# The Influence of Financial Technology Literacy and Self-Control on the Consumptive Behavior of Digital Business Study Program Students at Universitas Negeri Surabaya in Using the TikTok Shop Marketplace

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Abstract. The development of digital technology has triggered a change in consumption behavior, especially among students exposed to social media-based e-commerce platforms such as TikTok Shop. This study aims to analyze the influence of Financial Technology literacy and self-control on the consumptive behavior of students in the Digital Business Study Program at Universitas Negeri Surabaya. This research used a quantitative approach with a survey method involving 30 purposively selected respondents. The instrument used was a Likert scale-based questionnaire, which was then analyzed using multiple linear regression. The results show that simultaneously, Financial Technology literacy and self-control have a significant effect on students' consumptive behavior. Partially, only self-control has a significant effect, while Financial Technology literacy does not show a significant influence. This indicates that even though students have knowledge about digital financial technologies, emotional drives and self-control play a more important role in limiting consumptive behavior, especially in the context of impulsive shopping through TikTok Shop. These findings highlight the importance of strengthening students' psychological aspects in addition to improving financial understanding to overcome consumption challenges in the digital era.

**Keywords:** Financial Technology literacy, self-control, consumptive behavior, students, TikTok Shop

#### Introduction

The rapid development of information technology has brought significant changes to various aspects of life, including the way people engage in consumption activities. One clear form of this transformation is the emergence of social media-based marketplace platforms like TikTok Shop, which have become a new trend in shopping behavior among Indonesians, particularly the youth and student segments. According to a report by Katadata (2023), around 73% of TikTok's active users in Indonesia are aged between 18 and 24, making the platform a fertile ground for product promotion and sales. This phenomenon indicates that consumption is influenced not only by needs but also by digital lifestyles and aggressive marketing strategies from social media-based e-commerce.

Students, especially those from the Digital Business Study Program, are a vulnerable segment to this phenomenon because they have high access to technology and a strong interest in digital innovation and modern lifestyles. TikTok Shop offers an interactive and entertaining shopping experience through live shopping features, which have been proven to trigger purchase impulses in a short time (Sumarsid, 2024). However, the increased intensity of consumption via this platform also raises concerns about students' consumptive behavior, which can negatively impact their financial condition. One factor influencing students'

consumptive behavior is the level of Financial Technology literacy. This refers to the ability of individuals to understand, access, and wisely use digital financial services.

Research by Asriany (2023) found that financial literacy and understanding of financial technology significantly influence students' financial behavior. However, in the context of online shopping through TikTok Shop, a study by Julianingtyas and Listiadi (2024) found that Financial Technology payment methods had no significant effect on financial behavior, indicating that the usage patterns of Financial Technology remain complex and require deeper investigation.

In addition to Financial Technology literacy, self-control is also a key factor in regulating consumptive behavior. Self-control allows individuals to delay immediate gratification for greater long-term goals. Research by Anggraini and Hudaniah (2023) and Prasanti and Kamalia (2022) showed a negative relationship between self-control and consumptive behavior, in which students with high self-control tended to show lower tendencies to consume excessively. However, in a digital environment filled with visual temptations and intense promotions, the effectiveness of students' self-control is often tested.

Several previous studies have generally discussed the relationship between financial literacy and self-control on financial or consumptive behavior in students (Darmawati et al., 2023; Mohd Lila et al., 2025). However, there are still few studies that specifically examine the influence of Financial Technology literacy and self-control within the context of social-commercial platforms like TikTok Shop, which combines entertainment features with highly persuasive sales promotions.

This study aims to fill that gap by focusing on two main variables—Financial Technology literacy and self-control—and how they influence students' consumptive behavior in using TikTok Shop. By involving students from the Digital Business Study Program at Universitas Negeri Surabaya as research subjects, the study is expected to provide more specific and relevant insights into consumption challenges in the digital era.

Theoretically, this research will enrich the literature on consumptive behavior in the context of Financial Technology and social media-based e-commerce and provide new perspectives on the role of self-control in students' financial decision-making. Practically, the results can be used by educational institutions to design digital-based financial literacy programs and strategies to strengthen students' self-control in navigating the increasingly complex digital era.

## Methods

This study used a quantitative approach with a causal associative research design, aiming to determine the influence of two independent variables on one dependent variable. The research design was a quantitative survey with a questionnaire instrument constructed based on theoretical indicators of each variable and measured using a five-point Likert scale.

The population consisted of all active students in the Digital Business Study Program at Universitas Negeri Surabaya for the academic year 2024/2025, totaling 1,084 students. The sample size was determined using the guideline by Joseph F. Hair JR. (2013), which suggests a minimum of 10 respondents per independent variable in linear regression analysis. With two independent variables, the minimum sample is 20.

$$n = 10 \times 2 = 20$$
 responden

Figure 1. Sample Size Formula

To ensure validity and anticipate incomplete data, the sample size was set at 30 respondents, which is adequate for multiple regression analysis and supports the assumption of normal data distribution.

The sampling technique used was purposive sampling, with the following inclusion criteria:

- 1. Active students of the Digital Business Study Program at Universitas Negeri Surabaya;
- 2. Have made at least one purchase on TikTok Shop in the last three months;
- 3. Willing to complete the questionnaire honestly and responsibly.

The selection of purposive sampling technique was based on the suitability of respondents' characteristics with the variables being studied. This method is commonly used in quantitative social studies that are directed and specific in nature.

Data collection was done via an online questionnaire using Google Forms, divided into three main sections:

- Financial Technology Literacy (adapted from Asriany, 2023)
- Self-Control (based on Anggraini & Hudaniah, 2023)
- Consumptive Behavior (adapted from Darmawati et al., 2023)

The research instrument was tested for validity and reliability before the main analysis.

Data were analyzed using multiple linear regression to determine the influence of each independent variable on the dependent variable, both partially (t-test) and simultaneously (F-test). Classical assumption tests normality, multicollinearity, and heteroskedasticity were also conducted using SPSS software.

#### **Result and Discussion**

#### A. Result

#### 1. Normality Test

The normality test was conducted to determine whether the residuals of the regression model are normally distributed. The Shapiro-Wilk test was used, which is suitable for sample sizes under 50.

| Case Processing Summary |                       |        |      |      |       |         |  |  |  |
|-------------------------|-----------------------|--------|------|------|-------|---------|--|--|--|
|                         |                       | Cases  |      |      |       |         |  |  |  |
|                         | Va                    | lid    | Miss | sing | Total |         |  |  |  |
|                         | N Percent N Percent N |        |      |      |       | Percent |  |  |  |
| Unstandardized Residual | 30                    | 100.0% | 0    | 0.0% | 30    | 100.0%  |  |  |  |

|                         | Descriptive             | es          |            |            |
|-------------------------|-------------------------|-------------|------------|------------|
|                         |                         |             | Statistic  | Std. Error |
| Unstandardized Residual | Mean                    |             | .0000000   | .74752233  |
|                         | 95% Confidence Interval | Lower Bound | -1.5288548 |            |
|                         | for Mean                | Upper Bound | 1.5288548  |            |
|                         | 5% Trimmed Mean         | .1173204    |            |            |
|                         | Median                  | .3948148    |            |            |
|                         | Variance                | 16.764      |            |            |
|                         | Std. Deviation          |             | 4.09434842 |            |
|                         | Minimum                 |             | -10.87653  |            |
|                         | Maximum                 |             | 8.10845    |            |
|                         | Range                   |             | 18.98498   |            |
|                         | Interquartile Range     |             | 4.11712    |            |
|                         | Skewness                |             | 633        | .427       |
|                         | Market and a            |             | 4.054      | 000        |

| Tests of Normality                                 |                                 |    |      |           |    |      |  |  |  |
|----------------------------------------------------|---------------------------------|----|------|-----------|----|------|--|--|--|
|                                                    | Kolmogorov-Smirnov <sup>a</sup> |    |      |           |    |      |  |  |  |
|                                                    | Statistic                       | df | Sig. | Statistic | df | Sig. |  |  |  |
| Unstandardized Residual                            | .122                            | 30 | .200 | .959      | 30 | .295 |  |  |  |
| *. This is a lower bound of the true significance. |                                 |    |      |           |    |      |  |  |  |

a. Lilliefors Significance Correction

Figure 2. Normality Test

Result:

• Shapiro-Wilk significance value: 0.295 > 0.05

Thus, the regression model residuals are normally distributed, and the assumption of normality is fulfilled.

# 2. Multicollinearity Test

This test aims to identify whether there is a high correlation between independent variables. The indicators used are:

- Tolerance > 0.10
- *VIF* < 10

# Variables Entered/Removed³ Model Variables Variables Method 1 x2\_total, x1\_total b . . Enter a. Dependent Variables, y\_total b b. All requested variables entered.

|         |                                            |          | Adjusted R | Std. Error of |  |  |  |  |  |  |  |  |
|---------|--------------------------------------------|----------|------------|---------------|--|--|--|--|--|--|--|--|
| Model   | R                                          | R Square | Square     | the Estimate  |  |  |  |  |  |  |  |  |
| 1       | .584ª                                      | .341     | .292       | 4.24328       |  |  |  |  |  |  |  |  |
| a Predi | a Predictors: (Constant) v2 total v1 total |          |            |               |  |  |  |  |  |  |  |  |

a. Predictors: (Constant), x2\_total, x1\_tot

b. Dependent Variable: y\_total

| Model |            | Sum of<br>Squares | df | Mean Square | F     | Sig.              |
|-------|------------|-------------------|----|-------------|-------|-------------------|
| 1     | Regression | 251.320           | 2  | 125.660     | 6.979 | .004 <sup>b</sup> |
|       | Residual   | 486.147           | 27 | 18.005      |       |                   |
|       | Total      | 737.467           | 29 |             |       |                   |

a. Dependent Variable: y\_total

b. Predictors: (Constant). x2 total. x1 total

|       |            |                             | c          | oefficients"                 |       |      |              |            |
|-------|------------|-----------------------------|------------|------------------------------|-------|------|--------------|------------|
|       |            | Unstandardized Coefficients |            | Standardized<br>Coefficients |       |      | Collinearity | Statistics |
| Model |            | В                           | Std. Error | Beta                         | t     | Sig. | Tolerance    | VIF        |
| 1     | (Constant) | 9.405                       | 3.049      |                              | 3.085 | .005 |              |            |
|       | x1_total   | 346                         | .358       | 389                          | 968   | .342 | .151         | 6.619      |
|       | x2_total   | .894                        | .390       | .922                         | 2.294 | .030 | .151         | 6.619      |

a. Dependent Variable: y\_total

|       | Collinearity Diagnostics <sup>a</sup> |            |                      |            |          |          |  |  |  |  |  |  |
|-------|---------------------------------------|------------|----------------------|------------|----------|----------|--|--|--|--|--|--|
|       |                                       |            | Variance Proportions |            |          |          |  |  |  |  |  |  |
| Model | Dimension                             | Eigenvalue | Index                | (Constant) | x1_total | x2_total |  |  |  |  |  |  |
| 1     | 1                                     | 2.948      | 1.000                | .01        | .00      | .00      |  |  |  |  |  |  |
|       | 2                                     | .046       | 7.963                | .92        | .06      | .02      |  |  |  |  |  |  |
|       | 3                                     | 900        | 23 1 4 9             | 0.7        | 0.4      | 97       |  |  |  |  |  |  |

a. Dependent Variable: y\_total

|                                     | Residuals Statistics <sup>a</sup> |         |         |         |    |  |  |  |  |  |  |
|-------------------------------------|-----------------------------------|---------|---------|---------|----|--|--|--|--|--|--|
| Minimum Maximum Mean Std. Deviation |                                   |         |         |         |    |  |  |  |  |  |  |
| Predicted Value                     | 12.5454                           | 23.5848 | 20.1333 | 2.94384 | 30 |  |  |  |  |  |  |
| Residual                            | -10.87653                         | 8.10845 | .00000  | 4.09435 | 30 |  |  |  |  |  |  |
| Std. Predicted Value                | -2.578                            | 1.172   | .000    | 1.000   | 30 |  |  |  |  |  |  |
| Std. Residual                       | -2.563                            | 1.911   | .000    | .965    | 30 |  |  |  |  |  |  |

a. Dependent Variable: y\_total

Figure 3. Multicollinearity Test

#### Result:

• The tolerance and VIF values for variables X1 and X2 are within acceptable limits.

This means there is no multicollinearity in the regression model.

# 3. HeteroscedasticityTest

This test checks whether there is inconsistency in the variance of the residuals (heteroscedasticity). The method used is a scatterplot between predicted values and residuals.

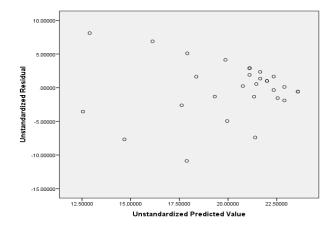


Figure 4. Heteroscedasticity Test

#### Result:

• The plot shows a random scatter of points with no specific pattern.

It can be concluded that heteroscedasticity does not occur, and the regression assumption is fulfilled.

## 4. Multiple Linear Regression Test

Multiple linear regression analysis was used to determine the effect of Financial Technology Literacy (X1) and Self-Control (X2) on Consumptive Behavior (Y), both simultaneously and partially.

#### a. Model Summary

|       | Model Summary <sup>b</sup> |          |                      |                               |                    |          |     |     |                  |  |  |  |
|-------|----------------------------|----------|----------------------|-------------------------------|--------------------|----------|-----|-----|------------------|--|--|--|
|       |                            |          |                      |                               | Change Statistics  |          |     |     |                  |  |  |  |
| Model | R                          | R Square | Adjusted R<br>Square | Std. Error of<br>the Estimate | R Square<br>Change | F Change | df1 | df2 | Sig. F<br>Change |  |  |  |
| 1     | .584ª                      | .341     | .292                 | 4.24328                       | .341               | 6.979    | 2   | 27  | .004             |  |  |  |

a. Predictors: (Constant), x2\_total, x1\_total

b. Dependent Variable: y\_total

Figure 5. Model Summary

Based on the SPSS output, the R Square value is 0.341, indicating that 34.1% of the variation in students' consumptive behavior can be explained simultaneously by Financial Technology literacy and self-control. Meanwhile, the Adjusted R Square value is 0.292, which shows that the regression model maintains reasonable explanatory power after being adjusted for the number of predictors.

The R value = 0.584, indicating a moderately strong and positive relationship between the combination of both independent variables and the dependent variable.

#### b. F-Test (Simultaneous)

#### **ANOVA**<sup>a</sup>

|   | Model        | Sum of<br>Squares | df | Mean Square | F     | Sig.              |
|---|--------------|-------------------|----|-------------|-------|-------------------|
| Γ | 1 Regression | 251.320           | 2  | 125.660     | 6.979 | .004 <sup>b</sup> |
| ı | Residual     | 486.147           | 27 | 18.005      |       |                   |
| ı | Total        | 737.467           | 29 |             |       |                   |

a. Dependent Variable: y\_total

Figure 6. F-Test (Simultaneous)

• The significance value (Sig.) is  $< 0.05 \rightarrow$  This means that the regression model is significant simultaneously.

# Interpretation:

Financial Technology Literacy and Self-Control jointly have a significant effect on Consumptive Behavior.

# c. Uji t (Partial)

#### Coefficients<sup>a</sup>

|     |            | Unstandardized Coefficients |            | Standardized<br>Coefficients |       |      | 95.0% Confider | ice Interval for B | Collinearity | Statistics |
|-----|------------|-----------------------------|------------|------------------------------|-------|------|----------------|--------------------|--------------|------------|
| Mod | el         | В                           | Std. Error | Beta                         | t     | Sig. | Lower Bound    | Upper Bound        | Tolerance    | VIF        |
| 1   | (Constant) | 9.405                       | 3.049      |                              | 3.085 | .005 | 3.149          | 15.661             |              |            |
|     | x1_total   | 346                         | .358       | 389                          | 968   | .342 | -1.080         | .388               | .151         | 6.619      |
|     | x2_total   | .894                        | .390       | .922                         | 2.294 | .030 | .094           | 1.693              | .151         | 6.619      |

a. Dependent Variable: y\_total

Figure 7. Uji t (Partial)

- X1 (Financial Technology Literacy): Sig. =  $0.342 > 0.05 \rightarrow \text{Not significant}$
- X2 (Self-Control): Sig. =  $0.030 < 0.05 \rightarrow Significant$

# Interpretation:

Self-Control significantly influences consumptive behavior, while Financial Technology Literacy does not, when assessed individually.

# d. Regression Equation

#### Coefficients

|     | Unstandardized Coefficients |       | d Coefficients | Standardized<br>Coefficients |       |      | 95.0% Confiden | ce Interval for B | Collinearity | Statistics |
|-----|-----------------------------|-------|----------------|------------------------------|-------|------|----------------|-------------------|--------------|------------|
| Mod | el                          | В     | Std. Error     | Beta                         | t     | Sig. | Lower Bound    | Upper Bound       | Tolerance    | VIF        |
| 1   | (Constant)                  | 9.405 | 3.049          |                              | 3.085 | .005 | 3.149          | 15.661            |              |            |
|     | x1_total                    | 346   | .358           | 389                          | 968   | .342 | -1.080         | .388              | .151         | 6.619      |
|     | x2_total                    | .894  | .390           | .922                         | 2.294 | .030 | .094           | 1.693             | .151         | 6.619      |

a. Dependent Variable: y\_total

b. Predictors: (Constant), x2\_total, x1\_total

Figure 8. Regression Equation

• Y = 9.405 - 0.346X1 + 0.894X2

A one-point increase in Financial Technology Literacy (X1) decreases consumptive behavior by 0.346 points.

A one-point increase in Self-Control (X2) increases consumptive behavior by 0.894 points, assuming all other variables remain constant.

#### **B.** Discussion

The results show that both Financial Technology literacy and self-control influence students' consumptive behavior. Students with higher Financial Technology literacy tend to have better understanding of the risks and benefits of using digital platforms like TikTok Shop, allowing them to manage expenses more rationally. This is consistent with studies by Rakhman & Pertiwi (2023) and Mubarokah & Pratiwi (2022), who found that financial literacy negatively affects consumptive behavior.

However, self-control showed a stronger influence in suppressing consumptive behavior than Financial Technology literacy. Students with higher self-control are more likely to resist impulsive purchases despite the temptations of digital transactions and promotions. This aligns with findings by Khairulanam & Surjanti (2024) and Anggraini & Hudaniah (2023).

Together, both variables contribute significantly to explaining students' consumptive behavior, reflecting the importance of improving both financial literacy and self-control to navigate the aggressive appeal of modern digital shopping platforms like TikTok Shop.

#### Conclusion

This study concludes that Financial Technology literacy and self-control simultaneously have a significant influence on the consumptive behavior of Digital Business Study Program students at Universitas Negeri Surabaya in using TikTok Shop. Partially, only self-control has a significant effect, while Financial Technology literacy does not. These findings emphasize the critical role of self-control in curbing consumptive behavior in a digital age filled with convenience and impulsive consumption temptations through social media platforms.

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