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# Can Gender be a Moderating Variable in Micro Small Medium Enterprises Financial Behavior? A Perspective from Financial Literacy, Financial Attitude, and Income

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**Abstract**

**Research aims:** This study aims to determine whether gender can moderate the relationship between income and financial literacy, financial attitudes, and financial management behavior in Sidoarjo MSMEs.

**Design/Methodology/Approach:** The study used quantitative methods. The population was all micro, small and medium enterprises registered with the Cooperatives and Small Business Administration. Meanwhile, the sampling technique employed targeted sampling and obtained 164 MSMEs. The analysis technique utilized in this study was path analysis using Smart PLS 3.0.

**Research findings:** This study revealed that gender could moderate financial literacy and attitudes towards financial management behavior in SMEs. However, gender could not affect the income of small business financial management behavior.

**Theoretical contribution/Originality:** Research contributions are crucial for small business actors to overcome bad financial behavior. Through the results of this study, it will be known how MSMEs should improve financial behavior and whether gender differences are considered to still significant in leading a company.

**Practitioner/Policy implication:** The implications of this study are vital; through the results, it can be known how gender roles are against a company. Nevertheless, the limitation of this study is the lack of variables used, so it could not explore gender more broadly.

**Keywords:** Academic information system; Facilities; Satisfaction; Loyalty

## Introduction

Micro, small, and medium enterprises (MSMEs) have the potential to grow big in improving people's lives. It is shown by the existence of MSMEs, which have reflected the actual manifestation of the social and economic life of the most significant part of the Indonesian people. As one of the components of the national industries, MSMEs have a substantial role in the national economy, including employment, equitable distribution of development results, and poverty alleviation. In Sidoarjo Regency, many types of MSMEs are engaged in food and beverage, non-food and

beverage, MSMEs still do not have business legality. However, the financial management fashion, services, and crafts. Although there are many types of MSME fields, many behavior of MSMEs in Sidoarjo Regency decreased slightly compared to the previous year due to the COVID-19 virus that entered Indonesia in 2020.

The most significant impact faced by MSMEs is their poor financial behaviors. Undoubtedly, this financial behavior is because the conditions faced by MSMEs are vastly different from before the COVID-19 pandemic. For example, the behavior for saving is also low. Is it due to low income that MSMEs behave poorly? In addition, MSMEs actors in managing their business finances are also still processed simply without utilizing existing technology due to the lack of knowledge and ability to use technology.

Further, the MSMEs most affected during this pandemic are those in the food and beverage sector, where many MSMEs have experienced losses and even went bankrupt. In this study, five sub-districts in the Sidoarjo Regency were selected since they followed the study sample and are also places where many foods and beverage MSMEs are located. The following is the saving behavior of MSMEs from five sub-districts in the 2019-2021 period, which can be seen in Figure 1 as follows:

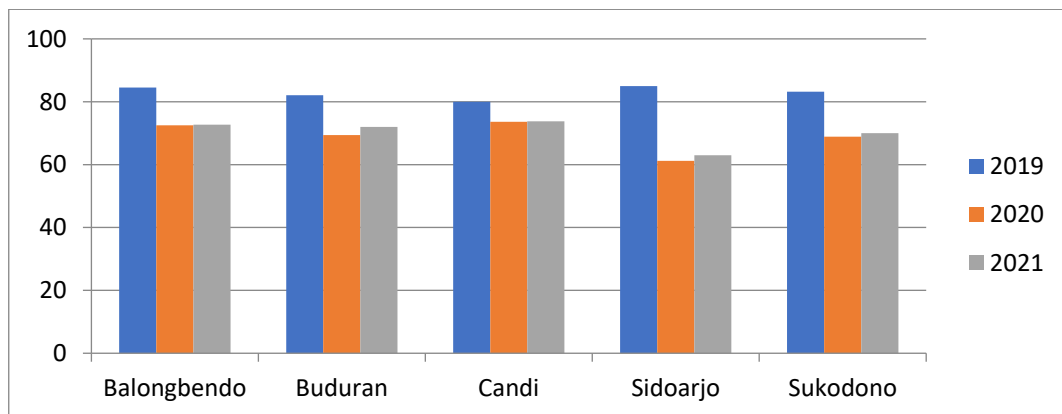


Figure 1 MSME Savings Behavior in 2019-2021

If this condition is not addressed immediately, MSME actors will be even worse off due to the COVID-19 pandemic. Thus, studying how to manage finances well through financial literacy, financial attitudes, and income is necessary to improve MSMEs' financial management behavior.

Furthermore, MSMEs still use traditional methods to learn how their business evolves. To become an MSME, the pattern of MSME development must be changed from detrimental behavior to profitable or professional behavior. By shifting to a professional direction, MSMEs can improve their performance, compete in the global market, and expand their market access. For this reason, MSMEs need to make sound decisions based on financial management analysis, enabling them to innovate to stand out in the market.

A financial behavioral survey conducted by Baptista and Dewi (2021) found that financial literacy was closely related to financial management, and higher financial literacy among MSMEs led to better corporate governance. In this case, financial literacy is the ability to understand and analyze financial options, plan for the future, and respond appropriately to events (Anis, 2017).

Understanding financial literacy as it relates to personal finance aspects should not make it difficult for businesspeople to achieve financial prosperity. In fact, financially literate businesspeople use financial resources to help them achieve their personal financial goals. According to a study by Mien and Thao (2015), financial literacy positively impacted financial management behavior. Dwiastanti (2017) also uncovered that financial literacy did not significantly influence financial management behavior.

Aside from financial literacy, financial attitudes also influence MSMEs' financial management behavior. Financial attitude is defined as a person's state of mind, opinions, and judgments regarding finance (Bhushan & Medury, 2014). In this respect, most MSME actors have bad attitudes toward finances, characterized by low motivation to improve their ability to manage corporate finances. The poor financial attitude of MSME stakeholders then affects business. It is because continued bad financial behavior will make MSMEs underperform and unable to compete in the market.

In fact, financial attitudes will help MSME actors determine attitudes and behavior in managing their business finances well in budgeting, planning, and decision-making (Ali et al., 2013). Without applying a good attitude, MSME actors will find it difficult to develop their businesses and achieve financial prosperity. Research conducted by Yap et al. (2016) states that financial attitudes significantly and positively affect the financial management behavior of MSMEs. In contrast to the research results shown by Syaliha et al. (2022) financial attitudes did not positively affect financial management behavior.

The next factor influencing financial management behavior is income. In this case, the not appropriately managed income earned by business actors is because they are too consumptive in spending their income and are more concerned with their personal needs than the business's needs, resulting in poor financial management behavior. A study by Szendrey and Fiala (2018) found that income significantly impacted financial management behavior. However, in contrast to the study of Arifin et al. (2018), income did not substantially affect financial management behavior.

In addition to the factors influencing financial behavior, the researchers also attempt to know whether gender can be a moderating variable. Gender differences between women and men in financial management can lead to different behavior perceived by each gender. Walczak and Pieńkowska-Kamieniecka (2018) argued that men have higher knowledge than women in the investment world, and women also have less knowledge of personal finance. Ansong and Gyensare (2012) also stated that men are usually responsible for financial decisions and understand financial concepts better than women. It denotes that men are more confident in managing their finances than women. The low

self-confidence of women is caused by their role as housewives and career women, making it very difficult to save (Lusardi et al., 2010).

Research conducted by Kim and Sherraden (2014) suggested that gender differences affected a person's shopping behavior control, where men are utilitarian shoppers while women are primarily hedonic shoppers. Thus, spending income on goods/services that are more useful will certainly significantly affect financial management for the better. Better financial knowledge, of course, affects the mindset in making financial decisions on more planned spending behavior based on the budget made previously so that proper personal financial management will be realized. According to a study by Yogasnumurti et al. (2020), gender could moderate financial attitudes and financial literacy on financial management behavior. In addition, a study (Broadbridge, 2010) explained gender as a mode of financial literacy.

Therefore, this study aims to determine whether gender can moderate several variables to increase good financial behavior. This research is very feasible to do, especially in the COVID-19 pandemic. Further, the research contribution is crucial for MSME actors to overcome bad financial behavior. Through the results of this study, it will be known how MSMEs should improve financial behavior and whether gender differences are considered to still significant in leading a company.

## **Literature Review and Hypotheses Development**

### **Financial Literacy**

To manage his funds, every person has to be financially literate or knowledgeable. People who are well-versed in finances can better manage their money wisely, including tracking spending and budgeting, using banking and credit cards, saving money, borrowing money, paying taxes, making necessary purchases, and purchasing and comprehending insurance, investments, and pension plans. Not only can people with financial understanding spend money, but they can also help the economy. Higher financial literacy also enables people to make wiser decisions in their daily lives, contributing to more excellent economic stability (Hilgert & Hogarth, 2003).

According to Chaulagain's (2017) research, financial literacy had a favorable and significant impact on financial management behavior. Additionally, according to Singh and Kumar's findings (2017). A study conducted by Chaulagain (2017) also revealed that financial literacy had a significant positive impact on financial management behavior. Furthermore, studies by Singh and Kumar (2017) and Strömbäck et al. (2017) showed that financial literacy significantly impacted financial management. Nevertheless, the studies are inconsistent with Dewi et al. (2020), indicating that financial literacy did not substantially affect public finance management behavior.

Moreover, theoretically, differences between men and women result from sociocultural structures that lead to separate roles and tasks. These differences leave women

constantly marginalized and neglected in their roles and contributions to family life, society, nation, and state (Walczak & Pieńkowska-Kamieniecka, 2018).

### **Financial Attitude**

The way one responds to a remark or viewpoint may be used to gauge their attitude about managing their money. On the other hand, financial management behavior describes a person's approach to managing their finances as demonstrated by their activities. A person's financial attitude also determines his or her financial conduct, whereas those who do not respond wisely to financial issues typically display poor financial behavior (Nuryaman, 2015). Besides, their financial views influence how people spend, save, hoard, and squander money. Financial issues like the prevalence of bill arrears and a lack of revenue to satisfy demands are also influenced by financial attitudes. Therefore, having a positive attitude about money will be translated into appropriate financial management practices.

Research by Akben-Selcuk (2015) stated that financial attitudes positively impacted financial management behavior. Their study contradicts another research (Ameliawati & Setiyani, 2018), revealing that financial attitudes did not influence financial management behavior.

In fact, financial attitude is critical for every individual to achieve prosperity in the future, especially business actors. Satoto and Suprapti (2017) uncovered that financial attitudes were related to financial knowledge. However, women's cautious attitude can strengthen the relationship between financial attitudes and financial management behavior. Moreover, business actors who have received the material will understand better, and prudence complements decisions. According to research (Yogasnumurti et al., 2020), gender may moderate attitudes toward financial literacy and financial management.

### **Income**

Income is one of the factors affecting financial management behavior. With a person's income, the needs and obligations that need to be met can be met. The higher a person's income level, the easier it is to meet their obligations, the more likely they are to take responsibility for the income they manage, and the better their financial management behavior.

A study Satoto and Suprapti (2019) showed that income considerably positively impacted financial management behavior. However, it differs from a study (Adiputra & Patricia, 2020), which asserted that income did not influence financial management behavior.

Further, a person's mastery of numerous aspects of the financial world, financial instruments, and financial talents is referred to as their financial knowledge. Business actors with sufficient financial understanding will exhibit superior financial management practices, such as on-time bill payments, maintaining records of monthly spending, and keeping emergency cash on hand (Silvy & Yulianti, 2013). To correctly manage financial

resources for their well-being, people also need to have a foundational understanding of finance (Siswanti & Halida, 2020).

Income is also the amount of money received from salaries, wages, rent, interest, profits, and others, earned within a certain period. The high amount of income earned can help a person to meet the needs and financial obligations that must be met. In this regard, differences in income occur between genders. According to Miki and Yuval (2011), women will find it easier to enter jobs, the majority of which require female workers with low incomes. On the other hand, women will find it more difficult to enter employment, where most of them need male workers. The income earned will be greater than that of a female-dominated job, but the income will be lower than that of a male in the same position. It is what causes income inequality between genders. Previous research has also shown that education could reduce income inequality between genders. Women with high education can be more competitive in the labor market than women with low education. Besides, gender is an inherent trait of the male and female groups formed socially and culturally (Ningsih & Soejot, 2017). According to research by Herdjiono et al. (2018), gender did not moderate the relationship between income and financial behavior on financial behavior.

### Gender

Gender is a biological difference between a male and a female from birth. According to Yogasnumurti et al. (2020), gender is a difference in behavior between men and women apart from biological structures, most of which are formed through social and cultural processes. A woman usually has a more subtle nature than men because men tend to use their instincts compared to women, who use their feelings more; thus, a person's behavior toward women will be different from men's (Sina, 2014).

In addition, Assyfa (2020) defined that gender is part of the self-concept that involves identifying the individual as a man or a woman. In general, the notion of gender is a difference devoid of men and women viewed from values and behavior. Typically, gender is measured using dummy variables since men and women belong to the nominal scale, where men have a value of 1 while women have a value of 0.

According to the explanation, the study's hypotheses could be proposed:

*H<sub>1</sub>: Gender can moderate the relationship between financial literacy and financial behavior.*

*H<sub>2</sub>: Gender can moderate the relationship between financial attitudes and financial behavior.*

*H<sub>3</sub>: Gender can moderate the relationship between income and financial behavior.*

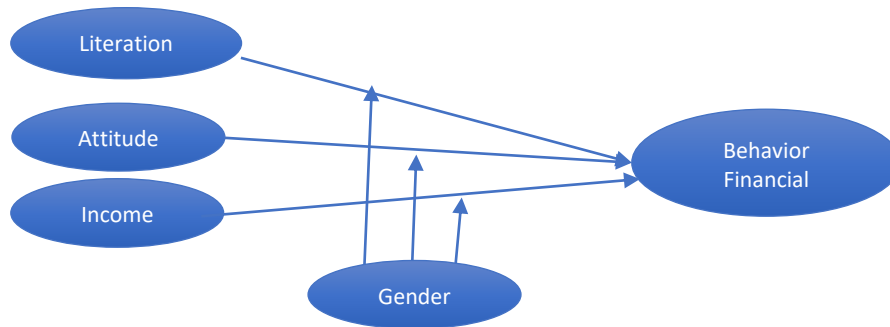


Figure 2 Conceptual Framework

## Research Methods

### Methodology

This study adopted a quantitative research method as the study type. Quantitative research studies a specific population or sample, in which the data collection uses research tools, and the statistical data analysis tests established hypotheses (Sugiyono, 2016). The population in this study was all MSMEs in Sidoarjo Regency. Meanwhile, the sampling technique used was targeted sampling using several criteria desired by the researchers.

Table 1 Operational Definition, Indicator, and Measurement Scale

Variable	Definition	Indicator	Measurement Scale
(X1) (Fajri, 2020)	A personal understanding of financial concepts and the ability to manage personal finances through short- and long-term decisions	1. Basic knowledge of personal finance 2. Deposits and loans 3. Insurance 4. Investment	Likert scale
(X2) (Herdjiono et al., 2018)	Financial attitudes are defined as the state of mind, opinions, and assessments of an individual's finances that apply to attitudes.	1. Obsession 2. Savings 3. Irine	Likert scale
(X3) (Yusnia, 2017)	Income is the entire amount received from salary, wages, rent, interest, profit, and others earned within a certain period.	1. Increase in sales 2. Maximum profit 3. Fulfillment 4. Need	Likert scale
Gender (X4)	Gender is understood as an inherent trait of male and female groups formed socially and culturally.	1. Male = 1 2. Female = 0	Dummy variable
Financial management behavior (Y) (Putri & Tasman, 2019)	It is the management ability of the person who maintains, budgets, inspects, administers, controls, locates, and keeps the daily funds.	1. Consumption 2. Cash flow management 3. Saving and investing 4. Credit management	Likert scale

### Data Collection Techniques

This study employed a questionnaire as one of its data-gathering methods. The questionnaire gathered data gauging people's attitudes, views, and perceptions of one another or a set of events. The measured variables were then converted into variable indicators using a Likert scale. This indication serves as a benchmark for creating instrument items, which may take the form of questions (Sugiyono, 2016). Each response component's assessment score is as follows:

**Table 2** Likert Scale

Answer Choices	Score
Strongly Agree	5
Agree	4
Uncertain	3
Disagree	2
Strongly Disagree	1

### Analysis Techniques

The researchers performed descriptive tests from questionnaire aggregate results to determine the state of existing data and test the instrument's validation and reliability. Classical assumption tests were then performed on the data, including normality, linearity, multicollinearity, autocorrelation, and heteroskedasticity. Hypothesis analysis tests, including t-tests, were also performed after the data met all tests' requirements.

**Table 3** MSME Sampling Criteria

No.	Criteria	Quantity
1.	MSMEs under the auspices of the Cooperatives and Micro Business Office of Sidoarjo	878
2.	Selected five sub-districts with the highest number of MSMEs	450
3.	MSMEs from five sub-districts that have already had business legality	239
4.	MSMEs from five subs with types of food and drink products	164

The sample analysis technique used several tests to obtain correct results. Initially, the validity and reliability of the data were tested. Then, the outer and inner models were tested. In testing the hypotheses, the t-test was also employed to obtain the relationship between each variable and test gender ability as a moderating variable.



## Results and Discussion

### Descriptive Analysis

Characteristics of Respondents by Gender

**Table 4** Characteristics of Respondents by Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man	48	29.3	29.3	29.3
	Female	116	70.7	70.7	100.0
	Total	164	100.0	100.0	

Characteristics of Respondents Based on Marital Status

**Table 5** Characteristics of Respondents Based on Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Marry	153	93.3	93.3	93.3
	Unmarried	11	6.7	6.7	100.0
	Total	164	100.0	100.0	

Characteristics of Respondents by Age

**Table 6** Characteristics of Respondents by Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30 Year	16	9.8	9.8	9.8
	31-40 Year	79	48.2	48.2	57.9
	41-50 Year	53	32.3	32.3	90.2
	> 51 Year	16	9.8	9.8	100.0
	Total	164	100.0	100.0	

Characteristics of Respondents Based on Length of Business

**Table 7** Characteristics of Respondents Based on Length of Business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5 year	115	70.1	70.1	70.1
	6-10 Year	33	20.1	20.1	90.2
	> 10 Year	16	9.8	9.8	100.0
	Total	164	100.0	100.0	

Characteristics of Respondents Based on Education

**Table 8** Characteristics of Respondents Based on Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Junior High School	6	3.7	3.7	3.7
	Senior High	60	36.6	36.6	40.2
	Diploma/ S1	94	57.3	57.3	97.6
	S2	4	2.4	2.4	100.0
	Total	164	100.0	100.0	

The outer test started with estimating the parameters, i.e., computing the PLS algorithm, as shown in the Figure 3. From the subsequent analysis results, the measurement model (external model) could be evaluated by testing the adequacy of convergence, discriminant validity, and reliability.

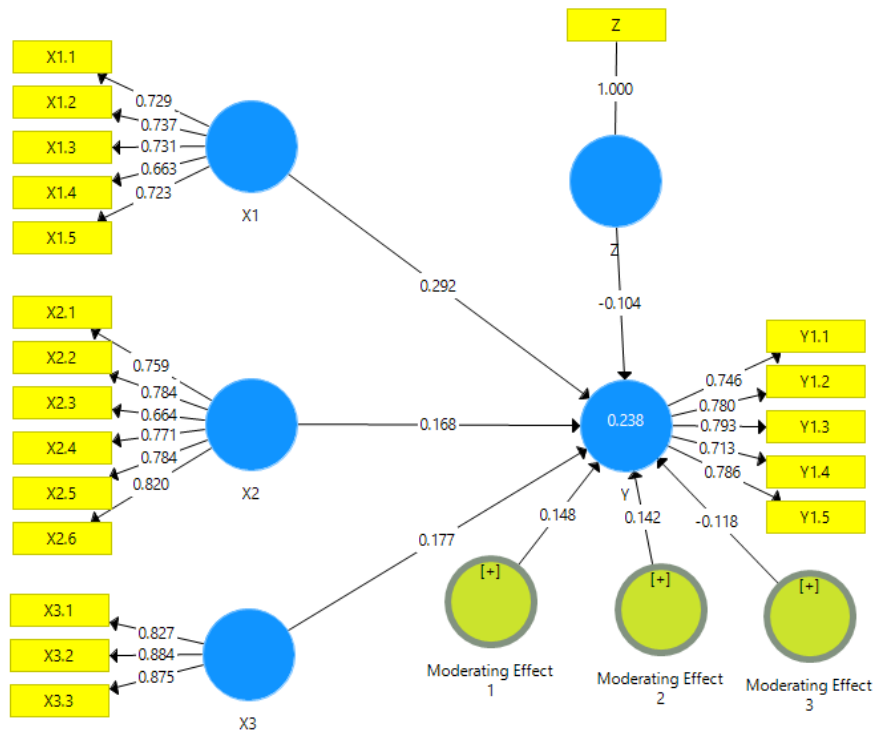


Figure 3 Display of PLS Algorithm

Hypotheses Testing

Table 9 Table of Coefficient Path Test Result

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics ( O/STDEV )	P-Values
Moderating Effect 1 -> Y	0.148	0.141	0.074	1.987	0.047
Moderating Effect 2 -> Y	0.142	0.125	0.066	2.163	0.031
Moderating Effect 3 -> Y	-0.118	-0.105	0.103	1.150	0.251
X1 -> Y	0.292	0.307	0.065	4.464	0.000
X2 -> Y	0.168	0.199	0.080	2.092	0.037
X3 -> Y	0.177	0.175	0.114	1.550	0.122

The results of hypotheses testing in Table 9 can be explained as follows:

#### Hypothesis Testing 1

The moderating effect of financial literacy with the gender on financial management behavior showed a t-statistic value of 1.987 and a p-value of 0.047. The measurement results indicate that the t-statistic  $1.987 > 1.96$  and p-value  $0.047 < 0.05$ , so it can be concluded that gender could moderate financial literacy on financial management behavior.

#### Hypothesis Testing 2

The moderating effect of financial attitudes with gender on financial management behavior revealed a t-statistic value of 2.163 and a p-value of 0.031. The measurement results denote that the t-statistic  $2.163 > 1.96$  and the p-value  $0.031 < 0.05$ , so it can be concluded that gender could moderate financial attitudes toward financial management behavior.

#### Hypothesis Testing 3

The moderating effect of income with gender on financial management behavior uncovered a t-statistic value of 1.150 and a p-value of 0.251. The measurement results signify that the t-statistic  $1.150 < 1.96$  and p-value  $0.251 > 0.05$ , so it can be concluded that gender could not moderate income on financial management behavior.

### **Discussion**

#### **Gender in Moderating the Relationship between Financial Literacy and Financial Management Behavior**

This study supports previous research (Mien & Thao, 2015) that found a strong correlation between financial management behavior and financial literacy. It demonstrates how financial literacy will result in more appropriate personal financial management practices. Consequently, financial management behavior is significantly and directly impacted by financial understanding. The same research findings—that financial management behavior was influenced by financial literacy—were also found in studies by Singh and Kumar (2017) and Humaidi et al. (2020).

The study's findings suggest financial management behavior is influenced by financial literacy. According to Chen and Volpe's (1998) idea of financial literacy, financial literacy is the knowledge or capacity to manage one's own money and a financial understanding of savings, insurance, and investments. It indicates how MSMEs players' increased financial knowledge may enhance their financial management practices. Thus, knowledge may be a powerful capital to help MSME actors overcome any risks that may arise throughout the course of financial management and financial decision-making.

Moreover, each individual must acquire financial knowledge through prior experience in formal education and learning from family, friends, and colleagues. Financial knowledge derived from the past can encourage or discourage individuals from conducting more responsible financial management behavior. It means that individuals with high financial knowledge will be increasingly encouraged to make the right decisions in financial management, investment, consumption, and savings activities.

The study's findings are also consistent with the premise that raising financial literacy may foster rational and responsible financial management behavior. One of the variables that might help people manage their money more intelligently is financial literacy or awareness. People who understand the fundamentals of money will have a better retirement strategy, be wealthier, and be better able to avoid taking on debt for consumer activities.

In addition, this study supports previous research (Mien & Thao, 2015), suggesting a strong correlation between financial management behavior and financial literacy. It demonstrates how more financial literacy will result in more appropriate personal financial management practices. Consequently, financial management behavior is significantly and directly impacted by financial understanding. The same research findings—that financial management behavior was influenced by financial literacy—were also found in studies by Singh and Kumar (2017) and Humaidi et al. (2020).

Based on the data analysis results in Table 9, it is proven that gender could moderate financial literacy regarding the financial management behavior of MSMEs. It demonstrates financial literacy, knowing many things about the world of finance, financial products, and financial skills. In this regard, business players with sound financial knowledge can perform better financial management actions. Also, individuals need basic financial knowledge and skills to effectively manage their financial resources for their welfare (Nabellah & Sriyono, 2021).

Theoretically, differences between men and women result from sociocultural structures that lead to separate roles and tasks. With these differences, women are consistently marginalized and neglected in their roles and contributions to family life, society, country, and nation. Gender differences between women and men in financial management can lead to different behavior perceived by each gender. Walczak and Pieńkowska-Kamieniecka (2018) argued that men have higher knowledge than women in the investment world, and women also have less knowledge of personal finance. Ansong and Gyensare (2012) also stated that men are usually responsible for financial decisions and understand financial concepts better than women. It indicates that men are more confident in managing their finances than women. The low self-confidence of women is caused by their role as homemakers and career women, making it very difficult to save.

### **Gender in Moderating the Relationship between Financial Attitudes and Financial Management Behavior**

Based on the data analysis results in Table 9, the financial attitude had a significant and positive relationship with financial behavior. The study results align with the research (Bhushan & Medury, 2014), which stated that financial attitudes affected financial management behavior. In this case, someone with a better financial attitude tends to be wiser in their financial behavior than someone with a poor financial attitude. The results of this study are also consistent with research conducted by Baptista and Dewi (2021), stating that financial attitudes significantly affected financial management behavior.

According to the theory of financial attitudes presented by Lim and Teo (1997), people with good financial attitudes exhibit patterns of thoughtfulness about money, allowing them to perform well in organizing their finances. The results of this study indicate that financial attitudes influenced financial management behavior. It also signifies that the better the financial attitudes of MSME stakeholders, the better the financial management behavior of MSMEs. In other words, financial attitudes influence a person's financial management behavior decisions. Financial attitudes guide a person in dealing with different financial behaviors. People with excellent financial mindsets can better make various financial management decisions. A reasonable degree of financial attitude in MSME players will be seen in their outlook on the future, ability to manage their finances, ability to modify their usage of money to fulfill their requirements, reluctance to spend money, and an expanding conception of money. They also do not have an outdated viewpoint so that they may manage their finances for their welfare, regulate their consumption, balance their income and spending, and set away money for investments and savings.

According to Bir (2014), the more financial management techniques that may be used, the more favorable the attitude toward financial management and the more extensive the financial expertise. One's financial conduct is significantly influenced by their financial attitudes. How people spend, save, hoard, and squander money is also influenced by their financial views. Financial issues like the prevalence of bill arrears and a lack of revenue to satisfy demands are also influenced by financial attitudes. Therefore, having a positive attitude about money will translate into appropriate financial management practices.

This study's results align with research by Satoto and Suprapti (2019), which stated that financial attitudes affected financial management behavior. It shows that the better a person's attitude in allocating his funds, the better his financial management behavior will be.

The data analysis results in Table 9 prove that gender could moderate financial attitudes toward MSME financial management behavior. It shows differences in financial attitudes between men and women, where women's prudent attitudes could strengthen the relationship between financial attitudes and financial management behavior. Moreover, business actors who have received the material will understand better, and prudence complements decisions.

In this case, gender is understood as an inherent trait of men and women formed socially and culturally. Women usually have a more subtle nature than men since men tend to use their instincts compared to women, who use their feelings more so that women's behavior will be different from that of men. According to research (Putri & Tasman, 2019), gender could moderate financial attitudes on financial management behavior.

### **Gender in Moderating the Relationship between Income and Financial Management Behavior**

The statistical analysis presented in Table 9 demonstrates that the income variable did not significantly and substantially influence how MSMEs managed their finances. The findings of this study are consistent with research by Adiputra and Patricia (2020), which found no evidence of a significant relationship between income and financial management practices. The findings of this study also showed that an individual's conduct in managing their finances was not much influenced by their income level since each MSME actor had a unique approach.

The results revealed that income did not affect financial management behavior. It indicates that the income earned by MSME actors, both high and low, did not affect individuals. The income theory put forward by Hilgert and Hogarth (2003) also states that personal income is an individual's gross annual income earned from wages, business ventures, and various investments. The amount of income a person has affects their financial behavior because high-income earners are prone to irresponsible financial behavior and short-sighted thinking, making them unable to manage their spending properly. Thus, an individual with a high-income level often still encounters financial problems. Generally, when an individual experiences an increase in income, expenses also increase and exceed the additional income (Kholilah & Iramani, 2013).

The results of this study contradict research findings that income is one of the factors influencing financial management behavior (Szendrey & Fiala, 2018). With a person's income, the needs and obligations that need to be met can be met. The higher a person's income level, the easier it is to meet their obligations, the more likely they are to take responsibility for the income they manage, and the better their financial management behavior.

Hence, high income could not significantly affect the financial management behavior of MSMEs. Considering financial management behavior is a habit formed from knowledge and experience in managing finances, the size of the income could not increase the behavior directly. Instead, the behavior could be influenced by the presence of wealth of financial literacy and financial attitudes, which are knowledge and experience in managing finances. The results of this study are consistent with a study conducted by Satoto and Suprpti (2019), stating that income did not influence financial management behavior. Then, a person's high income can be interpreted as not affecting household management behavior.

Based on the data analysis results, gender could not moderate income on MSME financial management behavior. It shows that the financial management behavior of men and women differed in managing income, both high and low incomes. A study (Sabri et al., 2017) suggested that gender differences affected a person's shopping behavior control, where men are utilitarian shoppers (based on benefits), while women are primarily hedonic shoppers (just pleasure). Thus, spending income on goods/services that are more useful will certainly significantly affect financial management for the better. Better financial knowledge, of course, affects the mindset in making financial decisions on more planned spending behavior based on the budget made previously so that proper personal financial management will be realized. According to research (Yogasnumurti et al., 2020), gender could not moderate income on financial management behavior.

## **Conclusion**

Many preliminary studies have stated that gender has a role in company management; however, gender could not moderate income on financial behavior. It means that when MSME actors experience changes in income, it does not change the financial behavior of MSMEs. Nevertheless, gender could moderate financial literacy to improve one's financial behavior. It indicates that women have the literacy skills to change their financial behavior. In addition, gender could moderate their financial behavior. It denotes that women have a better financial attitude toward financial behavior than men.

## **Implication**

The implications of this study are enormous for the company. In this case, the existence of gender does not always provide positive value for the company. It is evidenced from the results of this study that gender could not reinforce the relationship between income and financial management behavior.

## **Limitation**

The limitation of the study is that this research applied only to the type of goods company and could not be applied to service companies.

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