

Digital Financial Literacy and Inclusion on Financial Management Skills in Generation Z: Education Level as Moderation

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Article Info	ABSTRACT
Keywords: Financial Literacy, Digital Financial Literacy, Education Level, Financial Inclusion, Digital Financial Inclusion	<p>This study aims to analyze the influence of digital financial literacy and inclusion on financial management skills in Generation Z by using education level as a moderation variable. The research is aimed at Generation Z among students in Kediri. This research method uses a quantitative approach with data collection through surveys to students and students in Kediri. Data analysis was carried out using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results of the study show that digital financial inclusion has a significant positive influence on financial management for Generation Z. The use of digital financial services helps the younger generation to be more capable of managing finances, supported by skills and intelligence in the use of technology so as to avoid patterns of consumptive behavior. On the contrary, digital financial literacy has a significant negative influence on financial management and the level of education shows a significant negative influence in moderating the relationship between digital financial literacy and digital financial inclusion on financial management. The purpose of this research is to provide input for the government and related stakeholders to further optimize digital financial inclusion for Gen Z from the age of adolescence so that Gen Z can manage and plan their finances in the future so that they do not always behave consumptively.</p>
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INTRODUCTION

Based on the National Survey on Financial Literacy and Inclusion (SNLIK) conducted by the Financial Services Authority (OJK) in 2024, the financial literacy index reached 65.43 percent and the financial inclusion index reached 75.02 percent. In the survey above, it is known that the category of respondents in the education group graduated from university 75.92 percent, and the category of high school graduates/equivalent, and junior high school graduates/equivalent had a financial literacy index of 65.76 percent. Meanwhile, the group with a college education, high school graduation/equivalent, and junior high school graduation/equivalent has the highest financial inclusion index, namely 98.54

percent, 88.29 percent, and 73.18 percent, respectively. The grouping based on daily work/activities is known that the student group has a financial literacy index of 69.00 percent and has a financial literacy index of 56.42 percent.

Definition Financial literacy reflects an individual's understanding of basic financial concepts, such as cash flow management, savings, investments, and loans, as well as the ability to make effective financial decisions. Meanwhile, financial inclusion reflects the extent to which individuals or entities have access to formal financial services, such as banking, insurance, and microloans (Ahmed, 2023; Gunupudi & Dharmarajan, 2023).

Financial inclusion according to the Consultative Group to Assist the Poor "state in which all working age adults have effective access to credit, savings, payments, and insurance from formal service providers. Effective access involves convenient and responsible service delivery, at a cost affordable to the customer and sustainable for the provider, with the result that financially excluded customers use formal financial services rather than existing informal options" (CGAP-GPFI).

In the opinion of experts, more specifically, digital financial literacy is the ability of individuals to understand and manage financial aspects effectively in a rapidly evolving digital environment (Lusardi & Mitchell, 2017). Meanwhile, digital financial inclusion is access to formal services to the public to the financial sector by utilizing digital technology, such as smartphones (Lyman and Lauer (2015).

Generation Z is a group of Students/Students in the range of 15-27 years old. Gen Z is one of the generations most affected by the change in the development of the financial services industry from traditional financial services to digital financial services. The ease and speed of access to digital financial services is a new challenge for Gen Z in managing their finances, especially in setting a priority scale for meeting life needs or following a wise lifestyle. In several previous studies, many have highlighted the importance of digital financial literacy for Gen Z in order to encourage digital financial inclusion and its influence in Gen Z financial management so that financial digitalization has a positive impact on Gen Z rather than causing negative influences, including consumptive lifestyles. In addition, digital financial services also have risks, especially in terms of cybersecurity, including misuse of personal data through account access, phishing attacks, malware, and personal data security breaches by digital financial service providers. This issue is becoming increasingly important in this era of digitalization, where technology-based financial services (such as mobile banking and fintech applications) are growing (Abegao Neto & Figueiredo, 2023; Jungo et al., 2023).

Furthermore, Digital Financial Services are limited payment and/or financial system services that are carried out not through a physical office. This service is carried out by means of technology (mobile based and web based) and third-party services (agents). The target target of LKD is people

who do not have an account or who already have an account but have not used it optimally. The purpose of LKD is to help people to be able to transact their daily finances with easy, safe, and extensive technological facilities. (National Strategy for Financial Inclusion (SNKI; 2017)

By identifying the relationship between education level, digital financial literacy, digital financial inclusion, and financial management among Gen Z, it is hoped that this research can contribute to the knowledge of the extent of Gen Z's financial management proficiency in the dynamics of lifestyle changes and technological developments. The level of education is taken as a moderation variable that relates the influence of digital financial literacy and digital financial inclusion on financial management among Gen Z.

METHOD

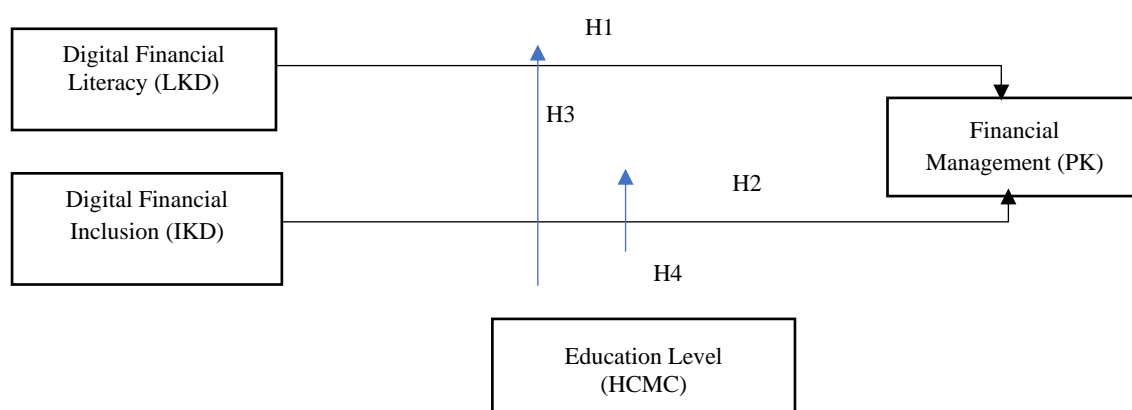
Research design and measurement

In this study, the type of research used is quantitative research, which aims to test whether the level of digital financial literacy and the level of digital financial inclusion possessed by Gen Z affect financial management skills. To achieve this goal, the researcher used a questionnaire specially designed to collect responses from 49 (forty-nine) students/students with an age range ranging from 15 to 27 years old in Kediri. The questionnaire was compiled and customized using a five-point Likert scale, which ranges from "strongly agree" to "strongly disagree."

Research samples, data collection methods and data analysis

The sample taken in this study is students in the Kediri area. The technique used in collecting data is to distribute questionnaires through g-form using the purposive sampling technique where the selection of samples is taken based on the criteria that have been set by the researcher so that the total sample taken is 49 (forty-nine) people. The analysis method in this study uses SEM-PLS with several stages, namely 1. Designing an outer model, 2. Designing a structural model (inner model) and the last is hypothesis testing. (Ghozali, Imam & Latan, 2017).

Figure 1. Thinking Framework



RESULTS AND DISCUSSION

Result

Respondent profiles

Table 1 explains the demographics of the correspondents who are the sample of this study, which includes gender, age and education level. All variables included in this demographic data are variables that will be used as consideration in describing the results of the study. The profiles of respondents who filled out the questionnaire in this study were mostly women (59.2%) with an age range between 15-27 years old and most of them were Undergraduate/Postgraduate graduates as much as 53.1%.

Table 1. Respondent Demographics

<u>Variabel</u>	<u>Item</u>	<u>Frekuensi</u>	<u>Persentase</u>
<u>Jenis kelamin</u>	Wanita	29	59,2%
	Pria	20	40,8%
<u>Usia</u>	15 - 17	7	14,2%
	18 - 20	6	12,2%
	21 - 25	18	36,8%
	25 - 27	18	36,8%
<u>Pendidikan</u>	Sekolah Menengah Pertama	5	10,2%
	Sekolah Menengah Atas	13	26,5%
	Diploma	5	10,2%
	Sarjana/Pascasarjana	26	53,1%

Data Analysis

In this study, the analysis carried out is by using path analysis with SEM-PLS as the analysis tool. This structural model is more effective in testing the effects of mediation and moderation in the form of models. (Hair, Joseph, F., Jr., William C. Black, Barry, J., Babin, Rolph, E., 2014).

1. Measurement model

In SEM PLS, the first test carried out is the convergence validity test, where this test is used to see if each statement item of each latent variable can be understood by the respondent. In Table 2, it is explained that all items in the loading factor exceed the recommended value of 0.5 (Hair Joseph F., William C. Black, Barry J. Babin, Rolph, E., 2014) while the AVE value ranges from 0.518 to 1,000 where the value is more than 0.5 (Ghozali, Imam & E. Babin, 2014). So it can be concluded that the questionnaire presented is valid.

Furthermore, reliability tests are carried out to see if an instrument can provide consistent results in each measurement. The reliability of the construct was evaluated using Cronbach's alpha and composite reliability values, from the results shown in Table 2, the values of Cronbach's alpha and

composite reliability for each variable were greater than 0.6 as the minimum recommended construct (Chin, W.W., Peterson, R.A. and Brown, 2008). This reflects that the constructs presented have proven to be reliable and reliable.

The next stage is the validity test of discrimination which aims to see how well the construct measures discrimination empirically. In this study, the validity test of discrimination was carried out by looking at the value of the Heterotrait Monotrait Ratio (Table 3). It is proven that the HTMT value has a number of less than 0.9 (Hair joseph, et. al, 2014) thus reflecting that all the statement items in the questionnaire are valid.

Table 2. Reliability and Validity Construct

Reliabilitas dan Validitas Konvergen AVE

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
IKD	0,767	0,782	0,851	0,588
IKD-PK	1,000	1,000	1,000	1,000
LKD	0,850	0,903	0,882	0,518
LKD-PK	1,000	1,000	1,000	1,000
PK	0,772	0,785	0,869	0,689
TP	1,000	1,000	1,000	1,000

	IKD	IKD-PK	LKD	LKD-PK	PK	TP
IKD	0,767					
IKD-PK	-0,613	1,000				
LKD	0,718	-0,492	0,720			
LKD-PK	-0,495	0,682	-0,516	1,000		
PK	-0,712	0,512	-0,582	0,444	0,830	
TP	0,513	-0,297	0,451	-0,172	-0,563	1,000

Table 3. Heterotrait-Montrait Ratio (HTMT)

Validitas Diskriminan

Cross Loading

	IKD	IKD-PK	LKD	LKD-PK	PK	TP
IKD * TP	-0,613	1,000	-0,492	0,682	0,512	-0,297
LKD * TP	-0,495	0,682	-0,516	1,000	0,444	-0,172
M	0,513	-0,297	0,451	-0,172	-0,563	1,000
x1.1	0,772	-0,511	0,761	-0,575	-0,522	0,428
x1.2	0,786	-0,634	0,851	-0,555	-0,643	0,459
x1.3	0,493	-0,448	0,697	-0,481	-0,332	0,162
x1.4	0,232	-0,159	0,620	-0,160	-0,320	0,102
x1.5	0,394	-0,124	0,738	-0,274	-0,334	0,236
x1.6	0,278	-0,103	0,691	-0,115	-0,296	0,390
x1.7	0,264	-0,133	0,658	-0,129	-0,243	0,395
x2.1	0,708	-0,374	0,677	-0,403	-0,419	0,342
x2.2	0,786	-0,634	0,851	-0,555	-0,643	0,459
x2.3	0,757	-0,433	0,329	-0,243	-0,525	0,398
x2.5	0,814	-0,398	0,330	-0,296	-0,562	0,360
y1	-0,619	0,386	-0,586	0,349	0,875	-0,533
y2	-0,625	0,486	-0,524	0,367	0,856	-0,429
y3	-0,525	0,408	-0,314	0,398	0,753	-0,436

2. Structural Model

Inner Model testing or can be referred to as Structural Model is used to predict the relationship between latent variables and measure the criteria of model quality (*goodness of fit*). Based on relevant theories, structural models describe the level of estimation or correlation between latent variables. The inner model will be tested by statistical processing using tests related to variables and coefficient of determination (R-Squared).

The structural model can be assessed from the results of the determination coefficient (R-square) and its p-value to see the level of significance. Changes in the value of the R-square are used to describe the totality of its independent variables to the dependent variables. From the results seen in table 4, it can be stated that the Financial Management (PK) variable is influenced by the Digital Financial Inclusion (IKD) and Digital Financial Literacy variables together by 58%.

Table 4. Path Coefficient

R-Square

	R Square	R Square Adjusted
PK	0,580	0,531

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
IKD -> PK	-0,441	-0,430	0,152	2,895	0,004
IKD-TP -> PK	0,056	0,057	0,143	0,389	0,697
LKD -> PK	-0,058	-0,095	0,139	0,417	0,677
LKD-TP -> PK	0,104	0,088	0,130	0,805	0,421
TP -> PK	-0,274	-0,265	0,111	2,477	0,014

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
IKD -> PK	-0,441	-0,430	0,152	2,895	0,004
IKD-TP -> PK	0,056	0,057	0,143	0,389	0,697
LKD -> PK	-0,058	-0,095	0,139	0,417	0,677
LKD-TP -> PK	0,104	0,088	0,130	0,805	0,421

Note : *0.05 **0.1

The results of the significance level can be seen from table 4 where it can be concluded that only hypothesis two has a significant influence which indicates that the hypothesis is accepted, while for the other hypothesis does not have a significant influence, the hypothesis is rejected. The same is true of the indirect influence shown in table 5 where the results show that hypothesis one, hypothesis three and hypothesis four, are rejected so as to prove that the Education Level (TP) cannot moderate the relationship between Digital Financial Literacy (LKD) and Financial Management and the Education Level (TP) cannot moderate the relationship between Digital Financial Inclusion (IKD) and Financial Management.

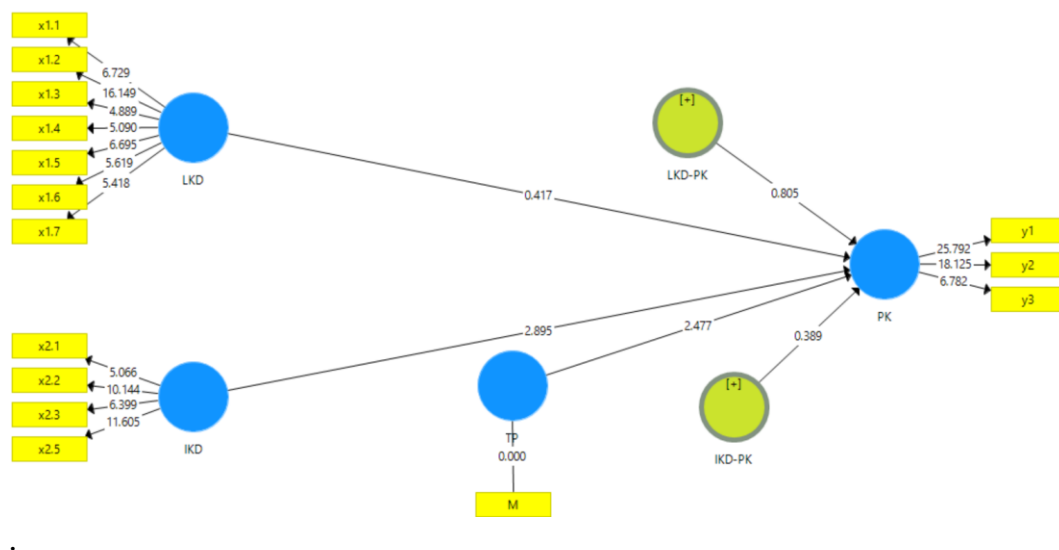
Discussion

In the results of the analysis that has been described earlier, it is known that only hypothesis two has significant results, while the other hypothesis is rejected. Hypothesis two states that Digital Financial Inclusion has a significant positive influence on Financial Management capabilities in Gen Z. This explains that Gen Z who are active in Digital Financial Inclusion more easily understand the benefits of various financial products such as opening savings, debit cards, credit cards, using e-wallets, using QRIS, and the importance of digital investment and various other financial management risks so that they are able to manage their finances in a positive manner. wise both in terms of saving and spending money.

Meanwhile, hypothesis one, hypothesis three, and hypothesis four prove that education level has

a significant negative influence on the level of digital financial literacy and digital financial inclusion in Gen Z. It can be concluded that the higher a person's education level, the lower their digital financial inclusion level because they tend to avoid using digital financial services for consumptive things, high costs, for example, Pay Later services, Credit Cards, Fintech P2P lending in terms of imposition of loan interest. In addition, Gen Z with a high level of digital financial literacy is also more careful to use access to Digital Financial Inclusion. This is because they understand the risks related to cybersecurity, as well as the misuse of consumer personal data.

Figure 2. Path Analysis Results



CONCLUSION

From this study, it can be concluded that the level of education cannot moderate the relationship between digital financial literacy and digital financial inclusion on financial management. Digital financial literacy and financial inclusion are more influenced by other factors, such as trust in formal institutions, so education level is not a strong variable to explain the relationship.

However, digital financial inclusion directly has a positive influence on Gen Z's financial management because with access to digital financial services, Gen Z finds it easier to increase their interest in saving and investing without having to come to a bank office or to another PUJK office but simply through digital media. In addition, they can also meet their daily needs through various digital financial product facilities by choosing which products are low-cost but can be owned quickly and efficiently by utilizing online promotional media. This can be an input for the government and related stakeholders to further optimize digital financial inclusion for Gen Z from the age of adolescence so

that Gen Z can manage and plan their finances in the future so that they do not always behave consumptively.

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