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# DOES FINANCIAL LITERACY AMPLIFY DIGITAL BANKING'S IMPACT ON STUDENT SAVING BEHAVIOR?

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**ABSTRACT**

Digital banking adoption among college students is growing rapidly, but this is not necessarily accompanied by an increase in planned savings behavior. This study aims to fill this gap by examining how usage intensity, perceived ease of use, and feature utilization of the blu by BCA app collectively shape student savings behavior. It also examines the role of financial literacy as both a direct and moderating factor, a combination that has not been widely studied in the context of neobanks in Indonesia. The study employed a quantitative approach with an explanatory survey design among 200 active college students in West Jakarta who had used the blu by BCA app for at least three months. Data were collected through an online Likert-scale questionnaire and analyzed using PLS-SEM with the assistance of SmartPLS 4. All seven hypotheses were supported. Feature utilization was the strongest predictor of savings behavior, followed by usage intensity and perceived ease of use. Financial literacy was shown to have a direct and strengthening effect on all three pathways, although the moderating effect was weak to moderate. The overall model explained 61.5% of the variation in savings behavior with a high level of model fit. These findings confirm that feature design oriented towards financial goals, rather than simply ease of transactions, is a key driver of planned savings behavior. From a policy perspective, integrating digital-based financial literacy programs into higher education curricula is relevant given their role in optimizing the benefits of banking technology. This research provides a conceptual contribution by developing a TAM model that integrates financial literacy as a moderator in the neobank ecosystem, with practical implications for app developers, regulators, and educational institutions.

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## 1. INTRODUCTION

The digital transformation in the financial sector has fundamentally changed the way people interact with banking services. In Indonesia, this shift has been accelerated by increased internet penetration and massive smartphone adoption following the COVID-19 pandemic. The Financial Services Authority (OJK) recorded that the national financial literacy index reached 65.43% in 2024,

a significant increase from 49.68% in 2022. However, its distribution remains uneven, particularly among university students (OJK & BPS, 2024). Efforts to increase financial awareness among the younger generation, including understanding savings and income management, have become a focus of various educational programs in Indonesia (Puspita et al., 2025).

This situation creates an interesting empirical paradox: the rapid growth in digital banking technology adoption is not necessarily accompanied by an increase in prudent financial behavior, particularly saving. This paradox reflects the "behavioral gap" identified in behavioral economics literature: a situation where individuals have access to financial tools but do not automatically use them rationally (Thaler & Sunstein, 2021). One digital banking product that has garnered widespread attention among college students is blu by BCA Digital, a branchless banking application launched by PT Bank Digital BCA in 2021. This application offers various features designed with a user-centric approach, including digital account opening, goal-based savings through bluSaving, bill splitting through bluSplit, and integrated mutual fund investments. Its intuitive interface and fully online onboarding process make blu a relevant platform to study in the context of Generation Z financial behavior, particularly among college students residing in urban areas like West Jakarta. The relevance of this research is further strengthened by the limited number of studies specifically examining the blu by BCA ecosystem in relation to the formation of college students' savings behavior.

Studies on the adoption of digital banking technology generally rely on the Technology Acceptance Model (TAM) framework. Over time, various studies have expanded the TAM framework by integrating contextual factors more comprehensively. Laradi et al. (2023) confirmed that the expanded TAM framework consistently explains mobile banking adoption across various contexts, with perceived ease of use and perceived usefulness as key predictors. However, the TAM framework has a fundamental limitation: it does not explicitly model users' financial capability as a moderating factor in the relationship between technology use and financial behavior. This gap is theoretically relevant because, as demonstrated by financial capability theory, having access to financial tools is insufficient without the capability to use them effectively (Xiao & O'Neill, 2018). Therefore, this study integrates financial literacy as a variable that not only directly influences but also moderates the relationship between TAM technology variables and saving behavior. This approach extends and deepens the TAM framework beyond its standard version, while also responding to researchers' calls to incorporate behavioral financial theory into technology acceptance models in developing countries (Singh et al., 2024; Widjaja et al., 2020).

The intensity of digital application use is a behavioral predictor that has been extensively researched in the information systems literature. Mussa et al. (2022) and Sahoo et al. (2026) assert that technology usage habits formed through intensive interaction will strengthen sustainable behaviors, including positive financial behaviors. The higher the frequency and depth of user interaction with banking apps, the greater the likelihood of establishing a consistent savings routine due to repeated exposure to features that facilitate financial management. Based on these theoretical and empirical arguments, the first hypothesis is formulated as follows.

**H1: The intensity of blu by BCA app usage has a positive and significant effect on the savings behavior of students in West Jakarta.**

Perceived ease of use is a core construct in TAM that directly influences users' attitudes and behaviors toward a technology (Anggraeni & Arizonia Ismail, 2026). An app that is perceived as easy to use will reduce psychological barriers to financial transactions, including routine savings activities. When users do not need to allocate significant cognitive resources just to navigate the app interface, that energy can be diverted to more deliberate and deliberative financial decision-making. Riptiono et al. (2021)confirmed that perceived ease of use significantly influences the financial behavior of mobile banking users in the context of Islamic banking in Indonesia. Based on this, the second hypothesis is formulated as follows:

**H2: Perceived ease of use of the blu by BCA app has a positive and significant effect on the savings behavior of students in West Jakarta.**

Active feature utilization reflects deeper user engagement in the digital ecosystem of banking apps. Features such as bluSaving and expense trackers are inherently designed to facilitate more structured financial planning. Anh et al. (2026) and Ortega (2025) found that active engagement with financial planning features in digital banking applications directly stimulates financial awareness and encourages more disciplined income allocation among young users. Based on this, the third hypothesis is formulated as follows:

**H3: Utilization of blu by BCA application features has a positive and significant effect on the savings behavior of college students in West Jakarta.**

Beyond technological variables, financial literacy is widely recognized as a direct determinant of savings behavior across contexts. Förster et al. (2026) and Lusardi (2015) define financial literacy as an individual's ability to understand and apply basic financial knowledge to make rational and effective economic decisions. Individuals with good financial literacy tend to be more disciplined in allocating income, setting savings targets, and avoiding impulsive consumption behavior. Başar et al. (2025) and Padi et al. (2026) confirmed that financial literacy is a significant predictor of savings behavior, regardless of the financial medium or platform used. Based on this, the fourth hypothesis is formulated as follows:

**H4: Financial literacy has a positive and significant effect on the savings behavior of college students in West Jakarta.**

The relationship between technological variables and savings behavior is not linear and simple. Financial literacy is thought to moderate the strength of this relationship. Students with high financial literacy are predicted to be able to optimize the benefits of intensive use because they understand the relevance of the frequency of such interactions to their long-term financial goals. Conversely, students with low financial literacy tend to use apps intensively but do not consistently direct their use towards savings. Abdallah et al. (2024), Ban et al. (2025), and Başar et al. (2025) found that digital financial literacy moderates the relationship between fintech adoption and savings behavior, with users with higher literacy gaining greater benefits from the intensity of digital platform use. Based on this, the fifth hypothesis is formulated as follows:

**H5: Financial literacy moderates the effect of blu by BCA app usage intensity on student savings behavior in West Jakarta, with higher financial literacy strengthening this effect.**

High perceived ease of use will encourage more effective savings behavior if supported by adequate financial literacy. Students who understand the concepts of the time value of money and budget planning will be better able to utilize the ease of use of apps as a means to achieve planned savings goals, rather than simply facilitating general transactions. Without adequate financial literacy, ease of access has the potential to encourage impulsive consumption rather than disciplined savings behavior. Andreou & Anyfantaki (2021) and Taghavifard et al. (2012)) confirmed that financial literacy significantly strengthens the impact of ease of use of internet banking services on more planned financial behavior. Based on this, the sixth hypothesis is formulated as follows:

**H6: Financial literacy moderates the effect of perceived ease of use of the blu by BCA application on the savings behavior of students in West Jakarta, with higher financial literacy strengthening this effect.**

Optimally utilizing app features requires a thorough understanding of the function and benefits of each feature within the context of personal financial planning. Students with high financial literacy are better able to identify which features are relevant to their financial goals and use them strategically to develop consistent savings habits. Without an adequate foundation of financial literacy, feature utilization tends to be exploratory without a clear financial orientation. Başar et al. (2025) and Friedline & West (2016) confirmed that individuals with higher financial capability are consistently better able to translate the use of financial technology features into planned savings behavior. Based on this, the seventh hypothesis is formulated as follows:

**H7: Financial literacy moderates the effect of blu by BCA app feature utilization on the savings behavior of students in West Jakarta, with higher financial literacy strengthening this effect.**

Previous research examining the relationship between mobile banking use and savings behavior is relatively limited, particularly those specifically targeting the student segment while considering the moderating role of financial literacy. Windasari et al. (2022) found that exclusive digital banking experience positively influenced the financial habits of Generations Y and Z, but this moderating variable was not included in their research model. On the other hand, Burhan (2025) and Goyal & Kumar (2021) identified financial literacy as a strong predictor of savings behavior, although the integration of digital contexts requires further exploration. This study specifically contributes to filling this gap by integrating the TAM framework, financial capability theory, and contextual analysis of the specific neobank ecosystem in Indonesia.

Geographically, West Jakarta was chosen as the research location given that this area is one of the densest student population centers in DKI Jakarta, with the presence of several large-scale universities. The multicultural demographic characteristics of students and their intensive exposure to the digital ecosystem make it a representative context for studying the adoption of app-based banking technology. Based on the above description, this study aims to analyze the influence of usage intensity, perceived ease of use, and feature utilization of the blu by BCA app on student savings behavior in West Jakarta, while also examining the role of financial literacy as a variable that directly influences and moderates this relationship. This is particularly important given that financial literacy not only shapes rational financial behavior but also reduces cognitive biases that may hinder optimal financial decision-making (Pradana & Kiky, 2022). This research is expected to provide theoretical contributions by developing a TAM model in the context of digital banking in developing countries, while also providing practical implications for banking app developers, higher education institutions, and financial policymakers in Indonesia.

## 2. RESEARCH METHODS

This study employed a quantitative approach with an explanatory survey design to examine causal relationships between variables through statistical hypothesis testing. A positivistic paradigm was employed because the study focused on objectively measuring socio-economic phenomena using standardized instruments.

The study population consisted of individuals residing or studying in West Jakarta who had used the blu by BCA app for at least three months. The number of respondents was determined at 200 using a purposive sampling technique based on the following criteria: active blu by BCA users, belonging to the Gen Z (14-29 years) or Gen Y (30-45 years) age group, and willingness to participate in the study. This sample size meets the recommended threshold for PLS-SEM analysis, which is at least 10 times the maximum number of indicators in a single construct (Hair et al., 2017). However, it should be acknowledged that the purposive sampling technique carries the potential for selection bias, which may limit the generalizability of the findings to the broader student population outside West Jakarta. This study does not claim statistical representativeness of the population but rather focuses on testing theoretical relationships within a specific context.

This study involved five variables: Intensity of Use (X1), Perceived Ease of Use (X2), Feature Utilization (X3), Saving Behavior (Y), and Financial Literacy (M) as both independent and moderating variables. All variables were measured using indicators adapted from relevant literature on a 1-5 Likert scale. The financial literacy measurement combined two approaches: a subjective indicator reflecting respondents' self-perceptions of their financial capabilities, and an objective indicator consisting of true-false questions on basic financial concepts such as compound interest, inflation, and risk diversification. This combination of measurements follows the practice recommended by Lusardi (2015) where objective measures capture actual knowledge while subjective measures reflect financial confidence, which also plays a role in shaping behavior.

Data were collected through an online questionnaire using Google Forms. The research instrument was pilot-tested on 30 respondents and demonstrated valid and reliable results.

To anticipate common method bias, this study used Harman's single-factor test as a preliminary test (Alruwayti & Sulphey, 2023). It should be acknowledged that this method has limitations in comprehensively detecting common method bias. Further research is recommended to use more robust techniques such as the marker variable approach or the unmeasured latent method construct procedure to provide stronger assurance against the threat of method bias.

The choice of PLS-SEM over covariance-based SEM (CB-SEM) is based on three methodological considerations. First, this research model is predictive and explanatory with a complex structure, including moderating variables (Hair et al., 2017). Second, PLS-SEM does not require strict assumptions of normality of data distribution, which is relevant given that data collection was conducted through a survey using an ordinal Likert scale. Third, a sample size of 200 is more appropriate for PLS-SEM, which is known to be more statistically efficient at moderate sample sizes compared to CB-SEM, which generally requires larger samples for stable estimates.

Model evaluation was conducted in two stages. The measurement model (outer model) was tested using loading factors (>0.70), Average Variance Extracted or AVE (>0.50), Composite Reliability or CR (>0.70), and HTMT ratio (<0.85). The structural model (inner model) was tested using path coefficients, $R^2$, and $Q^2$. Hypothesis testing used bootstrapping with 5,000 subsamples at a 5% significance level. Moderation effects were tested using a product indicator approach, with the interpretation of the effect strength referring to the $f^2$ value based on Cohen's criteria: 0.02 is weak, 0.15 is moderate, and 0.35 is strong (Puspita & Rohmanuddin, 2026; Sugiyono, 2017). A small $f^2$ value for a moderation effect does not necessarily mean it is practically meaningless, but needs to be interpreted carefully by considering the context and direction of the relationship found.

## 3. RESULTS AND DISCUSSION

### Data Instrument Test

Figure 1 presents the full PLS-SEM structural model of this study, illustrating the outer loadings of all indicators across five constructs: Intensity of Application Usage (X1), Perceived Ease of Use (X2), Feature Utilization (X3), Financial Literacy (M), and Saving Behavior (Y), along with the direct path coefficients, the direct effect of the moderating variable, and the interaction path coefficients representing the moderating role of Financial Literacy, with an overall $R^2$ value of 0.629 for Saving Behavior. The details of the instrument test results are presented as follows.

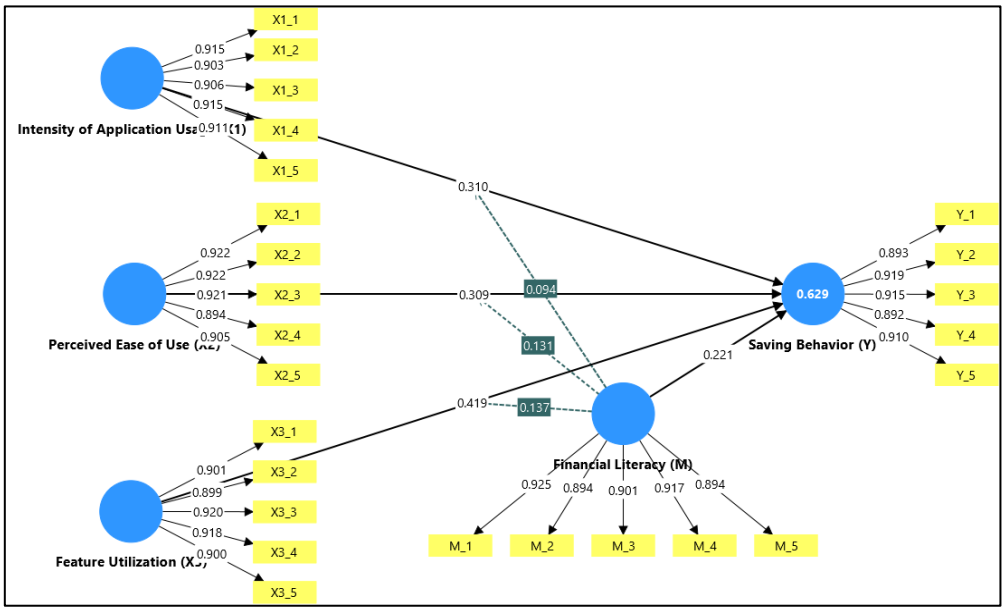


Figure 1. PLS-SEM structural mode
Source: Processed Data (2026)

**Convergent Validity**

Convergent validity evaluation was conducted by examining the outer loadings of all indicators in each latent construct. The test results showed that all indicators had outer loadings above 0.70, ranging between 0.892 and 0.925. Specifically, the indicators in the Intensity of Use construct (X1) obtained loading values ranging from 0.903 to 0.915; Perceived Ease of Use (X2) between 0.894 and 0.922; Feature Utilization (X3) between 0.899 and 0.920; Financial Literacy (M) between 0.894 and 0.925; and Savings Behavior (Y) between 0.892 and 0.919. All values exceeded the threshold of 0.70 recommended by Hair et al. (2017) so all indicators were declared convergently valid.

**Discriminant Validity**

Discriminant validity was assessed using the Fornell-Larcker criteria by comparing the square root of the AVE value of each construct to inter-construct correlations. The square root of the AVE value of each construct, namely Feature Utilization (0.907), Financial Literacy (0.906), Intensity of Use (0.910), Perceived Ease of Use (0.913), and Saving Behavior (0.906), was greater than the correlation with other constructs. The highest inter-construct correlation was recorded between Saving Behavior (Y) and Feature Utilization (X3) at 0.547, still lower than the square root of the AVE of each construct. All constructs therefore met the requirements for discriminant validity.

**Reliability Test**

All constructs have Cronbach's Alpha and Composite Reliability (rho_c) values exceeding the threshold of 0.70. Cronbach's Alpha values range from 0.945 to 0.950, while Composite Reliability (rho_c) ranges from 0.958 to 0.961. The Average Variance Extracted (AVE) values for all constructs are above 0.50, ranging from 0.821 to 0.833, indicating that more than half of the indicator variance is successfully explained by their respective constructs. All constructs are therefore declared reliable.

**Coefficient of Determination ($R^2$)**

The $R^2$ value for Saving Behavior (Y) is 0.629 with an adjusted $R^2$ of 0.615. This means that 61.5% of the variation in students' saving behavior is jointly explained by Intensity of Use (X1), Perceived Ease of Use (X2), Feature Utilization (X3), Financial Literacy (M), and three moderating interaction variables, while the remaining 38.5% is attributable to factors outside the model. This level of explanatory power is considered substantial for behavioral research in the financial technology domain (Hair et al., 2017).

**Effect Size ($f^2$)**

The effect size ($f^2$) values provide a more nuanced picture of each predictor's substantive contribution beyond mere statistical significance. Feature Utilization (X3) has the largest effect size of 0.440, classified as strong. Perceived Ease of Use (X2) produces an $f^2$ of 0.231 and Intensity of Use (X1) of 0.216, both classified as medium effects. Financial Literacy (M) has an $f^2$ of 0.109, classified as a medium-weak effect. The three moderating interaction variables produce weak effect sizes: Financial Literacy × Feature Utilization ($f^2 = 0.051$), Financial Literacy × Perceived Ease of Use ($f^2 = 0.038$), and Financial Literacy × Intensity of Use ($f^2 = 0.022$). These weak moderation effect sizes are critical for interpretation and should not be overlooked simply because all interactions reached statistical significance. Statistical significance and practical magnitude are distinct considerations, particularly in samples of moderate size where even trivial effects may reach the $p < 0.05$ threshold (Sugiyono, 2017).

**Goodness of Fit (GoF)**

The Goodness of Fit value is calculated by multiplying the average AVE by the average adjusted $R^2$. With an average AVE of 0.825 and average adjusted $R^2$ of 0.615, the GoF value is 0.712, indicating strong overall model fit.

$$GOF = \sqrt{average\ of\ AVE\ x\ average\ of\ R\ square} \quad \text{.....(1)}$$
$$GOF = \sqrt{0.825\ x\ 0.615}$$
$$GOF = \sqrt{0.507}$$
$$GOF = 0.712$$

This value is considered high and indicates that the research model has a strong overall fit.

**Hypothesis Testing Results (Bootstrapping)**

Figure 2 presents the bootstrapping results of the PLS-SEM model. All direct path coefficients from Intensity of Use (X1), Perceived Ease of Use (X2), Feature Utilization (X3), and Financial Literacy (M) to Saving Behavior (Y) are significant at p = 0.000, while the moderating interaction paths yield p-values of 0.025 (M × X1), 0.009 (M × X2), and 0.001 (M × X3), all below the 0.05 threshold. The complete summary of hypothesis testing results is presented in Table 1. All seven hypotheses were accepted at a significance level of 5%.

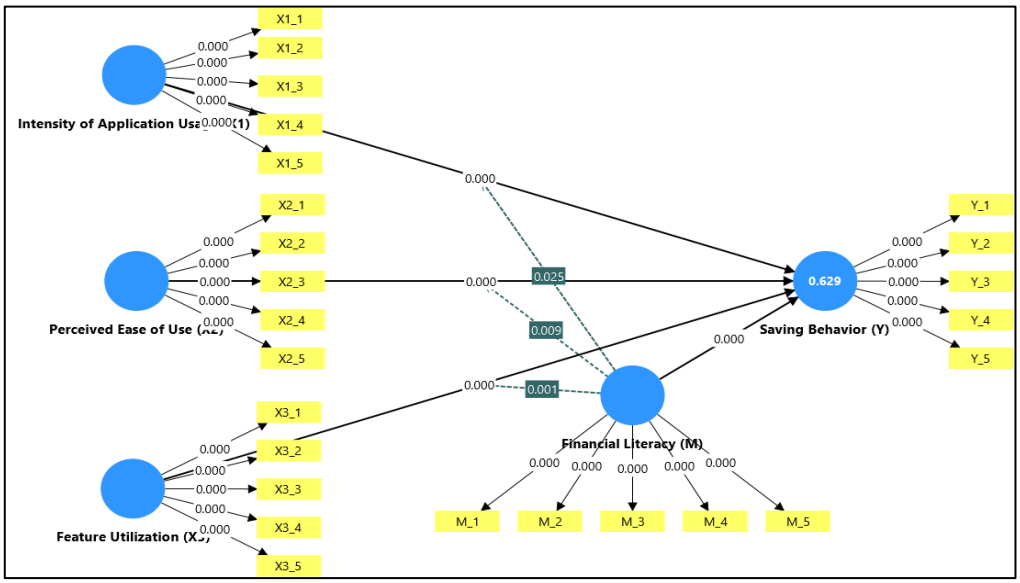


Figure 1. Hypothesis Testing Results
Source: Processed Data (2026)

Table 1. Hypothesis Testing Results

| Hypothesis | Track | Coef. (β) | T-statistic | P-value | Decision |
|---|---|---|---|---|---|
| H1 | Intensity of Use → Saving Behavior | 0.310 | 6,566 | 0,000 | Accepted |
| H2 | Perceived Ease → Saving Behavior | 0.309 | 7,315 | 0,000 | Accepted |
| H3 | Feature Utilization → Saving Behavior | 0.419 | 9,767 | 0,000 | Accepted |
| H4 | Financial Literacy → Saving Behavior | 0.221 | 4,713 | 0,000 | Accepted |
| H5 | Financial Literacy × Intensity of Use → Saving Behavior | 0.094 | 2,241 | 0.025 | Accepted |
| H6 | Financial Literacy × Perceived Ease → Saving Behavior | 0.131 | 2,604 | 0.009 | Accepted |
| H7 | Financial Literacy × Feature Utilization → Saving Behavior | 0.137 | 3,177 | 0.001 | Accepted |

**The Effect of Intensity of Use on Savings Behavior (H1)**

Usage intensity demonstrated a positive and significant effect on saving behavior ($\beta = 0.310$; $f^2 = 0.216$), representing a medium practical effect. This finding suggests that frequent and sustained interaction with the blu by BCA application meaningfully contributes to the formation of consistent saving routines, likely through repeated exposure to savings reminders, goal-tracking notifications, and embedded financial management features. The medium effect size positions intensity of use as a substantively important, though not dominant, predictor in this model.

This finding is consistent with Mussa et al. (2022) and Sahoo et al. (2026), who demonstrated that technology usage habits formed through intensive interaction reinforce sustainable behavioral patterns, including positive financial behaviors. The mechanism is largely habitual: as students repeatedly open and interact with the application, the act of checking balances, reviewing spending, and setting aside funds gradually becomes embedded in their daily financial routines. Notably, however, Windasari et al. (2022) found that digital banking experience positively influences financial habits without necessarily capturing the directional quality of those habits. This nuance suggests that the frequency of app interaction alone does not guarantee purposeful saving behavior; the content and orientation of that interaction ultimately determine whether usage intensity translates into disciplined financial outcomes. App developers should therefore prioritize designing engagement mechanisms that deliberately channel user interaction toward financial goal features rather than passive browsing or consumption-facilitating transactions.

**The Influence of Perceived Ease of Access on Savings Behavior (H2)**

Perceived ease of use showed a positive and significant effect on saving behavior ($\beta = 0.309$; $f^2 = 0.231$), with a medium practical effect nearly equal in magnitude to usage intensity. This near-parity is theoretically meaningful: it suggests that how effortlessly students can navigate the application matters as much as how often they use it. When cognitive resources are not consumed by interface complexity, users are better positioned to engage in deliberate financial planning rather than reactive transaction behavior (Dewi et al., 2025).

This finding aligns with Riptiono et al. (2021) who confirmed that perceived ease of use significantly influences the financial behavior of mobile banking users in the Indonesian Islamic banking context, and extends that finding to the neobank setting. An important counterpoint, however, is that ease of use is a double-edged construct. Andreou and Anyfantaki (2021) noted that the directional effect of ease of use on financial behavior depends significantly on users' financial knowledge base, a dynamic further examined in H6. A frictionless interface reduces barriers equally for disciplined savers and impulsive spenders. This suggests that interface simplicity alone is insufficient as a behavior-change mechanism and must be coupled with intentional goal-oriented feature design and adequate user financial literacy to consistently produce positive saving outcomes.

**The Effect of Feature Utilization on Savings Behavior (H3)**

Feature utilization emerged as the strongest predictor in this model ($\beta = 0.419$; $f^2 = 0.440$), with a strong practical effect that clearly distinguishes it from the other predictors. This finding carries a conceptually important message: it is not merely how often or how easily students use an application that most powerfully drives saving behavior, but how deeply and purposefully they engage with its goal-oriented features. Specific features such as bluSaving, which enables target-based savings allocation, and expense tracking tools appear to function as behavioral scaffolds that structure financial decision-making rather than simply facilitating transactions.

This result is consistent with Anh et al. (2026) and Ortega (2025), who found that active engagement with financial planning features in digital banking applications directly stimulates financial awareness and encourages more disciplined income allocation among young users. It also aligns with the broader behavioral economics argument that choice architecture embedded within digital interfaces can effectively nudge users toward more deliberate financial decisions (Thaler & Sunstein, 2021). The strong effect size implies that app developers should prioritize personalized goal-setting and tracking features, as they yield greater behavioral impact than interface aesthetics or transaction speed.

**The Influence of Financial Literacy on Saving Behavior (H4)**

Financial literacy demonstrated a positive and significant direct effect on saving behavior ($\beta = 0.221$; $f^2 = 0.109$), reflecting a medium-weak practical contribution. While statistically robust, this effect size is notably smaller than those of the three technology variables, which warrants careful interpretation. The finding does not diminish the importance of financial literacy; rather, it reveals that in the context of a well-designed digital banking application, technological factors collectively exert greater direct influence on saving behavior than individual financial capability alone.

This pattern is broadly consistent with Goyal & Kumar (2021), who confirmed financial literacy as a significant predictor of saving behavior across platforms, and with Başar et al. (2025) and Padi et al. (2026), who similarly documented its direct role in shaping saving outcomes. However, the relatively modest effect size observed here adds an important contextual qualifier: in environments where application design actively scaffolds financial decision-making, the direct behavioral contribution of financial literacy may be partially absorbed by the technological features themselves. Förster et al. (2026) and Lusardi (2015) define financial literacy as the capacity to understand and apply financial knowledge to rational economic decisions, and this study suggests that well-designed digital tools can operationalize elements of that capacity on behalf of users with limited knowledge. Policymakers should exercise caution in interpreting this finding as evidence that financial literacy education is less urgent; the moderation findings below clarify that literacy remains a critical amplifier of technology's behavioral benefits, particularly for users who engage most deeply with the application's features.

**The Moderating Role of Financial Literacy on the Influence of Intensity of Use (H5)**

Financial literacy significantly moderated the relationship between usage intensity and saving behavior ($\beta = 0.094$; $p = 0.025$), but the effect size of $f^2 = 0.022$ must be classified as weak by conventional standards (Sugiyono, 2017). Accepting this hypothesis should therefore not be interpreted as evidence of a strong or practically meaningful moderation. Rather, the finding suggests a subtle boundary condition: students with higher financial literacy extract marginally greater saving benefits from intensive app use because they understand the relevance of frequent digital financial interactions to their long-term financial goals, while those with lower literacy may engage frequently without directing their interactions toward purposeful financial outcomes.

This finding is directionally consistent with Abdallah et al. (2024), Ban et al. (2025), and Başar et al. (2025), who collectively documented that digital financial literacy moderates the relationship between fintech adoption intensity and saving behavior. However, the weaker magnitude observed in this study compared to some of those findings may reflect platform-specific dynamics: the blu by BCA application's built-in behavioral scaffolding may reduce the marginal value of financial literacy as a moderator of raw usage frequency, since the application itself partially compensates for lower literacy through structured feature design. Future research should examine whether this moderation effect strengthens under conditions of lower app usability or in populations with greater variance in financial knowledge levels.

**The Moderating Role of Financial Literacy on the Influence of Perceived Ease of Use (H6)**

Financial literacy significantly moderated the effect of perceived ease of use on saving behavior ($\beta = 0.131$; $p = 0.009$; $f^2 = 0.038$), though the effect size again remains weak. This finding substantiates a theoretically important argument: ease of use is not behaviorally neutral. Its effect on saving behavior is directionally shaped by the user's financial knowledge base. Students who possess adequate understanding of budgeting and the time value of money are better positioned to convert a frictionless interface into a deliberate saving tool, while those with limited literacy may use the same ease of access primarily for consumption-facilitating purposes.

This result extends Andreou and Anyfantaki (2021), who confirmed that financial literacy strengthens the impact of ease of use of internet banking on more planned financial behavior, and is further supported by Taghavifard et al. (2012) who documented similar literacy-ease interactions in digital financial service adoption.

The weak effect size, however, cautions against overstating this interaction in practical terms. The behavioral difference between high- and low-literacy students utilizing an equally easy application is present but modest, suggesting that ease-of-use improvements alone, without accompanying financial education initiatives, will produce limited behavioral differentiation across the student population.

**The Moderating Role of Financial Literacy on the Influence of Feature Utilization (H7)**

The moderation of financial literacy on the feature utilization-saving behavior relationship was the strongest among the three interaction terms ($\beta = 0.137$; $p = 0.001$; $f^2 = 0.051$), yet still falls within the weak range by conventional criteria (Sugiyono, 2017). This pattern is substantively informative: the behavioral returns from actively using goal-oriented app features are amplified, though modestly, when users possess the financial knowledge to deploy those features strategically. A student who understands savings goal-setting principles will use bluSaving more purposefully than one who explores the feature without a clear financial framework.

This finding is consistent with Başar et al. (2025) and Friedline & West (2016), who confirmed that individuals with higher financial capability are consistently better able to translate the use of financial technology features into planned saving behavior. The fact that this interaction produces the largest effect size among the three moderation terms is also theoretically coherent: feature utilization is the most cognitively demanding of the three technology predictors, requiring users to navigate specific functions and interpret financial data, and is therefore the most sensitive to variations in financial capability (Xiao & O'Neill, 2018).

The overall pattern across H5, H6, and H7 points to a consistent and practically important conclusion that deserves explicit policy attention. Financial literacy functions as a genuine but modest amplifier of technology's behavioral effects, and its practical significance is greatest when users engage most deeply with the application's cognitively demanding features. One might be tempted to conclude from the weak moderation effect sizes that financial literacy education can be deprioritized in favor of app design improvements. This conclusion would be premature and potentially misleading. The weak moderation effects are partly a function of this study's sample, which likely exhibits moderate and relatively homogeneous financial literacy levels. In populations with greater literacy variance, particularly those with more pronounced low-literacy segments, the moderating role of financial literacy would likely emerge with substantially greater magnitude. Financial literacy education and thoughtful digital banking design should therefore be pursued as complementary, mutually reinforcing policy instruments rather than competing alternatives, a position well-supported by the behavioral capability framework of Xiao and O'Neill (2018) and the financial literacy evidence base established by Goyal & Kumar (2021) and Pradana & Kiky (2022).

## 4. CONCLUSION

This study successfully confirmed all seven proposed hypotheses, yielding several key findings with significant theoretical and practical implications. From a technological perspective, app feature utilization proved to be the strongest predictor of students' savings behavior, surpassing intensity of use and perceived ease of use. This is a conceptually important finding: it is not how often or how easily someone uses an app that most determines savings behavior, but rather how deeply and purposefully they engage with its goal-oriented features. This finding challenges the implicit assumption in many TAM studies that ease of use is the dominant variable, shifting attention to feature design as an agent of financial behavior change. Intensity of use and perceived ease of use also proved to have significant and substantive effects, confirming the relevance of the core TAM constructs in the context of neobanks in Indonesia.

From a financial literacy perspective, the findings suggest that financial literacy serves a dual function: as a direct predictor of savings behavior and as a moderator that strengthens all three technological pathways. However, the weak moderation effects ($f^2$ below 0.06 for all three) suggest a message that should be interpreted with caution. This weak effect does not imply that financial

literacy is unimportant, but rather indicates that well-designed apps can partially compensate for limited financial literacy in encouraging savings behavior. In other words, technology and financial literacy are complementary, not substitutive. Students with good financial literacy benefit more from intensive and targeted app use, but apps with well-designed features can still encourage savings behavior even among users with limited financial literacy. Overall, this research model explains 61.5% of the variation in student savings behavior, with a Goodness of Fit value of 0.712, indicating strong predictive power.

From a theoretical perspective, this study extends the TAM framework by integrating financial capability theory as a foundation, positioning financial literacy as a moderator, rather than simply a covariate. This integration results in a more comprehensive model for understanding technology-based financial behavior among students, particularly in the under-researched neobank ecosystem in developing countries.

From a policy perspective and practical implications, three specific recommendations can be put forward. First, for digital banking app developers like BCA Digital, these findings underscore the importance of prioritizing the development of features oriented toward users' financial goals, for example by enhancing the bluSaving function, integrating artificial intelligence-based savings reminders, and providing personalized financial planning dashboards. Second, for higher education institutions, particularly universities in West Jakarta, these findings support the integration of digital financial literacy education into student curricula and programs, as financial literacy has been shown not only to directly influence savings behavior but also to amplify the benefits derived from the use of banking technology. Third, for regulators like the Financial Services Authority (OJK), these research findings support the expansion of the Financial Inclusion Month program by targeting university students as the primary user group of the neobank ecosystem, given that this segment has high usage intensity but still requires strengthening its financial capabilities to optimize the potential of available technology.

This study has several limitations that open up opportunities for further research. The limited geographic coverage of West Jakarta and the focus on one specific app limit the generalizability of the findings. Furthermore, the cross-sectional study design does not allow for observation of the formation of savings habits over the long term, while a true causal relationship between app usage and savings behavior can only be confirmed through a longitudinal design. Further research could expand the scope to other cities, compare different neobank platforms, adopt a longitudinal design, and explore additional moderating variables such as financial goal orientation, self-control, or social pressure that are also relevant in shaping technology-based saving behavior among Indonesia's younger generation.

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