# THE EFFECT OF FINANCIAL LITERACY AND FINANCIAL TECHNOLOGY ON FINANCIAL BEHAVIOR WITH FINANCIAL CONFIDENCE AS A MODERATING VARIABLE (STUDY ON FEMALE STUDENTS IN MALANG CITY)

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## Abstract

This study aims to analyze the effect of financial literacy and financial technology on financial behavior, with financial confidence serving as a moderating variable among female university students in Malang City. The study was motivated by the increasing use of digital financial services among young adults and the inconsistent findings of previous studies regarding the moderating role of financial confidence. A quantitative approach was employed using primary data collected through online questionnaires distributed to 100 active female university students in Malang City selected through purposive sampling. The respondents were selected based on specific criteria, including active use of financial technology services and experience in independently managing personal finances. The focus on female university students was intended to provide a more specific contextual understanding of financial behavior among young women in higher education. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 3. The findings indicate that financial literacy and financial technology have a positive and significant effect on financial behavior. However, financial confidence was not found to moderate the relationship between financial literacy and financial behavior, nor the relationship between financial technology and financial behavior. These findings suggest that students' financial behavior is more strongly influenced by financial knowledge and the utilization of digital financial services than by psychological confidence factors. This study contributes to the development of financial behavior literature and provides practical implications for universities and policymakers in improving financial education and digital financial literacy among students.

**Keywords:** Financial Literacy, Financial Technology, Financial Behavior, Financial Confidence

## INTRODUCTION

Along with the rapid development of technology and globalization, personal financial management has become increasingly important, especially among young people living in the digital era. University students are currently required to possess adequate financial knowledge and financial management skills in order to manage increasingly complex financial needs. This condition is particularly relevant for Generation Z, who are highly connected to digital technology and actively use various financial technology services in their daily lives. The widespread accessibility of digital financial services such as e-wallets, mobile banking, and QRIS-based payments has transformed the way young people conduct financial transactions and make financial decisions.

However, the rapid growth of financial technology usage is not always accompanied by adequate financial literacy and responsible financial behavior. Based on the 2024 National Survey of Financial Literacy and Financial Inclusion (SNLIK) conducted by the Financial Services Authority (OJK) and Statistics Indonesia (BPS), the financial literacy index in Indonesia reached 65.43%, while the financial inclusion index reached 75.02% (OJK & BPS, 2024). In 2025, the financial literacy index increased to 66.46%, while financial inclusion rose significantly to 80.51% (OJK & BPS, 2025). These figures indicate that although access to financial services continues to increase, public understanding and capability in managing finances remain relatively lower than the level of financial inclusion. This gap suggests that individuals may actively use financial services without fully understanding how to manage their finances effectively, potentially leading to poor financial decision-making and unhealthy financial behavior, particularly among university students who are in the early stage of financial independence.

The growing use of financial technology among students further strengthens the importance of examining financial behavior in the digital era. According to Bank Indonesia (2025), digital economic and financial transactions in Indonesia reached 3.93 billion transactions in May 2025, with QRIS transactions increasing by 151.70% year-on-year. Although financial technology provides convenience and efficiency in conducting financial transactions, excessive accessibility and ease of use may also encourage impulsive spending and consumptive behavior if not supported by sufficient financial literacy and financial confidence. Therefore, financial technology does not automatically lead to positive financial behavior, as its impact may depend on an individual's ability and confidence in managing finances responsibly.

In addition to financial literacy and financial technology, psychological factors such as financial confidence are also considered important in influencing financial behavior. Financial confidence reflects an individual's belief in their ability to make appropriate financial decisions, manage expenses, and plan finances effectively. Previous studies have shown that women tend to have lower levels of financial confidence compared to men, even when they possess relatively similar financial knowledge. Data from the Financial Consumer Agency of Canada (2023) revealed that only 45.8% of young women felt confident in making financial decisions, compared to 61.9% of men. This condition indicates that financial confidence may influence how individuals apply financial knowledge and utilize financial technology in their daily financial activities.

Previous studies examining the relationship between financial literacy, financial technology, and financial behavior have produced inconsistent findings. Several studies

reported that financial literacy and financial technology positively influence financial behavior because they improve individuals' ability to manage finances, control spending, and make financial decisions effectively (Dhanalakshmi & Vanitha, 2024; Megawati & Moin, 2024; Novianti & Retnasih, 2023). However, other studies found insignificant relationships, indicating that financial knowledge and access to financial technology do not always lead to responsible financial behavior (Dwiprasetyo et al., 2025; Ervina et al., 2024; Farida et al., 2021). Similarly, the moderating role of financial confidence also remains inconclusive, as some studies found significant moderating effects while others did not (Lathiifah, 2022; Puspitasari & Widodo, 2024). These inconsistent findings indicate the existence of a research gap that requires further investigation, particularly among female university students who are currently experiencing a transition toward financial independence in the digital financial environment.

Malang City was selected as the research location because it is recognized as one of the largest educational cities in Indonesia, accommodating more than 60 higher education institutions and a large number of university students from various regions. Female university students were specifically chosen because women represent a significant proportion of higher education participants and are considered vulnerable to financial confidence issues during the process of developing financial independence. Therefore, this study aims to analyze the effect of financial literacy and financial technology on financial behavior, with financial confidence serving as a moderating variable among female university students in Malang City.

## REVIEW OF LITERATURE

### Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) explains that individual behavior is influenced by intention, which is formed through an individual's internal beliefs. Ajzen (2020) stated that intention is determined by three main factors, namely attitude toward behavior, subjective norms, and perceived behavioral control. Attitude reflects an individual's evaluation of a particular action, subjective norms are related to social pressure, while perceived behavioral control indicates the extent to which individuals perceive themselves as capable of performing the behavior.

### Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a theoretical framework developed by Davis (2022) to explain how individuals accept and use technology. This model states that technology acceptance is influenced by two main factors, namely perceived usefulness and perceived ease of use. Perceived usefulness refers to the extent to which individuals believe that the use of technology can improve their performance, while perceived ease of use relates to the extent to which the technology is easy to understand and operate. Therefore, the higher the perceived usefulness and ease of use, the greater the likelihood that individuals will accept and utilize the technology (Davis, 2022).

### Social Cognitive Theory (SCT)

The Social Cognitive Theory (SCT) explains that individual behavior is formed through reciprocal interactions among personal factors, behavior, and the social environment. Albert Bandura stated that individuals learn through processes of observation, imitation, and

interaction with their surrounding environment. In addition, this theory emphasizes the importance of cognitive processes, such as attention, memory, motivation, and self-regulation, in shaping individual behavior. The concept of self-efficacy also constitutes an important component of this theory, referring to an individual's belief in their ability to perform a particular action or achieve certain goals. Therefore, the higher an individual's confidence in their own abilities, the greater the likelihood that the individual will demonstrate positive and goal-directed behavior (Bandura, 2023).

**Financial Literacy**

Financial literacy does not merely refer to an individual's ability to understand financial concepts, but also reflects the ability to evaluate financial risks, consider financial consequences, and make rational economic decisions. Lusardi and Mitchell (2014) explain that financial literacy includes knowledge related to inflation, interest rates, investment, and risk management, which serve as the foundation for financial decision-making. In addition to functioning as financial knowledge, financial literacy also represents a cognitive capability that helps individuals manage expenses, establish financial priorities, and avoid impulsive financial decisions.

In the context of young adults, financial literacy becomes increasingly important because university students are in the early stage of developing financial independence and are required to make various financial decisions independently. Individuals with higher levels of financial literacy tend to be more capable of controlling spending, understanding the risks associated with digital financial services, and developing long-term financial planning more effectively. Similarly, Putra and Prajawati (2023) argue that financial literacy serves as a fundamental capability that shapes individuals' financial behavior by improving their ability to manage financial resources and make appropriate financial decisions. In contrast, low levels of financial literacy may lead to consumptive behavior, poor financial decision-making, and inadequate personal financial management.

Furthermore, the rapid development of financial technology requires individuals not only to understand traditional financial concepts, but also to adapt to digital financial services that continue to evolve. Therefore, financial literacy is not solely related to financial knowledge, but also to the ability to apply such knowledge in daily financial behavior within the digital financial environment.

**Financial Technology**

Financial technology (fintech) is not only understood as technological innovation within financial services, but also as an environmental factor that influences individuals' financial behavior and decision-making patterns. Harsono and Suprapti (2024) explain that financial technology aims to improve efficiency, accessibility, and convenience in financial services through the utilization of digital technology. Mardiana (2023) also explains that financial technology facilitates faster, simpler, and more accessible financial services, enabling individuals to perform financial transactions more efficiently through digital platforms. In practice, services such as e-wallets, mobile banking, QRIS, and digital payment platforms have transformed the way individuals conduct transactions and manage their finances in daily life.

In addition to providing convenience and transaction efficiency, the use of financial technology also has behavioral and psychological implications. Easy access, transaction flexibility, and instant payment systems may improve financial management efficiency;

however, they may also encourage consumptive behavior and impulsive buying, particularly among young adults who are highly dependent on digital technology. Cashless transaction systems often reduce individuals' awareness of spending because the payment process becomes more practical and less physically tangible.

Within the context of financial behavior, financial technology should not merely be viewed as a transaction tool, but also as a factor that shapes financial habits and spending patterns. The use of fintech supported by adequate financial literacy and self-control may help individuals manage finances more effectively. Conversely, the use of fintech without sufficient financial management capability may increase the risk of consumptive behavior and poor financial discipline.

**Financial Confidence**

Financial confidence refers to an individual's belief in their ability to manage finances, make financial decisions, and deal with financial risks effectively. Cude et al. (2023) explain that financial confidence plays an important role in shaping financial behavior because individuals with higher levels of confidence tend to make more rational and responsible financial decisions. Financial confidence is not only associated with financial knowledge, but also reflects individuals' psychological readiness in dealing with financial uncertainty, pressure, and risk.

Furthermore, financial confidence is closely related to the concept of self-efficacy, which refers to an individual's belief in their ability to control behavior and achieve desired outcomes. Individuals with high financial confidence tend to demonstrate better financial control, more effective financial planning, and more responsible use of digital financial services. In contrast, low financial confidence may cause hesitation in making financial decisions, increase financial anxiety, and reduce individuals' ability to control spending behavior.

In the context of young adults and financial technology usage, financial confidence becomes increasingly important because university students are frequently required to make independent financial decisions. Individuals' confidence in understanding and utilizing digital financial services may influence how they manage expenses, control impulsive buying behavior, and make financial decisions in the rapidly evolving digital financial environment.

**Financial Behavior**

Financial behavior does not merely refer to financial activities such as spending, saving, investing, and debt management, but also reflects how individuals make financial decisions and regulate their financial actions in everyday life. According to Morris et al. (2022), financial behavior represents patterns of financial decision-making influenced by cognitive abilities, experience, and individuals' confidence in managing financial resources. Good financial behavior is reflected through individuals' ability to manage expenses, control consumption, develop financial plans, and consider financial risks before making financial decisions. This finding is consistent with Marissa and Fitriyah (2023), who emphasized that sound financial behavior is reflected in individuals' ability to organize, manage, and utilize financial resources effectively to support better financial decision-making

Financial behavior is also closely related to psychological aspects and self-control in managing money. Individuals with strong self-control tend to distinguish between needs and wants, avoid excessive consumption, and suppress impulsive buying behavior that may negatively affect financial stability. Conversely, poor self-control may lead to irrational

financial behavior, including excessive spending, impulsive use of financial technology, and weak saving habits.

In the digital era, financial behavior has become increasingly complex due to the widespread use of financial technology services such as e-wallets, mobile banking, QRIS, and various digital payment platforms. Although these technologies provide convenience and efficiency, excessive accessibility may also increase impulsive buying behavior and consumptive lifestyles if not supported by adequate financial literacy and financial confidence. This indicates that financial behavior is influenced not only by financial knowledge, but also by individuals' ability to regulate emotions, control impulses, and make rational financial decisions within the rapidly developing digital financial environment.

**Conceptual Framework**

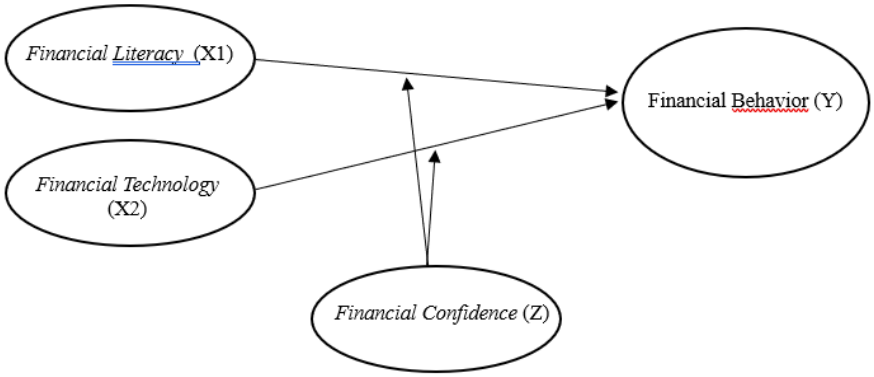


**Figure 1.**
**Conceptual Framework**

## RESEARCH METHOD

This study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3 as the data analysis technique. PLS-SEM was selected because the research model involves multiple latent variables and moderating relationships that require simultaneous analysis of both measurement and structural models. In addition, this study focuses on prediction-oriented analysis and examining the relationships among constructs related to financial literacy, financial technology, financial confidence, and financial behavior among university students in the digital financial environment.

Compared to covariance-based SEM (CB-SEM), PLS-SEM is considered more appropriate for this study because it provides greater flexibility in handling complex research models, relatively small sample sizes, and data that may not meet multivariate normality assumptions. Hair et al. (2021) explain that PLS-SEM is suitable for exploratory and predictive research aimed at maximizing the explained variance of endogenous constructs and evaluating the predictive capability of the model. Therefore, PLS-SEM was considered more relevant than CB-SEM because this study aims not only to confirm theoretical relationships, but also to predict financial behavior patterns among female university students in Malang City.

The analysis using PLS-SEM consisted of measurement model evaluation (outer model) and structural model evaluation (inner model). The outer model evaluation was conducted to assess the validity and reliability of the constructs. Convergent validity was evaluated using factor loading values and Average Variance Extracted (AVE), where AVE

values above 0.50 indicate adequate convergent validity. Discriminant validity was assessed using cross-loading values and the Fornell-Larcker Criterion to ensure that each construct was empirically distinct from other constructs. Reliability testing was conducted using Composite Reliability and Cronbach's Alpha, with values above 0.70 indicating satisfactory internal consistency.

Furthermore, the structural model (inner model) evaluation was conducted to examine the predictive relationships among latent variables. The evaluation included collinearity testing using Variance Inflation Factor (VIF), coefficient of determination ($R^2$), and predictive relevance ($Q^2$). The $R^2$ value was used to measure the extent to which endogenous variables could be explained by exogenous variables in the model. Hypothesis testing was conducted using the bootstrapping procedure with a significance level of 5%, where relationships were considered significant if the t-statistic value exceeded 1.96.

## RESULTS AND DISCUSSION

### Descriptive Analysis of Respondent Characteristics Based on Age

Based on the results of a questionnaire from 100 respondents, data were obtained as shown in the following table:

**Table 1**
**Characteristics of Respondents Based on Age**

| Information | Number (N) | Percentage(%) |
|---|---|---|
| **<20 years** | 16 | 16% |
| **20-22 t years** | 80 | 80% |
| **>20 years** | 4 | 4% |
| **Total** | **100** | **100%** |

Source: Primary Data, 2026

Based of Table 1 shows that 16 respondents were aged under 20 years (16%), 80 respondents were aged 20–22 years (80%), and 4 respondents were aged over 22 years (4%).

### Descriptive Analysis of Respondent Characteristics Based on University

Based on the results of a questionnaire from 100 respondents, data were obtained as shown in the following table:

**Table 2**
**Characteristics of Respondents Based on University**

| Information | Number (N) | Percentage (%) |
|---|---|---|
| **Brawijaya University** | 46 | 46% |
| **State University of Malang** | 32 | 32% |
| **Maulana Malik Ibrahim State Islamic University** | 15 | 15% |
| **State Polytechnic of Malang** | 7 | 7% |
| **Total** | **100** | **100%** |

Source: Primary Data, 2026

Based on Table 2 shows that 46 respondents were from Brawijaya University (46%), 32 respondents were from the State University of Malang (32%), 15 respondents were from

Maulana Malik Ibrahim State Islamic University (15%), and 7 respondents were from the State Polytechnic of Malang (7%).

**Descriptive Analysis of Respondent Characteristics Based on Batch**

Based on the results of distributing questionnaires to 100 respondents, data were obtained as shown in the following table:

**Table 3**
**Characteristics of Respondents Based on Year of Entry**

| Year of Entry | Number of Respondents | Percentage |
|---|---|---|
| **2022** | 9 | 9% |
| **2023** | 31 | 31% |
| **2024** | 38 | 38% |
| **2025** | 22 | 22% |
| **Total** | **100** | **100%** |

Source: Primary Data, 2026

Based on Table 4, it can be seen that 9 respondents were from the 2022 cohort (9%), 31 respondents were from the 2023 cohort (31%), 38 respondents were from the 2024 cohort (38%), and 22 respondents were from the 2025 cohort (22%)

**Outer Model Test Validity**

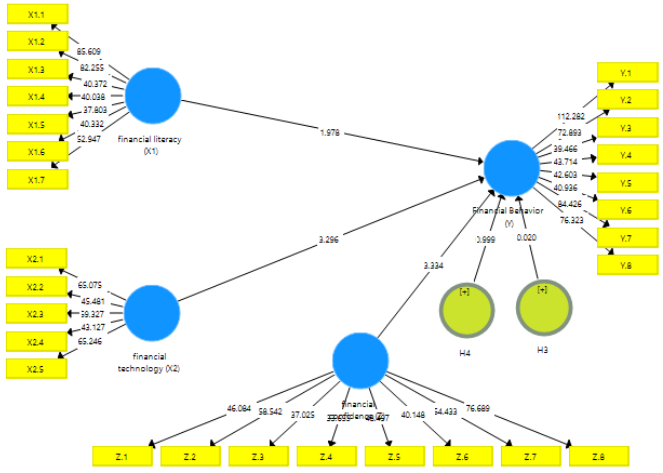


**Figure 2.**
**Outer Model**

The results of the validity analysis, obtained using SmartPLS version 3.0, are presented in the following table :

**Table 4**
**Outer Loadings**

| Variable | X1 | X2 | Z | Y | Description |
|---|---|---|---|---|---|
| **X1.1** | 0.928 | | | | Valid |
| **X1.2** | 0.922 | | | | Valid |

| | | | | | |
|---|---|---|---|---|---|
| **X1.3** | 0.875 | | | | Valid |
| **X1.4** | 0.873 | | | | Valid |
| **X1.5** | 0.859 | | | | Valid |
| **X1.6** | 0.868 | | | | Valid |
| **X1.7** | 0.904 | | | | Valid |
| **X2.1** | | 0.928 | | | Valid |
| **X2.2** | | 0.900 | | | Valid |
| **X2.3** | | 0.903 | | | Valid |
| **X2.4** | | 0.888 | | | Valid |
| **X2.5** | | 0.918 | | | Valid |
| **Z1** | | | 0.894 | | Valid |
| **Z2** | | | 0.904 | | Valid |
| **Z3** | | | 0.863 | | Valid |
| **Z4** | | | 0.853 | | Valid |
| **Z5** | | | 0.902 | | Valid |
| **Z6** | | | 0.880 | | Valid |
| **Z7** | | | 0.911 | | Valid |
| **Z8** | | | 0.924 | | Valid |
| **Y1** | | | | 0.946 | Valid |
| **Y2** | | | | 0.930 | Valid |
| **Y3** | | | | 0.861 | Valid |
| **Y4** | | | | 0.885 | Valid |
| **Y5** | | | | 0.882 | Valid |
| **Y6** | | | | 0.867 | Valid |
| **Y7** | | | | 0.928 | Valid |
| **Y8** | | | | 0.929 | Valid |

Source: Primary Data, 2026

Table 1 presents the results of the outer loading analysis used to evaluate the validity of each indicator in measuring its respective construct. All indicators exceed the minimum threshold of 0.70, indicating that they are valid and reliable for measuring their corresponding variables.

For instance, the indicators of variable X1 (X1.1–X1.7) show strong outer loading values ranging from 0.859 to 0.928, demonstrating good convergent validity. Similarly, the

indicators of variable X2 (X2.1–X2.5) also exhibit high loading values between 0.888 and 0.928, confirming their adequacy in representing the construct.

Furthermore, the indicators of variable Z (Z1–Z8) have loading values ranging from 0.853 to 0.924, indicating consistent and acceptable validity across all items. The indicators of variable Y (Y1–Y8) show the highest loading values, ranging from 0.861 to 0.946, which reflects excellent convergent validity.

**Discriminant Validity**

Discriminant validity reflects the ability of a latent construct to be truly distinct from other latent constructs. This validity is considered satisfactory when the square root of the Average Variance Extracted (AVE) for each construct is higher than its correlations with other constructs. In other words, a construct should be able to explain the variance of its own indicators better than the variance explained by other constructs (Hair et al., 2021).

**Table 5**
**Average Variance Extracted**

| Variable | Average Variance Extracted (AVE) | Description |
|---|---|---|
| **Financial Literacy (X1)** | 0.793 | Valid |
| **Financial Confidence (Z)** | 0.795 | Valid |

Source: Primary Data, 2026

Based on Table 4.9, the Average Variance Extracted (AVE) values for each variable meet the criteria for convergent validity. Overall, the AVE values of all constructs exceed the recommended minimum threshold (> 0.5), indicating that the indicators of each variable adequately represent the underlying concept being measured. Therefore, it can be concluded that the research instrument is both reliable and valid in capturing the latent variables under study.

**Reliability Test**

**Composite Reliability**

**Table 6**
**Composite Reliability**

| Variable | Composite Reliability (rho_c) | Description |
|---|---|---|
| Financial literacy (X1) | 0.964 | Reliable |
| Financial technology (X2) | 0.959 | Reliable |
| Financial self-confidence (Z) | 0.969 | Reliable |
| Financial behavior (Y) | 0.973 | Reliable |

Source: Primary Data, 2026

Based on the table above, it can be concluded that financial literacy (X1) has a Composite Reliability value of 0.964, financial technology (X2) is 0.959, financial self-confidence (Z) is 0.969, and financial behavior (Y) is 0.973. The data shows that the Composite Reliability value of each variable is > 0.70, so it can be concluded that all variables in this study are reliable.

**Cronbach's Alpha**

**Table 7**
**Cronbach's Alpha**

| Variable | Cronbach's Alpha | Description |
|---|---|---|
| Financial literacy (X1) | 0.956 | Reliable |
| Financial technology (X2) | 0.946 | Reliable |
| Financial self-confidence (Z) | 0.963 | Reliable |
| Financial behavior (Y) | 0.968 | Reliable |

Source: Primary Data, 2026

Based on the table above, it can be concluded that financial literacy (X1) has a Cronbach's Alpha value of 0.956, financial technology (X2) is 0.946, financial self-confidence (Z) is 0.963, and financial behavior (Y) is 0.968. The data shows that the Cronbach's Alpha value of each variable is > 0.70, so it can be concluded that all variables in this study are reliable.

**Inner Model**

**R-Square**

**Table 8**
**R-Square**

| Variable | R-Square | Adjusted R-Square |
|---|---|---|
| Financial behavior (Y) | 0.988 | 0.988 |

Source: Primary data, 2026

R-square ($R^2$) represents the proportion of variance in the dependent variable that can be explained by the independent variables within the model. An $R^2$ value of 0.988 indicates that the model can explain 98.8% of the variance in financial behavior as influenced by financial literacy, financial technology, and financial self-confidence. The remaining 1.2% of the variance is influenced by factors outside the scope of this research.

**Hypothesis Test**

**Table 9**
**Path Coefficient**

| Relationship | Original Sample (O) | T-Statistics | P-Values |
|---|---|---|---|
| Financial Literacy (X1) → Financial Behavior (Y) | 0.235 | 2.026 | 0.043 |
| Financial Technology (X2) → Financial Behavior (Y) | 0.274 | 3.330 | 0.001 |
| Financial Literacy * Financial Confidence → | -0.003 | 0.021 | 0.984 |

| | | | |
|---|---|---|---|
| Financial Behavior (Y) | | | |
| Financial Technology * Financial Confidence → Financial Behavior (Y) | -0.137 | 1.056 | 0.292 |

Source: Primary data, 2026

**H1:** Financial literacy has a positive effect on financial behavior among female college students in Malang City (hypothesis accepted), as indicated by a path coefficient value of 0.235, T-statistic value of 2.026 > 1.96 and a P-Value of 0.043 < 0.05, significant results (positive).

**H2:** Financial technology has a positive effect on financial behavior among female college students in Malang City (hypothesis accepted), as indicated by a path coefficient value of 0.274, T-statistic value of 3.330 > 1.96 and a P-Value of 0.001 < 0.05, significant results (positive).

**H3:** Financial self-confidence is not able to moderate the relationship between financial literacy and financial behavior among female college students in Malang City (hypothesis rejected), as indicated by a path coefficient value of -0.003, T-statistic value of 0.021 < 1.96 and a P-Value of 0.984 > 0.05, insignificant results (negative).

**H4:** Financial self-confidence is not able to moderate the relationship between financial technology and financial behavior among female college students in Malang City (hypothesis rejected), as indicated by a path coefficient value of -0.137, T-statistic value of 1.056 < 1.96 and a P-Value of 0.292 > 0.05, insignificant results (negative).

**The Influence of Financial Literacy on Financial Behavior**

The results indicate that financial literacy has a positive and significant effect on the financial behavior of female college students in Malang City. This finding suggests that students with better financial understanding tend to be more capable of managing expenses, prioritizing needs, and controlling their daily spending behavior.

This condition is closely related to the characteristics of the respondents, who are predominantly within the age range of 19–23 years, a stage considered crucial in the development of financial independence. In this phase, female students are required to manage living expenses, educational needs, and personal spending more independently, especially for those living away from their families in Malang City.

These findings support the Theory of Planned Behavior (TPB), which explains that individuals with stronger perceived behavioral control tend to demonstrate better behavioral decisions (Ajzen, 2020). The findings are consistent with previous studies conducted by Hidayat et al. (2024), Lathiifah (2022), Prasetyo and Mustaqim (2024), and Marissa and Fitriyah (2023), which suggest that stronger financial literacy or financial knowledge encourages individuals to make better financial decisions and exhibit more responsible financial behavior. However, this study also recognizes that financial knowledge does not always directly translate into financial behavior, as shown by Ervina et al. (2024), suggesting that financial behavior may also depend on experience, self-control, and environmental factors.

**The Influence of Financial Technology on Financial Behavior**

The findings reveal that financial technology has a positive and significant effect on the financial behavior of female college students in Malang City. The increasing use of digital financial services such as e-wallets, mobile banking, and QRIS payments enables students to conduct financial transactions more efficiently and conveniently in their daily activities.

This phenomenon reflects the growing adoption of digital payment systems among young people, particularly university students who rely heavily on technology in their daily financial activities. These findings are consistent with the Technology Acceptance Model (TAM), which explains that individuals are more likely to adopt technology when it is perceived as useful and easy to use (Davis, 2022).

The results support previous studies conducted by Dhanalakshmi and Vanitha (2024), Yanti and Suryadi (2024), and Prasetyo and Mustaqim (2024), which found that financial technology positively influences financial behavior. However, this study also critically acknowledges findings from Novianti and Retnasih (2023) and Fiika et al. (2022), which reported insignificant relationships between fintech usage and financial behavior. This difference suggests that the effectiveness of fintech depends not only on accessibility but also on users' financial literacy and self-control in utilizing digital financial services.

**The Moderating Effect of Financial Confidence on the Relationship Between Financial Literacy and Financial Behavior**

The results indicate that financial confidence was unable to moderate the relationship between financial literacy and financial behavior among female college students in Malang City. This finding suggests that confidence in financial abilities alone is not sufficient to strengthen the implementation of financial knowledge into actual financial behavior. One possible explanation is related to the characteristics of the respondents, who are mostly female students aged 19–23 years and are still in the early stage of financial independence. Although they may possess financial knowledge and confidence, many students are still financially dependent on parental support, limiting their opportunities to make complex financial decisions independently.

In addition, previous studies revealed that women tend to have lower levels of financial confidence compared to men in financial decision-making (Harrison et al., 2026). This condition may explain why financial confidence in this study was not strong enough to reinforce the relationship between financial literacy and financial behavior. These findings differ from studies conducted by Lathiifah (2022) and Yanti and Suryadi (2024), which found that financial confidence significantly strengthened financial behavior. The inconsistency may be caused by differences in respondent characteristics and financial experience.

On the other hand, the findings are aligned with the study by Widodo et al. (2024), which also found that financial efficacy was unable to significantly strengthen financial behavior. From the perspective of Social Cognitive Theory (SCT), self-confidence or self-efficacy does not automatically produce behavior unless individuals also possess sufficient experience, environmental support, and opportunities to apply their financial abilities in real-life situations (Bandura, 2001).

**The Moderating Effect of Financial Confidence on the Relationship Between Financial Technology and Financial Behavior**

The results indicate that financial confidence was unable to moderate the relationship between financial technology and financial behavior among female college students in Malang City. This finding suggests that confidence in using financial technology alone is not sufficient to strengthen positive financial behavior. One possible explanation is that most respondents use financial technology primarily for practical transactional purposes, such as online shopping, food delivery payments, and daily digital transactions, rather than for financial planning or long-term financial management. As a result, although students may feel confident in using fintech applications, this confidence does not necessarily encourage more responsible financial behavior.

In addition, the respondents in this study were predominantly female students aged 19–23 years who are still in the stage of developing financial independence and financial decision-making abilities. At this stage, many students are still financially dependent on parental allowances, limiting their experience in managing larger financial responsibilities independently. These findings indicate that the convenience and accessibility provided by financial technology may not automatically lead to positive financial behavior if they are not supported by sufficient financial experience and self-control. This condition is consistent with the perspective of Social Cognitive Theory (SCT), which explains that self-efficacy alone does not directly influence behavior unless individuals also possess adequate environmental support, behavioral experience, and self-regulation abilities (Bandura, 2001).

The findings of this study differ from previous studies conducted by Lathiifah(2022) and Yanti and Suryadi (2024), which found that financial confidence strengthened financial behavior through the use of financial technology. The difference may be caused by variations in respondent characteristics, financial experience, and patterns of fintech utilization. On the other hand, this study supports the findings of Adzhani et al. (2025), which reported that self-efficacy did not significantly influence fintech payment usage behavior. This suggests that financial confidence may not always function effectively as a strengthening factor in digital financial behavior, particularly among university students who are still adapting to financial management practices.

## CONCLUSION

This study concludes that financial literacy and financial technology play important roles in shaping the financial behavior of female college students in Malang City. Students who possess better financial knowledge and are able to utilize financial technology effectively tend to demonstrate more responsible financial behavior in managing their daily financial activities. However, the findings also reveal that financial confidence was unable to moderate the relationship between financial literacy, financial technology, and financial behavior. This result indicates that confidence in financial abilities alone may not be sufficient to strengthen positive financial behavior among university students.

One possible explanation is that most respondents are still in the early stage of financial independence and remain financially dependent on parental support. As a result, although students may have confidence in their financial abilities, they may not yet have sufficient experience or financial responsibility to apply such confidence in real financial

decision-making. In addition, financial technology among students is often used mainly for practical transactional purposes rather than long-term financial planning. From a theoretical perspective, these findings provide important insights into Social Cognitive Theory (Bandura, 2001) and the Theory of Planned Behavior (Ajzen, 1991). The results suggest that self-efficacy or perceived behavioral control does not automatically strengthen financial behavior unless individuals also possess adequate financial experience, environmental support, and opportunities to implement their financial knowledge in real-life situations.

Therefore, this study indicates that the role of financial confidence may be context-dependent, particularly among student populations in Malang City who are still developing financial maturity and independence. These findings also contribute to the development of financial behavior literature by showing that self-confidence alone may not always function as an effective strengthening factor in financial decision-making behavior.

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