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# The Influence of Financial Literacy on Financial Satisfaction with Financial Behavior as Moderating Variable (Case Study on MSMEs in Sleman Regency, Yogyakarta)

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Received: 05.06.2023

Reviewed: 20.06.2023

Accepted: 21.06.2023

## Abstract

*This study aims to explain the effect of financial literacy on financial satisfaction with financial behavior as a moderating variable. This research was conducted on SMEs in Sleman Regency, Yogyakarta with a total of 100 SMEs with the sample criteria that MSMEs have been operating for at least 1 year and provide primary needs. This study uses three variables. Data were tested using simple regression and moderated regression analysis. The results of the study show that financial literacy has a positive effect on financial satisfaction. In addition, it was found that financial behavior moderates the effect of financial literacy on financial literacy in MSMEs in Sleman Regency, Yogyakarta. This study shows that the financial literacy of MSME actors will influence their financial behaviour decisions so that the impact will be seen on their financial satisfaction.*

**Keywords :** *financial literacy, financial satisfaction, financial behavior*

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## 1. Introduction

Financial satisfaction is a subjective measure of financial well-being and shows the level of satisfaction felt by individuals concerning various aspects of their financial condition (Sahi, 2013). According to Altsani, Hasibuan, and Lubis (2017), financial satisfaction is an individual's satisfaction with his financial situation. Individuals who have financial satisfaction are those who are satisfied with their current financial situation. Hence, financial satisfaction is a fairly important perspective related to financial resources.

A person's financial satisfaction will be influenced by a person's ability to manage his finances. Vitt et al. (2000) stated that financial literacy is a person's capability in reading, analyzing, managing, and communicating about personal financial conditions that can affect material well-being. Financial literacy will influence a person's behavior in saving, debt, investing, and managing their finances (Hailwood et al., 2007). Based on the Financial Services Authority's (OJK) National Financial Literacy and Inclusion Survey (SNLIK) in 2022, the survey results showed that the Indonesian people's financial literacy index reached 49.68% and the Financial Inclusion Index reached 85.10%. This figure has increased compared to the results of the 2019 OJK survey, which showed a financial literacy index of only 38.03% and a financial inclusion index of 76.19%. Even though it continues to progress, Indonesia's financial literacy is still below the financial literacy of Hong Kong, Korea, and Thailand

Financial behavior is a person's ability to make decisions in managing his finances. Financial behavior is related to consumption, saving, investing, and paying bills. According to Topa et al., (2018), financial behavior is the acquisition, allocation, and use of one's financial resources that lead to a certain goal. This financial behavior is related to how a person

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manages, utilizes, and treats his income according to their needs. Empirical evidence supports financial behavior, namely if a family can achieve effective financial management, then their economic welfare and financial satisfaction will increase in the long term. This can be interpreted that financial behavior can be used as a picture of a person regarding how to behave when faced with a financial decision that they need to make. Financial behavior refers to systematic financial management such as making consistent savings with written plans and financial goals to be achieved (Titus et al. 1989). A good financial attitude can also be seen because it keeps records of books and cash flow, plans expenses, pays electricity bills, controls the use of credit cards, and saves money consistently.

Sleman Regency is the area in Yogyakarta with the largest number of MSMEs. The number of MSMEs in Sleman has reached 68,000 MSMEs (Merapi Daily, 2021). One of the strategic efforts to improve the sustainability and welfare of MSMEs is through increasing financial insight or knowledge so that MSMEs will be able to manage their finances and make MSMEs wiser in making decisions for the continuity of their business. With a level of financial literacy and good financial behavior, SMEs will be able to manage their finances well and will achieve the expected financial satisfaction.

## **2. Literature Review**

### **2.1. Financial Satisfaction**

Financial satisfaction is a component of financial well-being that includes subjective and objective factors of the financial situation regarding the extent to which a person's financial resources are adequate or not, or satisfactory or not (Hira and Mugenda, 1998). According to Joo and Grable (1999), the assessment of financial satisfaction can be done subjectively and objectively. Assessment objectively is looking at the financial condition in real terms. Meanwhile, subjective assessment is an assessment from within each individual in looking at financial conditions. subjective assessment of each against *financial satisfaction* is considered more accurate because each individual can assess the current financial condition of past conditions, future expectations, and social standards, rather than looking at financial conditions objectively (Toscano et al., 2006). Hira and Mugenda (1999), explained that financial satisfaction can be measured by: savings, debt, current financial situation, ability to meet long-term needs, funds for emergencies, and ability to manage money

### **2.2. Financial Literacy**

Financial literacy is an individual's ability to understand, obtain, and evaluate information that is deemed relevant in making decisions by understanding the resulting financial risks (Mason and Wilson; 2000). Financial literacy according to Chen and Volpe (1998) consists of four dimensions that influence it, namely: Basic financial knowledge (including income, expenses, debt, assets, equity, and risk); deposits and loans; protection or insurance, and investment. Financial literacy has a positive influence on financial satisfaction (Halim and Astusi, 2015). This shows that individuals who have a good level of financial knowledge tend to be satisfied with their financial condition. Good financial literacy will help someone make accurate decisions, have determination in financial management, and have good behavior it will help in obtaining financial satisfaction.

**H1:** Financial literacy has a positive effect on financial satisfaction.

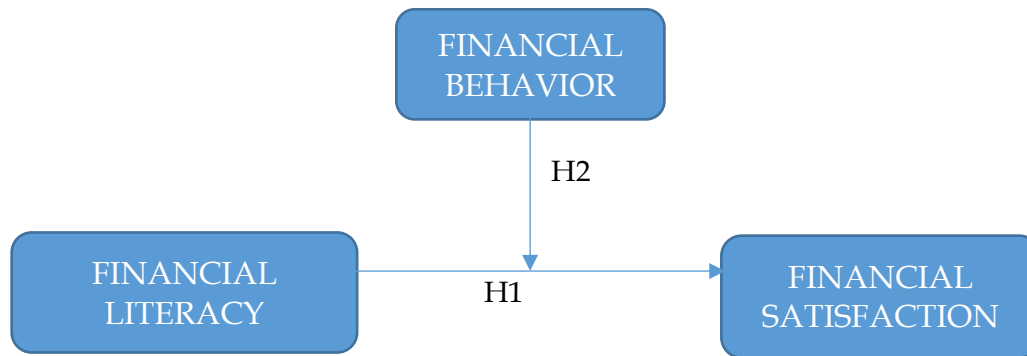


Figure 1. Research Model

### 2.3. Financial Behavior

According to Xiao (2009), financial behavior reflects how human behavior is relevant to financial management. Joo and Grable (2004) state that people who have positive financial behavior such as making price comparisons for purchasing expensive goods, paying debt bills on time, and planning monthly finances will affect a person's level of satisfaction. There are four indicators of financial behavior according to Dew and Xiao (2011), namely: consumption, cash flow management, savings and investments, and debt management.

Ku Ahmad, et.al (2017) shows that financial behavior moderates the effect of financial literacy on financial satisfaction. This means that if a person has financial literacy and good financial behavior, his financial satisfaction will be higher. Based on theory Behavioral Finance and Subjective Well Being, individual financial literacy will affect their financial satisfaction through their financial behavior. Financial literacy will influence individual financial behavior decisions so that the impact will be seen on financial satisfaction. Individuals who have financial literacy will produce individuals who have good financial behavior, for example in financial control, paying bills on time, meeting needs, and setting aside funds for savings and insurance so that they can achieve financial satisfaction.

**H2:** Financial Behavior moderates the effect of financial literacy on financial satisfaction.

## 3. Methods

### 3.1. Sampling and Procedures

The population in this study is all MSMEs in Sleman Regency, Yogyakarta. Based on the calculation of the Slovin formula, the researcher got the result that the number of samples taken was 100 MSMEs. The sampling technique used is purposive sampling, which is a sampling technique that does not provide equal opportunities for each member of the population being sampled. The criteria used in sampling in this study are that MSMEs have been established for at least 1 year and MSMEs provide primary needs.

### 3.2. Measures

The data used in this study are financial literacy (independent variable), financial satisfaction (dependent variable), and financial behavior (moderating variable). Data collection was carried out by distributing questionnaires consisting of 25 question items representing 3 variables, consisting of 8 question items for financial literacy variables, 8 question items for

financial behavior variables, and 9 question items for financial satisfaction variables. Variable measurement using a 5 point Likert-scale. Instrument test in this study using validity and reliability tests. Validity test is used to measure the validity of a questionnaire. Reliability test is a value that shows the consistency of a measuring instrument in its use, or in other words the measuring instrument has consistent results when used many times at different times.

**Financial satisfaction** is a subjective evaluation of the extent to which a person's financial resources are adequate or inadequate to meet current and future financial obligations (Hira and Mugenda, 1998). The indicators used are: condition of savings, ability to pay debts, current financial situation, ability to meet long-term needs, funds for emergencies, and ability to manage money (Hira and Mugenda, 1998).

**Financial literacy** is the level of financial knowledge and a person's ability to apply this knowledge to improve his financial status (Lusardi and Mitchell, 2014). This variable uses indicators, namely: financial management, financial planning, financial well-being, financial knowledge, and insurance financial products (Chen and Volpe, 1998)

**Financial Behavior** reflects how human behavior is relevant to financial management (Xiao, 2019). The indicators used to measure financial behavior are: consumption, cash flow management, savings, and investment, and debt management (Dew and Xiao, 2011)

### 3.3. Data Analysis

#### 3.3.1. Simple Linear Regression Test

In this study, simple linear regression was used to test how much influence financial literacy has on financial satisfaction in MSMEs in Sleman Regency, Yogyakarta. The regression equation is as follows:

$$Y = a + bX + e \dots\dots\dots (1)$$

Testing the first hypothesis is done by comparing the level of significance ( $\alpha = 5\%$ ), where if the significance value  $t \text{ count} \leq 0.05$  then the hypothesis is accepted which means that there is a significant effect of financial literacy on financial satisfaction. And vice versa.

#### 3.3.2. Interaction Test (*Moderated Regression Analysis*)

Hypothesis 2 was tested using *Moderating Regression Analysis* (MRA) to find out if the moderating variable can strengthen or weaken the relationship between the independent variables and the dependent variable. The regression equation is as follows:

$$Y = a + b_1X + b_2Z + b_3X*Z + e \dots\dots\dots (2)$$

The second hypothesis is accepted when the significance value  $t \text{ count } b_3X*Z \leq 0.05$ , meaning variable financial behavior (Z) moderates the influence of financial literacy (X) on variable financial satisfaction.

## 4. Result and Discussion

### 4.1. Descriptive statistics

Table 1 shows the descriptive statistics of the research respondents. 73% of the respondents were owner of the MSMEs while the rest were manager's. Most of the respondents were have a business between 1 and 5 years, 32% of those between 6 -10 years, 22% between 11-15 years, and the remaining 10% had business for more than 21 years.

Table 1. Characteristics of Respondents

<b>Respondent</b>	<b>Amount</b>	<b>Percentage</b>
Owner	73	73%
Manager	27	27%
Amount	100	100%
<b>Long Effort</b>	<b>Amount</b>	<b>Percentage</b>
1-5 years	34	34%
6-10 years	32	32%
11-15 years	22	22%
16-20 years	9	9%
21-25 years	1	1%
26-30 years	2	2%
Amount	100	100%

## 4.2. Research Result

The results of testing the effect of financial literacy on financial satisfaction in Table 2 show that financial literacy has a positive effect on financial satisfaction as indicated by the regression coefficient value of 0.109 and a significance of 0.000 (smaller than = 5%). These results prove that the higher the financial literacy of MSME in Sleman Yogyakarta Regency, the higher their satisfaction in managing their finances. Good understanding and knowledge supported by expertise in financial management, related to savings, loans, and investments, resulting in MSME players having high financial satisfaction in managing their finances.

The results of the interaction test using moderated regression analysis in Table 3 show that the financial behavior variable gives a coefficient of 0.813 with a significance of 0.000, which means that financial behavior affects financial satisfaction. The moderate variable which is the interaction between financial literacy

Table 2. Effect of Financial Literacy on Financial Satisfaction

<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sign.</b>
	<b>B</b>	<b>Std.Error</b>	<b>Beta</b>		
(Constant)	1.175	0.387		3.036	0.003**
Financial Literacy	0.726	0.109	0.557	6.633	0.000**

\*Correlation is significant at the 0.05 level (1 tailed), \*\*Correlation is significant at the 0.01 level (1 tailed)

Table 3. Interaction Test (Moderated Regression Analysis)

<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
(Constant)	-.184	.347		-.532	.596
Financial Literacy	-.044	.086	-.034	-.511	.610
1 Financial Behavior	.813	.116	.591	7.032	.000**
Financial Literacy*Financial Behavior	.075	.021	.369	3.548	.001**

\*Correlation is significant at the 0.05 level (1 tailed), \*\*Correlation is significant at the 0.01 level (1 tailed)

and financial behavior gives an interaction value of 0.075 with a significance of 0.001 (smaller than = 5%). This shows that financial behavior can moderate the effect of financial literacy on financial satisfaction in MSMEs in Sleman Regency, Yogyakarta.

### **4.3. Discussion**

Financial literacy is something that can influence a person's way of thinking about financial management which can change financial conditions for the better. Effective financial literacy will not only increase financial knowledge but will also encourage good financial behavior and assist in making the right decisions and increase confidence in financial management. Financial literacy also teaches the best way to use relevant financial information to achieve long-term financial satisfaction (Dew and Xiao, 2011). For MSMEs, their financial literacy will lead to positive behavior in decision making which will ultimately increase the financial satisfaction of MSME. This research is in line with research conducted by Henager and Anong (2014) and Farida, Susatyo, and Aji (2021) which shows that financial literacy has a positive effect on financial satisfaction.

Financial behavior moderates the effect of financial literacy on financial satisfaction. This indicates that the better financial behavior in managing consumption, cash flow management, saving, investing, and debt management obtained from better financial literacy, the better their financial satisfaction. Financial literations owned by MSME will influence their financial behavior decisions so that the impact will be seen on their financial satisfaction. MSME who have good financial literacy will have good financial behavior, for example in terms of financial control, timely bill payments, meeting needs, and setting aside funds for savings and insurance so that they can achieve financial satisfaction. This research supports research conducted by Ku Ahmad, Rahayu Hassan, and Farihah Idris (2017) which shows that financial behavior moderates the influence of financial literacy on financial satisfaction

## **4. Conclusion**

### **5.1. Conclusion**

Financial literacy is a person's ability, understanding, and skills to manage finances so that able to make decisions and policies effectively to utilize the financial resources they have. and reduce management errors in financial decision-making. Good financial literacy in terms of planning, controlling, and making financial decisions will affect financial satisfaction. The better the financial literacy, the better a person's financial behavior in managing finances will be. Financial behavior is often associated with a person's ability to control finances, pay bills on time, meet needs, and set aside funds for savings and insurance so that financial prosperity will be achieved. The achievement of financial prosperity will lead to financial satisfaction.

For MSMEs, financial literacy applied in their business activities can be the basis for making the right financial decisions, which will ultimately affect the welfare of MSMEs which leads to financial satisfaction obtained. Financial knowledge for SMEs is very important to avoid misunderstandings in making financial decisions. Financial literacy will help individuals achieve financial satisfaction. Financial satisfaction will increase gradually when MSMEs implement positive financial behavior. Good financial behavior in MSMEs will lead to fulfilling desires and goals by fulfilling one by one predetermined financial goals that it will lead to financial satisfaction for MSMEs (Yap et al., 2019)

## 5.2. Limitation

The limitations of this study include the number of samples studied which were limited to MSME actors in Sleman Regency. Further research can be carried out in a wider context. It is hoped that MSME financial literacy can be applied more broadly with the increasingly rapid advances in financial technology.

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