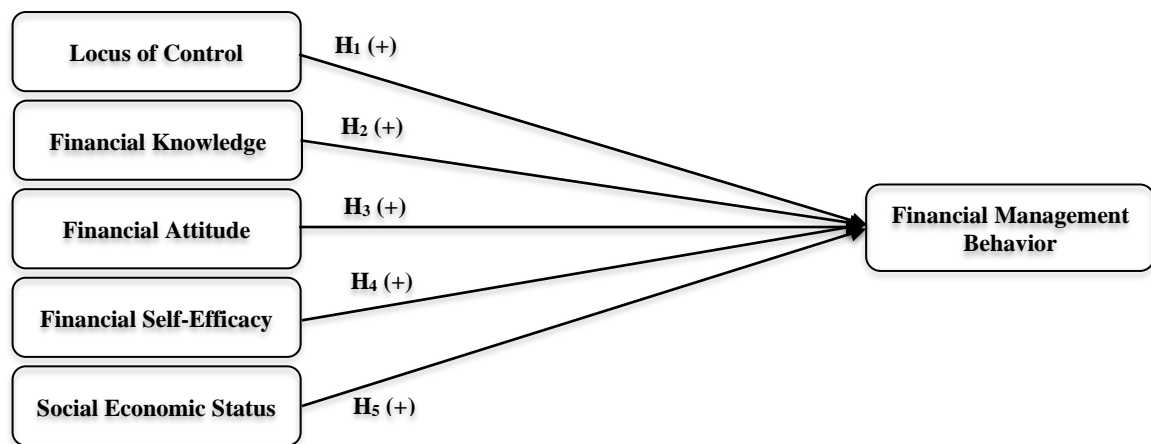


Figure 1. Research Framework

3. Research Methodology

The 198,144 students enrolled in the Faculty of Economics and Business in the Daerah Istimewa Yogyakarta make up the population of this study (Higher Education Database, 2020). Students in the Faculty of Economics and Business's class of 2016 to 2021 have studied and taken courses related to the fundamentals of finance, the sampling technique used in this study is purposive sampling, which is based on the criteria that the respondent is a student in the Daerah Istimewa Yogyakarta and is a member of the class of 2016 to 2021. Respondents totaling 92 pupils were gathered based on these sample parameters.

A survey given to students at the Faculty of Economics and Business in the Daerah Istimewa Yogyakarta was used to collect the data for this study. Statements from each research variable are provided in the questionnaire. The locus of control (LC) variable is represented by six statement items taken from Rotter (1996), the financial knowledge (FK) variable by seven statement items taken from Perry & Morris (2005), the financial attitude (FA) variable by seven statement items taken from Rajna & Anthony (2011), the financial self-efficacy (FSE) variable by six statement items taken from Forber & Kara (2010), the social economic status (SES) variable by 12 statement items taken from Sugiharto et al. (2015), and the financial management behavior (FMB) variable by seven statement items taken from Xiao & Dew. (2011).

The validity, reliability, and study hypothesis were all tested using SPSS statistical techniques during the data testing phase of this investigation. The Confirmatory Factor Analysis (CFA) method was employed in this study to examine the instrument (validity test). According to the criteria, each statement in the questionnaire is considered valid if the loading factor value is greater than 0.5 (Ghozali, 2018). Then, reliability tests are performed by looking at each variable's

Cronbach's alpha value. Each variable is deemed reliable if its Cronbach's alpha value is larger than 0.6 (Ghozali, 2018). In this study, hypothesis testing was also done by examining the probability value of each hypothesis. The hypothesis is deemed accepted or proven if the probability value obtained from hypothesis testing is less than or equal to 0.05 (Ghozali, 2018).

4. Result and Discussion

Validity Test

The results of the validity test are displayed in Table 1 below. The loading factor value on a number of statement items for each variable in this study had a value larger than 0.5, according to the test results. The fact that some statement items in this study have loading factors that are less than 0.5, however, prevents them from all being deemed genuine.

Table 1. Validity Test Result

Indicator	Social Economic Status	Financial Self- Efficacy	Financial Knowledge	Financial Management Behavior	Locus of Control	Financial Attitude
LC 3					0.668	
LC 4					0.585	
LC 6					0.694	
FK 1			0.751			
FK 2			0.775			
FK 5			0.651			
FK 6			0.854			
FK 7			0.691			
FA 3						0.741
FA 4						0.547
FA 5						0.709
FSE 1		0.721				
FSE 2		0.687				
FSE 3		0.618				
FSE 4		0.737				
FSE 5		0.745				
FSE 6		0.716				
SES 4	0.551					
SES 5	0.625					
SES 6	0.788					
SES 7	0.721					
SES 8	0.770					
SES 9	0.840					
SES 10	0.742					
SES 11	0.736					
SES 12	0.537					
FMB 2				0.669		
FMB 5				0.783		
FMB 6				0.781		
FMB 7				0.700		

Reliability Test

Table 2 below shows the reliability test results. Every variable's loading factor value has a Cronbach's alpha value that is more than 0.6. A variable is deemed dependable or reliable if its Cronbach's alpha value is better than 0.6.

Table 2. Reliability Test Result

Variable	Cronbach's Alpha
Locus of Control	0.813
Financial Knowledge	0.809
Financial Attitude	0.817

Variable	Cronbach's Alpha
Financial Self-Efficacy	0.799
Social Economic Behavior	0.781
Financial Management Behavior	0.823

Hypothesis Test

The results of the hypothesis test are displayed in Table 3 below. Based on the results of these tests, it is known that all hypotheses built in this study are declared accepted or proven. This can be proven by the value of the coefficient on each hypothesis is a positive direction in accordance with the formation of the hypothesis and also the significance value is less than 0.05.

Table 3. Hypothesis Test Result

Hypothesis	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Locus of Control → Financial Management Behavior	0.950	0.097	0.717	9.757	0.000
Financial Knowledge → Financial Management Behavior	0.593	0.089	0.576	6.677	0.000
Financial Attitude → Financial Management Behavior	0.702	0.093	0.621	7.520	0.000
Financial Self-Efficacy → Financial Management Behavior	0.682	0.105	0.565	6.502	0.000
Social Economic Status → Financial Management Behavior	0.374	0.050	0.623	7.564	0.000

Discussion

The Effect of Locus of Control on Financial Management Behavior

The locus of control has an influence for students of economics and business faculties in the Daerah Istimewa Yogyakarta in their financial management behavior. Students will make better financial judgments if they have a strong locus of control, which will influence excellent financial management behavior. It is imperative that sound financial management practices are complemented by a strong locus of control. In the absence of a strong locus of control, students may find it challenging to make prudent financial decisions that will lead to their current and future financial success. Research by Chujan et al. (2022) demonstrates that the locus of control has a favorable impact on financial management behavior, which is consistent with the findings of this study. Individuals' views or perceptions are related to locus of control, which is based on their ability to anticipate future events through decision-making based on current circumstances. Every person needs to have a locus of control, which means that person is accountable for whatever they do. It follows that the higher the locus of control, the better the financial management behavior, since the more accountable the person, the more cautious he will be in handling his finances (Mien & Thao, 2015). Financial decision makers are unlikely to have financial troubles in the future if they are able to perform well, according to Chinen & Endo (2012). Financial behavior should ideally be able to establish a priority scale of necessities that are more significant than wants. Thus, it can be said that an individual has an acceptable locus of control over the application of sound financial management behavior processing and is capable of applying sound financial management behavior throughout his life.

The Effect of Financial Knowledge on Financial Management Behavior

Financial knowledge has an influence on students of the Faculty of Economics and Business in the Daerah Istimewa Yogyakarta in their financial management behavior. Students who possess sound financial knowledge are more likely to exhibit sound financial management practices and make more informed financial judgments. It will be challenging for students to spend their money wisely and effectively to attain success and wealth now and in the future if they lack sound financial knowledge and financial management behaviors. The findings of this

investigation are corroborated by Qamar et al. (2016). According to Asaff et al. (2019), financial literacy positively influences financial management behavior. This indicates that people with strong financial literacy would essentially comprehend and be knowledgeable about a wide range of topics pertaining to the financial industry. As a result, it is appropriate to refer to financial knowledge as one of the demands in the financial industry, particularly in light of the fact that money is an integral part of today's modern world (Asaff et al., 2019). According to Asaff et al. (2019), money has evolved into a crucial instrument for transactions aimed at satisfying wants, yet many people are still stuck in consumerism and are unable to handle their money sensibly. In addition to informal parents, classmates, and coworkers, formal education can be obtained from a variety of sources, including college courses, financial seminars, extra tutoring outside of the classroom, and other sources (Keller & Staelin, 1987). Based on various interpretations provided by the experts, financial knowledge can be defined as an understanding of economics connected to financial knowledge acquired through formal education, including classes, seminars, lectures, and extra tutoring. The goal of financial knowledge is to develop financial skills and tools that will enable effective and efficient financial management for the establishment of a welfare life.

The Effect of Financial Attitude on Financial Management Behavior

Financial attitude has an influence for students of the Faculty of Economics and Business in the Daerah Istimewa Yogyakarta in their financial management behavior. Students that possess a good adequate financial attitude will also exhibit strong financial management behavior, leading to more informed financial decision-making. It will be challenging for students to spend their money wisely and effectively to attain success and wealth now and in the future if they lack a positive financial mindset and sound financial management practices. Research by Pham et al. (2012), which found that financial attitude positively affects financial management behavior, corroborates the findings of this study. People with a positive financial attitude will, in general, have a mindset and outlook on money going forward, and they will constantly strive to manage money properly. The higher the individual's financial attitude, the higher the individual's financial management behavior (Asaff et al., 2019). For instance, people may believe, judge, or otherwise feel that saving money is not worthwhile. A person's financial attitude can influence their financial management behavior and how they handle different everyday financial issues. As a result, it can be concluded that those with better financial attitudes will generally respond to financial issues wiser and more responsibly, as demonstrated by their ability to make sound financial decisions throughout their lives, particularly when it comes to financial management behavior (Asaff et al., 2019). Attitude is influenced by individual mental states, viewpoints, and assessments on personal finances (Pankow, 2003). His actions will be determined by his thought, reasoning, and financial assessment processes. When it comes to making financial decisions, an individual's financial management behavior increases with his or her attitude toward money. People who have a positive financial attitude typically have a positive outlook on money, which includes not using money as a means of problem-solving (Power-Prestige), not wanting to spend money (Retention Time), not viewing money as a source of uncertainty and mistrust, having a positive outlook on the future (Quality), and not viewing money as a source of anxiety. These traits enable them to manage money wisely, balancing spending and income, setting aside savings and investments, and managing money for the welfare of their lives (Templer, 1986).

The Effect of Financial Self-Efficacy on Financial Management Behavior

Financial self-efficacy has an influence for students of the Faculty of Economics and Business in the Daerah Istimewa Yogyakarta in their financial management behavior. With financial self-efficacy that is good enough, it will have an impact on good financial management behavior, students will be wiser in making decisions about their finances. Good financial management behavior must be equipped with good financial self-efficacy as well. Without good financial self-efficacy in financial management behavior, it will be difficult for students to make effective and wise decisions about the use of the money they have to achieve success and prosperity both now and in the future. The results of this study are supported by research conducted by Qamar et al. (2016) Research shows that financial self-efficacy has a positive effect

on financial management behavior. It shows that students with high financial self-efficacy have significantly greater financial optimism for the future and are less likely to feel depressed. This suggests that financial self-efficacy will influence student behavior in the future. In addition to influencing student behavior in the future, financial self-efficacy is also a person's sense of confidence in his capacity to manage his finances well and to achieve his financial goals. When a person's level of confidence is high, then someone will be motivated to do something to achieve the desired goal. So that the higher the financial self-efficacy, the more responsible the individual will be in managing finances.

The Effect of Social Economic Status on Financial Management Behavior

Social economic status has an influence for students of the faculty of economics and business in the Daerah Istimewa Yogyakarta in their financial management behavior. With a good social economic status, it will have an impact on good financial management behavior, students will be wiser in making decisions about their finances. Good financial management behavior must be equipped with a good social economic status as well. Without a good social economic status in financial management behavior, it will be difficult for students to make effective and wise decisions about the use of their money to achieve success and prosperity both now and in the future. Socioeconomic status is an individual's position in a hierarchical social structure (Singh et al., 2017). Research conducted by Gutter et al. (2009) financial knowledge, financial attitudes, and financial behavior between students who have high, medium and low socioeconomic status shows differences in meaning that students with high socioeconomic status, will also have high financial knowledge, financial attitudes, and financial behavior. Research conducted by Albeerdly & Gharleghi (2015) shows that parents are socialization agents in family financial education. Many studies show that a parent's socioeconomic status can have a positive impact on their children's behavioral development. The cause of making bad financial decisions is basically the result of a lack of knowledge about finance from an early age.

5. Conclusion

All of the study's hypotheses can be accepted based on the findings of the research outlined above. Each of the putative determinants of financial management behavior has been shown to have a favorable impact. Students at the Faculty of Economics and Business in the Daerah Istimewa Yogyakarta may practice financial management behavior due to their increased locus of control, financial knowledge, attitude, self-efficacy, and social economic position.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Akben-Selcuk, E. (2015). Factors influencing college students' financial behaviors in Turkey: Evidence from a national survey. *International Journal of Economics and Finance*, 7(6), 87-94. <http://dx.doi.org/10.5539/ijef.v7n6p87>
- Albeerdly, M. I., & Gharleghi, B. (2015). Determinants of the financial literacy among college students in Malaysia. *International Journal of Business Administration*, 6(3), 15-24. <http://dx.doi.org/10.5430/ijba.v6n3p15>
- Arofah, A. A. (2019). Financial literacy, self-efficacy, and financial behaviour of college students. *International Journal of Pedagogy and Teacher Education*, 3(2), 129-138. <https://doi.org/10.20961/ijpte.v3i2.17546>
- Asaff, R., Suryati, S., & Rahmayani, R. (2019). Pengaruh financial attitude dan financial knowledge terhadap financial management behavior. *JEMMA (Journal of Economic, Management and Accounting)*, 2(2), 9-22. <http://dx.doi.org/10.35914/jemma.v2i2.243>
- Asih, S. W., & Khafid, M. (2020). Pengaruh financial knowledge, financial attitude dan income terhadap personal financial management behavior melalui locus of control sebagai variabel intervening. *Economic Education Analysis Journal*, 9(3), 748-767. <https://doi.org/10.15294/eeaj.v9i3.42349>

- Bandura, A. (2006). *Guide for constructing self-efficacy scales*. Information Age Publishing.
- Ben-Caleb, E., Faboyede, E., Olusanmi, O., & Oyewo, B. (2014). Financial intelligence: A panacea to poverty reduction in Nigeria. In *EDULEARN14 Proceedings* (pp. 2280-2286). IATED.
- Borden, L. M., Lee, S. A., Serido, J., & Collins, D. (2008). Changing college students' financial knowledge, attitudes, and behavior through seminar participation. *Journal of Family and Economic Issues*, 29, 23-40. <https://doi.org/10.1007/s10834-007-9087-2>
- Brandon, D. P., & Smith, C. M. (2009). Prospective teachers' financial knowledge and teaching self-efficacy. *Journal of Family & Consumer Sciences*, 27(1), 14-28.
- Chinen, K., & Endo, H. (2012). Effects of attitude and background on personal financial ability: A student survey in the United States. *International Journal of Management*, 29(1), 33.
- 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).
- Forbes, J., & Kara, S. M. (2010). Confidence mediates how investment knowledge influences investing self-efficacy. *Journal of Economic Psychology*, 31(3), 435-443. <https://doi.org/10.1016/j.joep.2010.01.012>
- Furnham, A. (1984). Many sides of the coin: The psychology of money usage. *Personality and Individual Differences*, 5(5), 501-509. [https://doi.org/10.1016/0191-8869\(84\)90025-4](https://doi.org/10.1016/0191-8869(84)90025-4)
- Garman, E. T., & Fogue, R.E. (2006). *Personal finance* (8th ed.). Houghton Mifflin Company.
- Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25*. Badan Penerbit Universitas Diponegoro.
- Goyal, K., Kumar, S., & Hoffmann, A. (2023). The direct and indirect effects of financial socialization and psychological characteristics on young professionals' personal financial management behavior. *International Journal of Bank Marketing*. <https://doi.org/10.1108/IJBM-09-2022-0419>
- Gutter, M., Copur, Z., & Garrison, S. T. (2009). Which students are more likely to experience financial socialization opportunities? Exploring the relationship between financial behaviors and financial well-being of college students. *Networks Financial Institute Working Paper*, 7.
- Henslin, M. J. (2006). *Essentials of sociology*. Erlangga.
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Fed. Res. Bull.*, 89, 309.
- Idris, F. H., Krishnan, K. S., & Azmi, N. (2013). Relationship between financial literacy and financial distress among youth in Malaysia: An empirical study. *Malaysia Journal of Society and Space*, 9(4), 106-117.
- Keller, K. L., & Staelin, R. (1987). Effects of quality and quantity of information on decision effectiveness. *Journal of Consumer Research*, 14(2), 200-213. <https://doi.org/10.1086/209106>
- Lone, U. M., & Bhat, S. A. (2022). Impact of financial literacy on financial well-being: A mediational role of financial self-efficacy. *Journal of Financial Services Marketing*, 1-16. <https://doi.org/10.1057/s41264-022-00183-8>
- Marsh, B. A. (2006). Examining the personal finance attitudes, behaviors, and knowledge levels of first-year and senior students at Baptist Universities in the state of Texas (*Doctoral dissertation*, Bowling Green State University).
- Mien, N. T. N., & Thao, T. P. (2015). Factors affecting personal financial management behaviors: Evidence from Vietnam. In *Proceedings of the Second Asia-Pacific Conference on Global Business, Economics, Finance and Social Sciences* (AP15Vietnam Conference) (pp. 10-12).
- Nababan, D. (2013). Analisis personal financial literacy dan financial behavior mahasiswa strata I fakultas ekonomi Universitas Sumatera Utara. *Media Informasi Manajemen*, 1(1).
- Nasution, A. D., & Zahrah, W. (2014). Community perception on public open space and quality of life in Medan, Indonesia. *Procedia-Social and Behavioral Sciences*, 153, 585-594. <https://doi.org/10.1016/j.sbspro.2014.10.091>
- Pankow, D. (2003). Financial values, attitude, and goals. *Family Economic Specialist*, 591.
- Perry, V. G., & Morris, M.D. (2005). Who is in control? The role of selfperception, knowledge, and income in explaining consumer financial behavior. *Journal of Consumer Affairs*, 39, 299-313. <https://doi.org/10.1111/j.1745-6606.2005.00016.x>

- Qamar, M. A. J., Khemta, M. A. N., & Jamil, H. (2016). How knowledge and financial self-efficacy moderate the relationship between money attitudes and personal financial management behavior. *European Online Journal of Natural and Social Sciences*, 5(2), 296.
- Rajna, A., & Anthony, P. (2011). Knowledge, attitude, practice and satisfaction on personal financial management among the medical practitioners in the public and private medical services in Malaysia (*Doctoral dissertation*, University Kebangsaan Malaysia).
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1).
<https://psycnet.apa.org/doi/10.1037/h0092976>
- Singh, S., Shankar, R., & Singh, G. P. (2017). Prevalence and associated risk factors of hypertension: A cross-sectional study in urban Varanasi. *International Journal of Hypertension*, 2017.
<https://doi.org/10.1155/2017/5491838>
- Xiao, J. J., & Dew, J. (2011). The financial management behavior scale: Development and validation. *Journal of Financial Counseling and Planning*, 22(1), 43–59.