

## The Effect of Financial Literacy and Financial Behavior on the Performance of MSMEs on Madura Island

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#### ABSTRACT

This study aims to find empirical evidence on the influence of financial literacy and financial behavior on the development of MSME financial performance. The research approach used is quantitative and is located on Madura Island. The population in this study includes all MSMEs on Madura Island. While the samples taken amounted to 62 MSME samples covering four districts. By using the multiple regression analysis method, the results showed that: (1) The financial literacy variable has a significant influence on the performance of MSMEs; (2) The financial behavior variable does not have a positive influence on the performance of MSMEs.

**Keywords:** Financial Behavior, Financial Literacy, MSME Performance



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## **INTRODUCTION**

The development of the use of digital technology in the Southeast Asian region has appeared in all sectors, especially in digital financial services (Google, Temasek and Bain & Co research results). Specifically in Indonesia, online payment transactions, digital investments and insurance, and transfers are showing very rapid development. Non-cash payment transactions (prepaid cards, credit cards, debit cards, e-wallets) are even estimated in 2025 to reach 421 dollars or grow around 17%. Financial literacy is the knowledge, beliefs and skills that influence attitudes and behaviors to improve the quality of decision-making and management (Soetiono & Setiawan, 2018). Literacy is also interpreted as knowledge of facts, concepts, principles and technological tools that underlie smart use of money Garman & Fogue (2010). In turn, this literacy should be used to improve financial well-being (Huston, 2010).

According to Wicaksono (2015), financial behavior is an approach that describes how people invest and manage their finances and is influenced by psychological factors. Financial behavior refers to financial responsibility from individual related to how they manage their finances. Financial responsibility is the process of managing money and assets productively. Money management is the process of managing and using financial assets.

Many factors influence this financial behavior, including financial literacy which describes the knowledge and skills of the development of financial technology. The better the level of financial literacy, the better the financial behavior in utilizing existing financial technology. Similarly, the existence of MSMEs in Indonesia in utilizing technological developments to improve their business performance. It is realized that MSMEs have a very vital role in economic growth in Indonesia. Therefore, it is very important for MSMEs to be equipped from financial literacy so that in turn they can improve their financial behavior. So that in the next stage it is expected that the performance of MSMEs will increasingly show positive developments.

The rapid development of digital technology in Indonesia has led to the emergence of various digital platforms that revolutionize collaborative production and consumption activities. Of course, this will all be an opportunity for MSMEs in Indonesia to be able to adapt and transform to adjust and utilize technological developments. The use of digital platforms for MSMEs will encourage MSMEs to be stronger and more successful by increasing capacity that is increasingly innovative, productive, and increasing access to MSMEs through marketplace facilities, financial institutions and others (Bank Indonesia, 2020).

Data on Indonesia's financial literacy level still shows a low figure of 35%. This means that the knowledge of the community, especially growing businesses, does not have much knowledge and understanding of the development of financial technology. This is in line with the problems faced by MSMEs in Indonesia, including the low ability and competence of human resources who have soft skills, limited capital, marketing problems, technology, and limited access in utilizing market opportunities.

According to Atkinson and Messy (2012), a person's financial knowledge, skills, and beliefs influence financial behavior. Personal improvements can influence active participation in financial program and more proactive financial behavior. Furthermore, the association between behavior and one's own attitudes is evident in people with long-term positive attitudes, who are more likely to exhibit better economic behavior than those with short-term economic attitudes.

The local wisdom-based small and medium enterprises studied are micro-enterprises that process sago stems into wet sago. The descriptive qualitative method is the method that the researcher has used to answer the research problem. The data obtained in this research is primary data directly obtained by interviews with micro-level entrepreneurs processing sago stems into wet sago in Pemakuan Banjar village. Business actors who process sago stems into wet sago are unique to this area. However, this business is underdeveloped due to limited access to banking, all of which hinders business development in this area.

The survey results show that micro-entrepreneurs in Pemakuan village still do not understand how to prepare financial reports. These small and medium enterprises in Pemakuan village do not keep records of the buying and selling process. Accounting tasks such as recording sales and purchases are difficult for small and medium enterprises to perform, and the very low level of education has a major impact on evaluating the importance of recording financial activities. This study aims to find empirical evidence on the impact of financial literacy and financial behavior on the development of financial performance of MSMEs, based on the description of issues related to financial literacy, financial behavior, and performance of MSMEs.

## **LITERATURE REVIEW**

### **Theory of Planned Behavior (TPB)**

TPB was first proposed in 1985 by Icek Ajzen. TPB is based on various attitude theories such as learning theory, expectancy-value theory, consistency theory, and attribution theory. The theory of planned behavior in psychology is a theory about the relationship between beliefs and behavior. The theory of planned behavior (TPB) describes a social theory where human behavior is the result of various considerations influenced by behavioral control factors, ethics or norms, and attitudes and becomes the main reason in the decision-making process. There are several fundamental reasons that differ from one human to another in terms of behavior. This theory is basically a very good and strong and concise theory in predicting and being able to explain behavior. This theory can explain intention, namely the level of individual ability to try and the level of ability of a person's effort that has been sacrificed in carrying out something planned. So, the basic concept of TPB is basically to predict intentions that would occur in the absence of serious problems and translate them into actual behavior.

### **Dual-Process Theory**

The dual process theory proposed by Evans (2008) illustrates that a financial decision can be made by an intuitive and cognitive process. This means that financial literacy will not always get or produce maximum financial performance. Intuition is said to favor shortcuts because it tends to make decisions based on emotions. Cognition, on the other hand, is a mental process that includes understanding, calculation, thinking, problem solving and decision making.

### **Financial Literacy, Financial Behavior and MSME Performance**

Chen and Volpe (1998) that financial literacy is the application of existing understanding and knowledge to make decisions as effective financial, thereby improving one's financial situation, knowledge and understanding of risks, skills, motivation, A financial concept aimed at improving self-confidence, and happiness and friends that will improve.

Data on Indonesia's financial literacy level still shows a low figure of 35%. This means that the knowledge of the community, especially growing businesses, does not have much knowledge and understanding of the development of financial technology. This is in line with the problems faced by MSMEs in Indonesia, including the low ability and competence of human resources who have soft skills, limited capital, marketing problems, technology, and limited access in utilizing market opportunities.

This allows them to participate in the economic sector (OECD, 2016). Meanwhile, financial literacy is divided into four aspects: knowledge of personal finance in general, savings and credit, and insurance and investment. In line with previous research, Putri et al. (2019) conducted a study that aims to examine the role of financial literacy on the ability of students to manage finances and manage all their assets. Using SEM analysis, the results show that the level of financial literacy possessed by students has a very significant impact on their ability to manage all financial activities in their environment. The lower the level of financial literacy, the lower the ability to manage the financial activities of students.

Furthermore, Wuisang et al. research (2023) has the aim of analyzing the relationship between the level of financial literacy of students and the way financial management has been. Quantitative methods using SPSS aolikas are used in this research approach. The number of samples determined in this study based on the simple random method. The calculation of the sample size using the Slovin technique resulted in 64 respondents. The test results using multiple linear regression analysis, as well as hypothesis testing with the t test and the fm test obtained the results that the financial literacy variable plays a significant role in the way students manage their finances.

The study conducted by Rizky (2019) aims to measure the level of financial literacy of small entrepreneurs in preparing financial reports. Based on research using the description test, the results show that small entrepreneurs have a tendency to lack knowledge and understanding of finance. They do not understand the benefits of making financial reports and how to utilize these financial reports for the benefit of their business ventures. Therefore, in their business practices, they experience many obstacles in obtaining credit from banks and accessing other funds from funding sources in the business world. This will continue to be a classic problem for small entrepreneurs; therefore, it is necessary to improve financial understanding and knowledge to improve the ability to access finance and utilize it for their business interests.

According to Xu and Zia (2012), financial literacy not only includes concepts that begin with knowledge and understanding of financial products and institutions, but also concepts related to financial skills, such as the ability to compound interest on loans and general financial skills included. For financial management and financial planning. In turn, financial literacy that understands all aspects of personal financial knowledge is not intended to limit or complicate people's enjoyment of life. Instead, financially savvy individuals and families can enjoy life by appropriately utilizing their financial resources to achieve desired personal financial goals in the future.

Ardila et al. (2021) have conducted research on the role of financial literacy which has been ignored by many parties to manage their finances. This includes the MSME community in Medan city, so far, they have also run their MSME businesses or activities without being based on financial information and management in a good and disciplined manner. Ardila's research approach uses associative, where the type of data used is the primary type sourced from questionnaires and interviews with respondents. The population determined is MSME players in the industrial sector, namely food and beverage products. The number of respondents who were successfully sampled was

100 respondents. The data analysis method using Confirmatory Factor Analysis (CFA) is the data analysis method used and also uses an equation model known as the Structural Equation Model. While evaluating the structural equation model in this research using t statistics and p value parameters. The test results with SEM show that a number of three variables that influence financial literacy which include financial behavior, financial socialization, and financial recording model all have a positive and significant influence.

Research by Astuti et al. (2019) aims to test and analyze the level of financial literacy of the millennial generation towards the community's interest in doing business online. The research approach is quantitative and the analysis tool uses regression with a sample size of 150. It turns out that based on testing the results illustrate that the level of financial literacy of the millennial generation can influence their ability to run their online business. Many factors influence this financial behavior, including financial literacy which describes the knowledge and skills of the development of financial technology. The better the level of financial literacy, the better the financial behavior in utilizing existing financial technology.

Financial behavior includes an individual's behavior in managing money in daily life. This behavior refers to the way a person organizes and uses available financial resources. The behavior of a person who makes good financial decisions will certainly result in good profitability and all are based on financial management, financial planning, working capital, and investment decisions. According to Gitman (2012), MSMEs play a role in improving the economy of countries such as Indonesia. However, the situation is different if individual financial skills are poor or if poor financial behavior negatively affects the future of the company. Lusardi and Mitchell (2007) explain that basic finance is decisive in the financial management of a business based on a person's ability to run his business and in order to increase more productive and competitive business growth. Furthermore, Esiebugie et al. (2018) explains that financial behavior is in principle a major factor in determining the contribution to the financial performance that will be generated by the business unit.

Meanwhile, research by Wahyuni et al. (2022) entitled the role of financial literacy and behavior on business decisions from a community. By using multiple regression analysis techniques, the results show that the literacy skills of the community have a positive and very high influence on business decisions. Meanwhile, the financial behavior of the community did not show a positive influence on the community's decision to do business. Simultaneously, all independent variables including literacy and financial behavior have the ability to influence the community's decision to do business.

The purpose of this article Setiti et al. (2019) is to provide an overview of the understanding of micro, small and medium scale enterprises (MSMEs) based on local wisdom regarding the preparation of financial statements for financial access. The Indonesian Institute of Accountants is currently implementing Financial Accounting Standards for Micro, Small and Medium Enterprises (MSMEs) starting on January 1, 2018 which is in order to facilitate access to all bank financial services.

MSME performance shows work performance that reflects the complete state of the business unit during a certain period, including both financial and non-financial aspects. Performance is the result or output affected by the various operational activities of a company using all available resources (Fernita, 2020). Business performance is also defined as a set of results achieved and leads to efforts to achieve and carry out the work mandated.

Performance is a measuring tool that serves as an indicator of the success of a business in achieving its business objectives. MSME performance refers to the work results achieved by an MSME within a certain period of time, which are associated with certain standard values or measures and are adjusted to the role or mission of the MSME target (Pramestiningrum & Iramani, 2020). In its development, performance measures (Siswanti, 2015) can use various performance indicators including sales growth, customer growth, and profit growth.

## RESEARCH METHOD

The research approach used in this study is quantitative research. The location of this research is on Madura Island which includes all MSME business sectors in four districts namely Bangkalan, Sampang, Pamekasan and Sumenep. Data was collected using the Simple Random Sampling method by distributing questionnaires in the form of a Likert scale. The Simple Random Sampling technique is a data collection technique by randomly selecting the sample to be selected and at that time.

The population in this study includes all MSMEs on Madura Island, totaling approximately 1,126,807. In this study, the samples taken amounted to 62 MSME samples covering four districts, more than the minimum sample standard of 30 according to Cohen et al. (2007). Multiple regression analysis is an analysis method used in this research. This analysis is used because this study has more than one independent variable. The data analysis tool used in this research is SPSS software.

## RESULTS

The following are the results of data processing which include data description and test the effect of independent variables on the dependent variable.

**Table 1. Test of Descriptive Data**

<b>Descriptive</b>	<b>Criteria</b>	<b>Percentage</b>
Age of Business Person of MSMEs	Over 33 years	58,1%
	Under 33 years	41,9%
Long time in business	2 -3 years	37,1%
	More 5 years	32,3%
Education	SMA	33,9%
	Sarjana	58,1%
Omzet	10 – 25 Juta per month	88,7%
	Di atas 25 Juta per month	11,3%

Source: Data processed.

Table 1 shows the data description of MSMEs on Madura Island that were sampled in this study. From the age aspect, more business owners (58.1%) are above 33 years old, while the rest are below 33 years old. Meanwhile, the time MSMEs have been doing business is in the range of 2-3 years as much as 37.1% and more than 5 years as much as 32.3%. The education level of most MSME actors is a bachelor's degree 58.1%, while the rest have a high school education and the equivalent. From the aspect of business turnover per month, 88.7% of them have between 10-25 million, while the remaining 11.3% have more than 25 million.

**Table 2. The Coefficient of Determination**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.494 <sup>a</sup>	.244	.218	.362

a. Predictors: (Constant), Financial Literacy, Financial Behavior

Source: Data processed.

Test results for coefficient of determination (R square) in Table 2 measure how strong the model's ability is to explain variation in the dependent variable, shows an R2 value of 0.244. The results of this analysis indicate that only 24.4% of MSME performance is influenced by the independent variables, namely financial literacy and financial behavior. The largest influence of 75.6% of MSME performance is influenced by other variables not examined in this study.

**Table 3. The Test of Anova**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.489	2	1.245	9.511	.000 <sup>b</sup>
	Residual	7.721	59	.131		
	Total	10.210	61			

a. Dependent Variable: MSME Performance

b. Predictors: (Constant), Financial Literacy, Financial Behavior

Source: Data processed.

According to the statistical F-test results shown in Table 3 for the financial literacy, financial behavior, and financial performance variables of MSMEs in this study, the calculated F-count was 9.511 and the significance value was 0.000. If the significance level is less than 5% ( $\alpha = 0.05$ ). This indicates that all the independent variables, namely financial literacy and financial behavior, have a common impact on the dependent variable, the financial performance of MSMEs.

**Table 4. T Test**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.244	.426		7.610	.000
	Financial Literacy	.241	.056	.516	4.288	.000
	Financial Behavior,	.177	.111	.284	2.695	.390

a. Dependent Variable: MSME Performance

Source: Data processed.

The t-test results in Table 4 explain the results of testing the impact of each variable on the performance of MSMEs. Based on the test results, it is shown that the t-value of the effect of financial literacy on performance is 4.288 and the significance level is 0.000. On the other hand, the t-value of the test result regarding the impact of financial behavior on business performance is 2.695, and the significance level is 0.390. These results suggest that financial literacy has a significant impact on MSME performance. On the other hand, financial behavior does not affect the performance of MSMEs.

## **DISCUSSION**

### **Impact of Financial Literacy on the Performance of MSMEs**

The results of the data tests on the various impacts of financial literacy on the performance of MSMEs clearly show positive results. The effects of financial literacy on the performance of MSMEs in Madura Island suggest the following. MSME players have a lot of knowledge and skills in financial management so that in turn they are able to improve their welfare.

These results are in accordance with the Dual-Process theory (Lusardi & Mitchel, 2011) that a person when making decisions, especially business management, must be based on cognitive thinking, including analyzing, looking at data and digesting information and must try to get the latest information related to the problem. The results of this study are also supported by the findings of Dahmen & Rodriguez (2014), who established the fact that financial literacy influences business performance. Research by Aribawa (2016) also supports this research which states that there is a significant impact of financial literacy on MSME performance. These results also support the study of Dahmen and Rodriguez (2014). The study states that if entrepreneurs in the MSME sector have sufficient financial literacy skills, the business and financial decisions taken will lead to better performance.

The results of this study are in line with the results of SNLKI or OJK's National Survey of Indonesian Financial Literacy in 2016 to determine the understanding of banking products and services of the Indonesian people when it was running. Based on the data, it turns out that the results are quite high in terms of several banking products, including savings of 99.3%, while the transfer facility has reached the level of 86%. In practice, all banking facilities including transfer facilities, various types of savings, other loan facilities, as well as financial custody services can so far be used by business actors in order to develop business or business in the village. This all shows that the literacy level of all business actors has a positive impact on their performance.

The results of this test are also supported by Dual-Process Theory (Lusardi & Mitchel, 2011) where it is explained that when someone will make any decision including decisions in business management based on two ways of thinking, one of which is cognitive thinking, namely the analysis process, the stage of thinking earlier, the process of digesting information including efforts to obtain any information that is new and has a relationship with decision making. All of this is directed at optimizing all business units in order to decide which type of business to take. The results of this research analysis are also in accordance with the research of Dahmen & Rodriguez (2014) which found evidence that there is an influence of financial literacy variables on business continuity or performance variables. The results in the study have also stated that the financial performance of MSMEs is highly dependent on the mastery of all business actors about finance, workers and business owners.

### **Impact of Financial Behavior on MSME Performance**

The results of the test of financial behavior on MSME performance show that there is no significant impact. This result implies that the financial behavior of the Madurese community is not optimal and has not used effective and efficient ways to manage and utilize available financial resources so as to improve business performance.



The results of this study revealed that knowledge about the time value of money is still relatively low. This means that MSMEs do not understand the knowledge about time value of money and therefore the money they receive is not invested in MSMEs developed by others than themselves. The results of this study are in line with the research of Eke et al. (2013), which states that MSME owners do not have to be in an unfavorable position. Although they are financially blind, to the extent that other financially literate individuals can help make business decisions in certain financial areas. As Kotze and Smit (2008) argue, people with financial management skills can reduce the impact and consequences of financial mismanagement. In general, MSMEs on Madura Island are short-term oriented, do not have a sustainable innovation plan, have an inconsistent core business, and do not have a financial management structure, which hinders the development of MSMEs. In addition, access to funding is also a problem for those whose financial needs have not been met (Hilmawati & Kusumaningtias, 2021).

The results of this study indicate that there is no effect of financial behavior on the financial performance of the business community, in line with research conducted by Tuffour et al. (2020). The results of his research show that financial literacy attitudes measured by the level of awareness, level of attitude, and level of knowledge of the business community (MSMEs) have a significant effect on financial and non-financial performance. The results of this study are also in line with the results of research conducted by Esiebugie et al. (2018). The results of Esiebugie's research (2018) concluded that financial behavior has no effect on the performance of SMEs. It is realized that this micro and small level business has a significant impact on all economic activities in all regions and countries (Sucuahi, 2013). If the financial performance of an area has decreased or is poor, it all negatively impacts the entire sustainability of the community's business. That is why, when financial behavior reaches a high or good level, it will lead to the level of the community's ability to compete globally, and conversely, if the level of financial literacy is low, it will lead to business failure. Thus, the basic financial strength of all entrepreneurs will be an important barometer of business success, achievement, and economic growth (Lusardi & Mitchell, 2007).

This insignificant finding contradicts Potrich et al. (2016) research that financial behavior always has a significant influence on performance. This finding suggests that the majority of small and micro-level business owners do not have confidence in their management skills. All these results mean that entrepreneurs do not have access to the types of financial resources, and also lack knowledge about the impact of inflation. The results found that small and micro business owners, for the most part, do not make accurate calculation efforts and lack skills in financial aspects.

## **CONCLUSION**

Financial literacy variables have a significant impact on the performance of MSMEs. This means that on Madura Island, MSME players have a lot of knowledge and skills in financial management. The financial behavior variable It has no positive impact on the performance of MSMEs. The implication is that the financial behavior of the Madurese community is not optimal and has not used effective and efficient ways to improve business performance.

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#### DECLARATION OF CONFLICTING INTERESTS

That we as researchers truly carry out research activities and purely to obtain empirical evidence of the impact of financial literacy and behavior on the performance of MSMEs in Madura. We carry out this research carefully and without any tendency for the benefit of any party and anyone.

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