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THE EFFECT OF FINANCIAL LITERACY ON ENTREPRENEURIAL PERFORMANCE WITH FINANCIAL INCLUSION AS A MEDIATION VARIABLE

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Abstract: This research has a purpose to determine the effect of financial literacy on entrepreneurial performance, with financial inclusion as a mediating variable. The sampling technique used a 10-times rule approach based on the number of indicators, ensuring that the number of respondents met the criteria for Structural Equation Modelling (SEM) analysis based on Partial Least Squares (PLS) version 4.0.
The research results show that financial literacy has a positive and significant impact on entrepreneurial performance. Furthermore, financial literacy also positively impacts financial inclusion. Other findings indicate that financial inclusion positively impacts entrepreneurial performance and mediates the relationship between financial literacy and entrepreneurial performance. This demonstrates that sound financial understanding not only improves business management skills but also encourages access to and utilization of formal financial services, ultimately strengthening student entrepreneurial performance.

Keywords: Financial Literacy, Financial Inclusion, Entrepreneurial Performance

1. Introduction

Roda The wheels of a nation's economy are determined by business growth. Therefore, one aspect of business development that needs to be emphasized annually is growth. Entrepreneurs are a group of people who have developed methods for starting a business, even if it's small, as is typically the case with methods or criteria that are crucial for business success (Riwanda and Mawarpury, 2021).

Wirausaha Entrepreneurship is one of the driving forces of the Indonesian economy, playing a crucial role in increasing economic growth and reducing poverty. However, entrepreneurs still face various challenges in accessing financial services that can help improve their performance. According to Chen and Chiwamit (2011), financial literacy is the ability of an individual or organization to manage finances effectively and efficiently. Good financial literacy can help entrepreneurs make informed financial decisions and improve their performance.

Financial inclusion is also a crucial factor in improving entrepreneurial performance. Financial inclusion can be defined as the access and use of adequate financial services by individuals or organizations (Demirguc-Kunt et al., 2018). Financial inclusion can help entrepreneurs access the financial resources needed to improve their performance. According to Klapper and Singer (2014), financial inclusion can enhance entrepreneurs' financial management skills and improve their performance.

Microfinance theory also supports the importance of financial literacy and financial inclusion in improving entrepreneurial performance. According to microfinance theory, individuals or organizations with good financial literacy and access to adequate financial services can make informed financial decisions and improve their performance (Armendariz and Morduch, 2010). Therefore, this research aims to analyse the influence of financial literacy and financial inclusion on entrepreneurial performance.

Thus, this research is expected to contribute to the development of entrepreneurial financial management theory and practice, as well as assist entrepreneurs in improving their performance by increasing financial literacy and financial inclusion. This research is also expected to provide information for the government and financial institutions in developing policies and programs to improve financial literacy and financial inclusion among entrepreneurs. According to Lusardi and Mitchell (2014), research on financial literacy and financial inclusion can assist in developing effective policies and programs to improve entrepreneurial performance.

2. Literature Review

Entrepreneurial Performance

According to Gibson et al. (2012), business performance is the work results achieved by an organization or individual within a specific period, based on established standards, targets, or criteria. Tambunan (2019) emphasized that entrepreneurial performance can be measured by business growth, productivity, increased turnover, and business sustainability in facing market challenges.

According to Kaplan and Norton (1992), business performance can be measured using the Balanced Scorecard, which includes four perspectives: financial, customer, internal processes, and learning and growth. Meanwhile, according to Neely et al. (2007), measuring entrepreneurial performance must include several aspects, such as financial, customer, and internal processes. Entrepreneurial performance can be measured using several indicators that reflect the success and ability of entrepreneurs in achieving their goals. The performance indicators according to Peters and Shepherd (2017) are as follows: (a) increased turnover, (b) sales, (c) business income.

Financial Literacy

Financial literacy is the ability of an individual or organization to manage finances effectively and efficiently. According to Lusardi and Mitchell (2014), financial literacy is a person's ability to understand basic financial concepts and the skills to apply them in everyday financial decision-making. According to Chen and Chiwamit (2011), financial literacy encompasses knowledge and skills in financial management, such as financial planning, risk management, and investment. Chaidir et al. (2020) define financial literacy as the skills and confidence to make informed financial decisions. Therefore, financial literacy plays a crucial role in financial decision-making because it can improve people's future well-being (Setiawan and Saputra, 2021).

A person with good financial literacy will easily be able to determine information, including the impact of losses and rights and obligations in utilizing an obligation (Nasution and Fatira, 2019). In this situation, a person can become more knowledgeable about the use of financial products and services (Hutabarat, 2018). However, (Hutabarat, 2018) also stated that someone with a low level of financial literacy will be more vulnerable to being deceived in using transactions and will impact daily life decisions. The indicators of financial literacy according to Lusardi and Mitchell (2014) are as follows: (a) Knowledge of financial products, (b) Ability to manage finances, (c) Risk management

H1. Financial literacy has a positive influence on entrepreneurial performance.

H2. Financial literacy has a positive influence on financial inclusion.

Financial Inclusion

Financial inclusion has become an important topic of discussion at both the international and national levels. As an effort to encourage economic growth and poverty alleviation, financial inclusion programs are essential to make the financial system more accessible to the public. Access to financial services can be understood as a way in which all parties in the economy can easily reach and utilize the official financial system. Financial inclusion is the access and use of adequate financial services by individuals or organizations. Sarma (2012) explains that financial inclusion is a process that ensures universal access to financial services, such as savings, credit, and insurance, especially for low-income groups. According to Demirguc-Kunt et al., (2018), financial inclusion can improve the ability of individuals or organizations to manage finances and improve performance. The indicators of financial inclusion according to Mehrotra and Yetman (2015) are as follows: (a) Affordability, (b) Convenience and speed, (c) Convenience and speed.

H3. Financial inclusion has a positive influence on entrepreneurial performance.

H4. Financial inclusion mediates the effect of financial literacy on entrepreneurial performance.

Conceptual Framework

In summary, the conceptual framework in this research can be structured as follows:

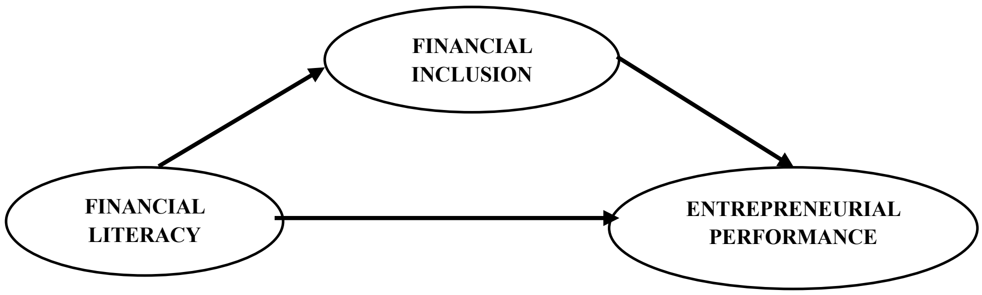

Figure 1 Conceptual Framework

3. Method

This research uses a quantitative approach, more specifically, the quantitative approach used is quantitative causality. Sample size was determined using the Hair formula. The Hair formula was used because the population size was not yet known with certainty. According to Hair et al., (2018), where the sample can be calculated based on the number of indicators multiplied by 5 to 10. Based on these guidelines, the sample size for this research is:

n = number of indicators x 10

The number of indicators in this research is 9, based on this formula, the sample obtained is as follows:

n = 9 x 10 = 90 respondents. Using this formula, the sample size for this research was 90 students. The research was conducted at the AMI Makassar Maritime Polytechnic (POLIMARIM). The data used in this research is primary data, that is, data obtained directly from the research object. The data collection procedure used in this research is a questionnaire. The measurement technique for questionnaire responses can be measured using a Likert scale. This research used SmartPLS software version 4 as a data analysis method. PLS (Partial Least Squares) is a variance-based structural equation analysis (SEM) that can simultaneously test measurement models and structural models. The measurement model is used to test validity and reliability, while the structural model is used to test causality (hypothesis testing with a predictive model).

4. Result and Discussion

Outer Model Test

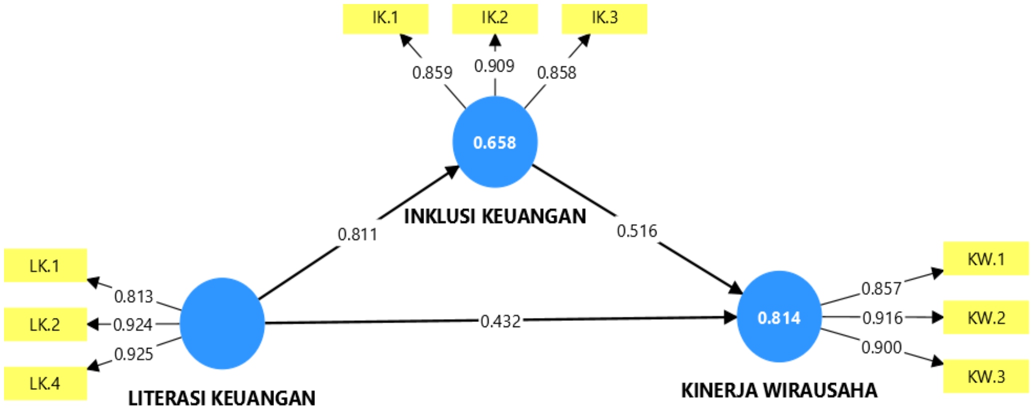

Figure 2. Outer Model

Convergent Validity Test

The following are the results of the convergent validity test in this research, namely:

Table 1. Convergent Validity Test

	FINANCIAL INCLUSION	ENTREPRENEURIAL PERFORMANCE	FINANCIAL LITERACY
IK.1	0.859		
IK.2	0.909		
IK.3	0.858		
KW.1		0.857	
KW.2		0.916	
KW.3		0.900	
LK.1			0.813
LK.2			0.924
LK.4			0.925

Based on the results of the tests carried out, it shows that the indicators of the Performance, Motivation and Career Development variables have all met the Loading Factor ≥ 0.7 requirements, so that the data in this research can be declared valid.

Table 2. Discriminant Validity Test

	FINANCIAL INCLUSION	ENTREPRENEURIAL PERFORMANCE	FINANCIAL LITERACY
IK.1	0.859	0.739	0.725
IK.2	0.909	0.749	0.688
IK.3	0.858	0.786	0.716
KW.1	0.771	0.857	0.745
KW.2	0.768	0.916	0.762
KW.3	0.777	0.900	0.766
LK.1	0.548	0.601	0.813
LK.2	0.799	0.814	0.924
LK.4	0.780	0.823	0.925

The cross-loading results show that the correlation value of the construct with its indicators is greater than the correlation value with other constructs. Thus, all constructs or latent variables have good discriminant validity, where the indicators in the construct indicator block are better than the indicators in other blocks. Discriminant validity testing is measured by comparing the AVE (Average Variance Extracted) value of each construct with the correlation between other constructs in the model. The criteria for the AVE value to be declared acceptable and valid is ≥ 0.5.

The reliability test measurement in this research used the criteria of Cronbach's Alpha value ≥ 0.6, which was declared reliable. If the Cronbach's Alpha value < 0.6, it was declared unreliable. The following are the results of the reliability test:

Table 3. Reliability Test

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
FINANCIAL INCLUSION	0.848	0.848	0.908	0.767
ENTREPRENEURIAL PERFORMANCE	0.870	0.870	0.921	0.794
FINANCIAL LITERACY	0.867	0.896	0.918	0.790

Based on the table above, each variable has a Cronbach's alpha value of ≥ 0.6, indicating that the variables used in this research are reliable. Therefore, it can be concluded that the entire construct meets the reliability requirements, both according to Cronbach's alpha criteria.

R-Square (R2) can indicate the strength or weakness of a research model. The R-Square value criteria are said to be weak if the R-Square value is ≥ 0.25 x < 0.5, and the R-Square value criteria are said to be moderate if the R-Square value is ≥ 0.5 x < 0.75, and the R-Square criterion value is said to be strong if the R-Square value is ≥ 0.75. The following are the results:

Table 4. R-Square

	R-square	R-square adjusted
FINANCIAL INCLUSION	0.658	0.653
ENTREPRENEURIAL PERFORMANCE	0.814	0.809

Setelah dilakukan pengujian dengan SmartPLS ditemukan bahwa Kinerja wirausaha (KW) memiliki nilai R-Square sebesar 0,814 yang termasuk dalam kategori “kuat” dengan range nilai ≥ 0,75, sehingga dikatakan bahwa kemampuan variabel Literasi Keuangan (LK) dan inklusi kuangan (IK) dalam menjelaskan variabel Kinerja wirausaha (KW) yaitu cukup kuat yaitu sebesar 81,4%, sementara sisanya yaitu sebesar 18,6% merupakan pengaruh variabel independen lain yang tidak diukur dalam penelitian ini. Sedangkan Inklusi keuangan (IK) memiliki nilai *R-Square* sebesar 0,658 yang termasuk dalam kategori “Moderat” dengan range nilai ≥ 0,5 x < 0,75 yang artinya literasi keuangan (LK) mampu menjelaskan hubungannya dengan inklusi keuangan (IK) sebesar 65,8%.

The hypothesis test in this research used a t-test with a significance level of >1.96 and a P-Value of 0.000 < α = 0.05 (5%).

Table 5. Path Coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
FINANCIAL INCLUSION -> ENTREPRENEURIAL PERFORMANCE	0.516	0.520	0.099	5.196	0.000
FINANCIAL LITERACY -> FINANCIAL INCLUSION	0.811	0.813	0.030	26.826	0.000
FINANCIAL LITERACY -> ENTREPRENEURIAL PERFORMANCE	0.432	0.429	0.109	3.949	0.000
FINANCIAL LITERACY -> FINANCIAL INCLUSION -> ENTREPRENEURIAL PERFORMANCE	0.419	0.423	0.086	4.839	0.000

The greater the knowledge of finance in the world of entrepreneurship, the better the financial results entrepreneurs can achieve. The success or failure of an entrepreneur is largely determined by the abilities and skills of the individual running the business. The entrepreneurial process requires several key types of capital that play a crucial role in an entrepreneur's success: human capital, social capital, and financial capital. One category of capital expected to contribute is financial capital, so every young entrepreneur must pay attention to their insight into the human resources involved in financial management. Financial literacy enables entrepreneurs to understand existing financial products and services, such as business loans, savings, insurance, and digital payment methods. This finding aligns with research by Yanti (2019) which shows that financial knowledge has a positive impact on entrepreneurial performance. Understanding finance helps young entrepreneurs gain the knowledge, skills, and capabilities to make financial decisions and develop financial strategies in selecting appropriate financial services. Financial understanding also supports business owners in acquiring the financial knowledge and skills necessary to develop business plans, initiate financial management, and make strategic investment decisions.

Financial Literacy: A person's ability to understand, manage, and make sound financial decisions is called financial literacy. The higher a person's level of financial literacy, the greater their chances of effectively using formal financial services. According to Lusardi and Mitchell (2014), financial literacy provides crucial foundational knowledge, such as how to manage savings, credit, investments, and insurance, which encourages people to be more confident in accessing financial services. Sarma (2012) also emphasized that financial inclusion depends not only on the availability of access but also on the community's ability to utilize these services. In the context of entrepreneurship or MSMEs, entrepreneurs with good financial literacy skills are better able to use banking facilities, apply for business loans, utilize digital payment services, and manage capital more efficiently. This demonstrates that financial literacy is a key element in driving broader financial inclusion.

Successful development is characterized by a stable financial system that benefits all levels of society. In this regard, financial institutions play a crucial role in driving economic growth, equitable income distribution, poverty reduction, and achieving financial system stability through their intermediary function. Although the financial industry is growing rapidly, this is not always directly related to the availability of sufficient financing. Research conducted by Yanti (2019) found that financial inclusion has a positive impact on financial performance. This suggests that as young entrepreneurs continue to improve their financial inclusion, their financial performance will experience significant improvements. From this, we can conclude that financial inclusion has a positive impact on financial performance.

Financial literacy helps individuals understand financial concepts, while financial inclusion offers entrepreneurs concrete access to financial services. Although entrepreneurs gain knowledge about financial management through literacy, without access to formal services, its impact on performance remains limited. Financial inclusion serves as a link between financial literacy and performance, as the availability of capital, insurance, and digital financial services amplifies the effects of literacy on productivity, income, and business continuity.

5. Conclusions

The analysis shows that financial literacy and access to financial services play a crucial role in improving entrepreneurial performance. Financial literacy provides a foundation of knowledge, skills, and abilities for business actors to manage finances effectively, plan, and make wise investment decisions. Furthermore, access to financial services provides a real opportunity to obtain formal financial facilities, such as loans, savings, insurance, and digital payment systems, which are essential to support business activities. Existing research, including that conducted by Yanti (2019), confirms that financial literacy has a positive effect on entrepreneurial performance, while access to financial services has also been shown to significantly improve financial performance. Furthermore, access to financial services serves as a bridge that strengthens the impact of financial literacy on business performance. With financial literacy, entrepreneurs can learn how to manage their finances, and with access to financial services, they are able to apply this knowledge in practice. It can be concluded that the combination of sound financial literacy and strong access to financial services will result in better, more sustainable, and more competitive entrepreneurial performance in the modern business world.

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