

Research Article

The Influence of Financial Literacy, Age, and Income on the Financial Behavior of Tokopedia Customers

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Abstract: The purpose of this study is to investigate how Tokopedia users in Medan City behave financially in relation to their age, income, and level of financial knowledge. The Structural Equation Modeling-Partial Least Squares (SEM-PLS) analytical method is used in this quantitative study. One hundred respondents who shop on Tokopedia in Medan were given questionnaires in order to collect data. The findings show that while age has no discernible effect on financial behavior, income and financial knowledge do. Age, income, and financial literacy all account for 89.4% of the variation in financial behavior, according to the R-Square value of 0.894. These results demonstrate how better income management and financial literacy can assist people in making more informed financial decisions. To improve the community's financial well-being, effective income management techniques and financial education are crucial.

Keywords: Age, Financial Behavior, Financial Literacy, Income.

1. Background

E-commerce in Indonesia has grown quickly in the digital age, and Tokopedia is now one of the top venues for easy online transactions. Convenience and accessibility are now important considerations when making purchases due to this change in consumer behavior. Understanding the elements that affect consumers' financial behavior in a digital setting is crucial as the number of transactions on websites like Tokopedia keeps growing.

The term "financial behavior" describes how people plan, budget, spend, save, and invest, among other financial decisions. A person's involvement in financial decision-making is linked to their financial conduct, claim Paramita et al. (2020). Halim and Astuti (2015) go on to say that in order to make the best choices and stay out of trouble financially, financial conduct involves having the capacity to comprehend, assess, and manage money. Therefore, how people handle their money to attain financial well-being is reflected in their financial conduct.

Received: November 01, 2024

Revised: November 15, 2024

Accepted: December 29, 2024

Published: December 31, 2024

Curr. Ver.: December 31, 2024



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Financial literacy, or the capacity to comprehend and efficiently handle funds, is one of the primary determinants of financial behavior. Financial literacy is defined by the Financial Services Authority of Indonesia (OJK) as the information, abilities, and self-assurance that impact attitudes and actions meant to enhance financial management and decision-making quality. Strong financial literacy usually enables people to avoid needless debt, save, invest, and make budgets. However, a lack of financial literacy can result in bad financial choices that have an adverse effect on one's financial well-being.

Age influences a person's financial behavior in addition to literacy levels. People typically get more financial management expertise and understanding as they get older. According to Wijaya et al. (2015), financial literacy improves with age. Other research, however, has shown conflicting results about how age affects financial behavior. As a result, it is critical to take into account other factors that could interact with age to affect financial decisions.

Income is another crucial component that has a big impact on people's financial behavior. Devi et al. (2021) assert that a person's capacity to handle money sensibly, including controlling spending and distributing funds appropriately, increases with their income. However, without sufficient financial knowledge, more wealth does not always translate into better financial behavior. On the other hand, those with excellent financial literacy but lower incomes are frequently better equipped to handle their money sensibly.

The decision to concentrate on the e-commerce sector—specifically, Tokopedia—was made in light of the industry's explosive expansion in Indonesia, which has been fueled by the country's massive smartphone use and internet penetration. The Ministry of Trade predicted that by 2023, Indonesian e-commerce transactions would be worth IDR 487 trillion. One of the main websites influencing this trend has been Tokopedia. With an average of 65.95 million monthly website visitors, Tokopedia was Indonesia's most popular e-commerce platform in the second quarter of 2022, according to data from Databoks.

Given this context, it is imperative to investigate the ways in which Tokopedia customers' financial behavior is influenced by their age, income, and level of financial literacy. It is anticipated that the results of this study will support the creation of marketing plans and initiatives for financial literacy in the e-commerce industry.

With 65.95 million monthly visits as of September 30, 2019, Tokopedia surpassed Shopee, which had 55.96 million visitors. Both platforms saw a notable increase in users over time, particularly in the middle of 2020, which was probably caused by the COVID-19 pandemic's spike in online sales. While Shopee also showed a rising tendency, albeit with more consistent swings, Tokopedia reported a dramatic surge, reaching over 140 million visitors. This data shows how quickly Indonesia's e-commerce industry is expanding and how fiercely the two top platforms compete to draw users.

The researcher is interested in carrying out a study named "The Influence of Financial Literacy, Age, and Income on Financial Behavior among Tokopedia Customers" in light of the background information previously mentioned.

2. Research Methodology

This study analyzes the correlations between variables using an associative methodology and a quantitative approach. For analysis, data is gathered and transformed into numerical values. With a sample size of 100 randomly chosen respondents, the study focuses on Tokopedia users in Medan City. Because the population is always changing, the quota sampling technique is employed.

Two forms of data are used in this study: secondary data from books, journals, and prior theses, and primary data collected through questionnaires disseminated via Google Forms. Financial behavior, age, income, and financial literacy are among the variables examined, and the indicators are derived from pertinent theoretical frameworks.

Structural Equation Modeling-Partial Least Squares (SEM-PLS) is used to assess the data. This entails testing the inner model for the coefficient of determination and hypothesis testing, as well as the outer model for data validity and dependability. T-tests and F-tests are used to test hypotheses; if the t-statistic is greater than 1.96 and the p-value is less than 0.005, the t-test is considered significant. An NFI value greater than 0.062 indicates significance in the F-test, which is used to assess the simultaneous association between variables.

4. Results and Discussion

Pada To gather preliminary data for this study, the questionnaire was given to the respondents who had already been chosen. The validity and reliability of each indicator within the latent variables were ascertained through data analysis using Smart PLS. Understanding the effects of age, income, and financial literacy on the financial behavior of Tokopedia customers in Medan City is the primary goal of this study. Because of its benefits, including the fact that it eliminates the need for normalcy testing throughout the data testing and analysis process, Smart PLS was selected as the analytical tool. The inner model examined the links between the independent and dependent variables, whereas the outer model assessed validity and reliability indicators for the latent variables.

Table 1. Validity and Reliability

	Min	Max
Financial Literacy	2,696	1,227
Income	2,458	1,332
Financial Behavior	4,132	1,513
Age	2,648	1,311

Financial Literacy:

- The Financial Literacy variable's minimum value is -2.696, meaning that there is a minimal value in the data for this indicator, which could be a sign of an extremely poor financial literacy score.
- The highest value in the data for this indicator is 1.227, which shows that there is a very high score for financial literacy.

Income:

- The minimum value for Income is -2.458, indicating that there are individuals in the dataset with very low or even negative income values. This may occur if the data contains unusual values or outliers.
- The maximum value is 1.332, representing the highest income value in the dataset, reflecting individuals with very high income.

Financial Behavior:

- There are people with really bad financial behavior or behavior that does not fit the measured norms, as indicated by the minimum value for financial behavior of -4.132.
- The highest value, 1.513, indicates very good or ideal financial conduct based on the model in use.

Age:

- Data with extremely low or potentially invalid ages, such as outliers or input errors, are present when the Age minimum value is -2.648.
- The greatest value, 1.311, is the oldest age in the dataset; nevertheless, given human age, this value appears implausible (perhaps as a result of data errors or outliers).

Reliability Test

In the reliability test with Smart PLS, the internal consistency of the indicators measuring latent variables can be evaluated using Cronbach's Alpha and Composite Reliability (CR). Indicators are regarded as very trustworthy if the Cronbach's Alpha value is greater than 0.70 and consistently assess the latent variables if the Composite Reliability (CR) value is greater than 0.70. The findings of this study's reliability test are listed below:

Table 2. Reliability Test

	Cronch's Alpha	rho_A	Composite realibility	Average variance extracted (AVE)
Financial Literacy	0,923	0,947	0,933	0,667
Income	0,919	1,05	0,927	0,679
Behavior financial	0,898	0,913	0,92	0,658
age	0,927	0,947	0,936	0,645

All of the indicators in this study exhibit good internal consistency, according to the reliability test findings, which indicate that each variable's Cronbach's Alpha value is higher than 0.70. Each construct is extremely accurate and appropriate for more study, as indicated by the Composite Reliability (CR) values for each variable being greater than 0.70.

Average Variance Extracted (AVE) was used to perform the discriminant validity test. Every variable has a value more than 0.50, including Financial Literacy (0.661), Age (0.714), Income (0.711), and Financial Behavior (0.635). The variables satisfy the criteria for discriminant validity if each latent variable can account for over half of the variance in its indicators. Each variable in this study is therefore regarded as legitimate and trustworthy for use in further investigations.

Coefficient of Determination

The ability of independent variables to explain the variance of the dependent variable is assessed using the coefficient of determination test (R^2) in SEM-PLS. The more accurately the independent variables explain the dependent variable, the higher the R^2 value, which goes from 0 to 1.

Table 3. Coefficient of Determination

	R Square	R Square Adjusted
Financial Literacy	0,894	0,841

Age, income, and financial literacy together account for 89.4% of the variation in the financial behavior of Tokopedia users in Medan City, according to the coefficient of determination test results, which show a R Square value of 0.894. Other factors not covered by this research model have an impact on the remaining 10.6%. The Adjusted R Square score of 0.841 indicates that the predictive power is still high at 84.1% even after controlling for the number of independent variables in the model. These figures demonstrate the model's high predictive power, implying that the independent variables in this research have a major impact on Tokopedia users' financial behavior.

Hypothesis Testing

The t-test and F-test are used by Smart PLS to assess hypotheses. Each independent variable's impact on the dependent variable is examined using the t-test; findings are deemed significant if the t-statistic is greater than 1.96 and the p-value is less than 0.05. The cumulative impact of all independent factors on the dependent variable inside the research model is tested using the F-test.

F-Test

Smart PLS uses the F-test to determine whether the independent variables have a simultaneous effect on the dependent variable. If the p-value is less than 0.05 or the F-statistic exceeds the critical value, then the independent factors collectively have a significant effect on the dependent variable. Conversely, if the p-value is greater than 0.05, it indicates no significant simultaneous influence.

This study uses the F-test to examine whether age, income, and financial literacy collectively influence the financial behavior of Tokopedia users in Medan City.

Table 4. F-Test

Explanation	F-SQUARE
Financial Literacy	0,012
Income	0,045
Age	0,005

The table above displays the F-squared values for the three variables: age, income, and financial literacy. The F-squared value in this model shows how much each variable affects the dependent variable. An F-squared value of 0.012 indicates that the dependent variable is only marginally impacted by financial literacy. With an F-squared value of 0.045, income had a marginally larger impact in our study. Age, however, has a minor effect on changes in the dependent variable, as indicated by the F-squared value of 0.005. These three factors taken together have little effect on the dependent variable, indicating that other components of the model might be more important.

T-Test in SmartPLS

The impact of each independent variable on the dependent variable is assessed using the T-test in partial least squares structural equation modeling (PLS-SEM). The t-statistic result is compared to the critical value of 1.96 at a 5% significance level ($\alpha = 0.05$) in order to perform this test.

- The hypothesis is accepted if the t-statistic > 1.96 and the p-value < 0.05 indicate that the independent variable has a statistically significant impact on the dependent variable.
- The hypothesis is rejected if the t-statistic is less than 1.96 and the p-value is greater than 0.05, indicating that the independent variable's impact on the dependent variable is not statistically significant.

Therefore, this test aids in determining the statistical significance of the correlations among the variables in the model.

Table 5. T-Test in SmartPLS

	ORIGINAL SAMPLE (O)	SAMPLE MEAN (M)	STANDARD DEVIATION (STDEV)	T STATISTICS	P VALUE
Financial Literacy- Beahvior Fianncial	0,349	0,351	0,133	2,627	0,005
Age-Behavior Financial	0,225	0,23	0,124	1,809	0,076
Income- Behavior Financial	0,287	0,284	0,097	2,95	0,01

Based on the T-test results using SmartPLS, the findings are as follows:

Financial Literacy on Financial Behavior has a t-statistic value of 2.627 and a p-value of 0.005. A t-statistic value larger than 1.96 and a p-value less than 0.05 demonstrate that financial literacy has a substantial impact on the financial behavior of Tokopedia customers in Medan City.

- The t-statistic value for the variable Age on Financial Behavior is 1.809, and the p-value is 0.076. Age has no discernible impact on the financial behavior of Tokopedia customers in Medan City, according to a t-statistic of less than 1.96 and a p-value of more than 0.05.
- The t-statistic value for the variable Income on Financial Behavior is 2.950, and the p-value is 0.010. Income significantly affects the financial behavior of Tokopedia customers in Medan City, as evidenced by the t-statistic being larger than 1.96 and the p-value being less than 0.05.

The following analysis of the factors influencing the financial behavior of Tokopedia customers in Medan City is based on the T-test findings from SmartPLS:

The Influence of Financial Literacy on Financial Behavior

A t-statistic of 2.627 and a p-value of 0.005 show that financial literacy has a significant impact on financial behavior. The study of Herawati (2015), which contends that financial literacy can improve an individual's money management strategies, is supported by this finding. Better financial judgments can be made by those who possess a solid understanding of finance.

Age's Effect on Financial Behavior

Age has no discernible effect on financial conduct, according to a t-statistic of 1.809 and a p-value of 0.076. This outcome is in line with Wijaya et al. (2016)'s findings, which showed no discernible relationship between financial management techniques and age. This could be because different age groups have differing degrees of financial expertise and understanding.

Income's Effect on Financial Behavior

A p-value of 0.010 and a t-statistic of 2.950 indicate that income significantly affects financial behavior. The study by Brilianti (2019), which discovered that people with higher incomes are generally more cautious while handling their money, lends credence to this notion.

6. Conclusion

Several inferences can be made from the study's findings: Financial literacy has a significant impact on financial behavior. Age has little bearing on financial behavior. Income has a big impact on financial behavior. Enhancing income and financial literacy can help promote better money management.

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