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FINANCIAL MANAGEMENT BEHAVIOR IN THE DIGITAL ERA: THE MEDIATING ROLE OF SELF-CONTROL IN THE EFFECTS OF FINANCIAL TECHNOLOGY AND SOCIAL ENVIRONMENT

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ABSTRACT

Objective: This study aims to analyze the influence of Financial Technology and Social Environment on Financial Management Behavior and to examine the role of Self-Control as a mediating mechanism among users of digital financial services in Indonesia.

Research Design & Methods: This study employs a quantitative approach using a survey design. Data were collected from 120 respondents who are users of digital financial services in Indonesia, selected using purposive sampling. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS to evaluate the measurement model and structural model, as well as to test the direct and indirect relationships among the variables.

Findings: The results of this study indicate that Financial Technology and Social Environment do not have a significant direct effect on Financial Management Behavior, but both have a positive effect on Self-Control. Furthermore, Self-Control was found to be the most dominant predictor of financial management behavior. The results of the mediation analysis confirm that Self-Control significantly mediates the relationship between Financial Technology and Social Environment and Financial Management Behavior. These findings confirm that the contributions of financial technology and the social environment to financial behavior primarily occur through the mechanism of self-control.

Contribution: This study expands on Self-Regulation Theory by demonstrating that technological and social factors influence financial management behavior primarily through the internal mechanism of self-control, rather than through direct effects. These findings underscore the importance of strengthening self-regulation capacity in the development of digital financial interventions.

Novelty: The novelty of this study lies in identifying Self-Control as the psychological mechanism that bridges the influence of Financial Technology and the Social Environment on Financial Management Behavior, thereby demonstrating that these external factors do not directly shape financial management behavior but operate through an individual's self-regulation process.

Keywords: Financial Management Behavior, Financial Technology, Self-Control, Social Environment.

JEL codes: D14, G41, O33.
Article type: research paper

INTRODUCTION

The rapid spread of digital technology has fundamentally transformed the financial ecosystem by changing the way individuals access, transact, and manage their financial resources. Mobile banking, e-wallets, QR-based payments, digital investment platforms, and other fintech services have increased the speed, accessibility, and convenience of financial transactions. Digital financial services have also become a key mechanism for expanding financial inclusion, particularly in developing countries where digital platforms can reduce barriers to formal financial services (Tay et al., 2022). Broader access to financial technology does not always translate to better financial management. The very same digital features that simplify saving, payments, and financial monitoring can also lower transaction barriers and make spending easier, thereby creating new behavioral challenges. Recent evidence on digital payments suggests that reduced psychological resistance to spending can increase consumers' propensity to shop, highlighting the behavioral ambiguities of financial digitization (Faraz & Anjum, 2025; Yuttama, 2025). The key issue is no longer simply whether individuals can access digital financial services, but whether they can use those services in ways that support responsible financial management.

Financial management behavior (FMB) is increasingly important in understanding the consequences of financial digitization. FMB encompasses individuals' practices in budgeting, controlling spending, saving, meeting financial obligations, and planning financial resources for future needs. A systematic review of the literature

identified psychological, social, technological, and financial factors as key prerequisites for personal financial management behavior (Goyal et al., 2021). A meta-analysis confirms the substantial role of psychological factors, including self-control, in explaining variations in financial management behavior (Goyal et al., 2022; Strömbäck et al., 2017). In the digital context, financial technology represents an important external condition because it provides users with broader access to financial information, payment facilities, and financial products. However, the behavioral consequences may vary: digital tools can facilitate financial monitoring and planning, but the convenience they offer can also simultaneously facilitate impulsive and unplanned consumption (Yuttama, 2025). This suggests that the availability of financial technology alone may not be sufficient to explain whether individuals will ultimately engage in responsible financial management.

The social environment is one of the external conditions that can shape financial behavior through financial socialization, interpersonal interactions, and exposure to financial norms (Gudmunson et al., 2016). Family members, peers, educational settings, and broader social networks can provide information, values, and behavioral examples that influence how individuals view and manage their financial resources. Recent evidence suggests that financial socialization and self-control are positively correlated with saving behavior, although their effects vary depending on the financial product and behavioral context (Boto-García et al., 2022). A recent systematic review also identified financial socialization as a key component within the broader framework of financial planning behavior (Yeo et al., 2024). Exposure to social norms does not always produce identical behavioral outcomes because individuals differ in their ability to regulate impulses, evaluate consequences, and translate external influences into consistent actions. Therefore, both financial technology and the social environment may be better understood as external conditions whose behavioral effects depend on an individual's internal regulatory capacity.

This perspective highlights self-control as a potentially crucial psychological mechanism. From a self-regulation perspective, individuals do not merely respond mechanically to external stimuli; they monitor their behavior, evaluate it in light of long-term goals, and adjust their actions as needed (Bandura, 1969). In financial decision-making, self-control enables individuals to refrain from immediate consumption, delay gratification, adhere to financial plans, and consider long-term consequences. Evidence from the field of behavioral finance consistently shows that self-control is closely linked to responsible financial behavior, while meta-analysis evidence increasingly supports the importance of psychological factors in personal financial management (Goyal et al., 2022). Self-control may also explain why the same technological and social environments lead to varying financial outcomes among individuals. Digital financial tools can provide monitoring and information, while social environments can offer norms and behavioral cues; however, these external influences must be internalized before they can be translated into sustainable financial management practices.

Although research on fintech, financial socialization, and financial behavior continues to evolve, significant theoretical gaps remain. Existing studies have largely examined financial technology, social influences, or psychological characteristics as separate predictors of financial behavior, while the mechanisms linking external digital and social conditions to actual financial management behavior have received less attention. Consequently, the literature provides substantial evidence regarding the relationships among individual variables but offers few integrated explanations of the psychological processes linking external conditions to behavioral outcomes. This gap is particularly relevant in the evolving digital financial ecosystem, where access to financial technology is growing rapidly while individuals simultaneously face increasingly complex social and consumption environments. To address this gap, this study adopts Self-Regulation Theory as its primary theoretical framework and conceptualizes self-control as an internal psychological mechanism that links financial technology and the social environment to financial management behavior.

This study develops and tests an integrated mediation model in which financial technology and the social environment represent external conditions, self-control represents a self-regulation mechanism, and financial management behavior represents the behavioral outcome. This study examines whether financial technology and the social environment influence financial management behavior directly and indirectly through self-control. This approach expands existing research on financial behavior by shifting the focus from the question of whether external factors influence financial behavior to how those influences are internally regulated and translated into financial actions. The findings of this study are expected to contribute theoretically by clarifying the psychological mechanisms underlying financial management behavior in the digital age, as well as practically by informing financial institutions, educators, and policymakers that the expansion of digital financial access must be accompanied by interventions that strengthen individuals' capacity for self-regulation and responsible financial decision-making.

LITERATURE REVIEW

Self-Regulation Theory

Self-Regulation Theory provides the primary theoretical foundation for explaining how individuals regulate their thoughts, decisions, and actions to achieve desired goals. Self-regulation involves an ongoing process of monitoring current behavior, evaluating it against internal standards or goals, and adjusting subsequent actions

when discrepancies arise (Bandura, 1969). This perspective is highly relevant to financial management because responsible financial behavior requires individuals to control immediate impulses while maintaining decisions aligned with long-term financial goals. In this process, self-control represents a crucial psychological mechanism that translates self-regulation into actual financial decisions, thereby enabling individuals to delay immediate gratification, control consumption, and maintain goal-oriented financial behavior. Empirical evidence confirms the relevance of this mechanism, as self-control has been linked to better saving and financial behavior, while financial socialization also contributes to the development of responsible financial practices (Boto-García et al., 2022).

A further perspective on self-regulation suggests that financial behavior is not determined solely by the availability of external resources or exposure to external influences. Financial Technology and the Social Environment can be understood as external conditions that provide information, opportunities, norms, feedback, and behavioral cues, whereas Self-Control represents the internal capacity that individuals use to regulate their responses to these conditions (Zolait, 2014). Financial technology, for example, can facilitate transaction monitoring, access to financial information, and expenditure tracking, but these features do not automatically result in responsible financial management. Similarly, the social environment can provide norms, values, and examples of financial behavior, yet its influence depends on how individuals interpret and internalize these influences. Thus, external conditions may create opportunities for better financial behavior, while an individual's capacity for self-regulation determines whether those opportunities are translated into consistent financial practices (Boto-García et al., 2022; Goyal et al., 2021).

Based on this theoretical reasoning, this study conceptualizes Financial Technology and the Social Environment as external conditions, Self-Control as a self-regulatory mechanism, and Financial Management Behavior as the behavioral outcome. Thus, the proposed mechanism can be stated as External Conditions → Self-Control → Financial Management Behavior. This framework expands upon the conventional view that financial technology or social influences directly determine financial behavior by emphasizing the psychological processes through which external conditions are translated into behavioral outcomes. Consequently, Self-Control is expected to play a direct role in shaping Financial Management Behavior as well as a mediating role in channeling the influence of Financial Technology and the Social Environment into financial management practices. This theoretical position serves as the foundation for testing the direct and indirect relationships proposed in subsequent hypotheses.

Financial Management Behavior

Financial management behavior refers to the ways in which individuals plan, allocate, monitor, and control their financial resources through activities such as budgeting, saving, managing expenses, and making financial decisions. It represents the behavioral dimension of personal finance because it reflects how financial knowledge, resources, psychological characteristics, and environmental influences translate into actual financial practices (Goyal et al., 2021). A systematic review of the literature indicates that financial management behavior is shaped by a combination of psychological, social, financial, and technological factors, confirming that financial behavior is a multidimensional outcome, not merely a consequence of financial knowledge alone. More specifically, recent meta-analysis evidence identifies self-control as one of the psychological factors that has a significant positive relationship with personal financial management behavior (Goyal et al., 2021). Empirical studies also show that self-control is positively associated with saving and other responsible financial practices, indicating that individuals with a greater ability to control immediate desires are more likely to maintain financial decisions that support long-term goals (Boto-García et al., 2022). In the Indonesian context, recent findings also report a significant association between self-control and financial management behavior, including among individuals exposed to digital financial products (Bu et al., 2022).

From the perspective of Self-Regulation Theory, financial management behavior can be understood as the behavioral outcome of an individual's ability to translate financial goals into consistent actions. Effective financial management requires individuals to set financial priorities, monitor expenditures, evaluate whether actual behavior remains aligned with those priorities, and adjust consumption or savings decisions when deviations occur (Bandura, 1969). This perspective is particularly important in the contemporary financial environment, where individuals have increasingly easy access to digital payment and financial services, yet are simultaneously faced with greater opportunities for instant consumption. Consequently, responsible financial management behavior depends not only on access to financial resources or information but also on the ability to regulate responses to financial opportunities and temptations. Further literature indicates that financial behavior is influenced by technological and social conditions as well as psychological characteristics (Goyal et al., 2021). Meanwhile, financial literacy and self-control jointly contribute to saving behavior (Boto-García et al., 2022). Therefore, this study positions Financial Management Behavior as the ultimate behavioral outcome through which the effects of Financial Technology and the Social Environment are expected to manifest, either directly or through the self-regulatory mechanism of Self-Control.

Financial Technology and Financial Management Behavior

Financial Technology has transformed the way personal finances are managed by facilitating digital payments, access to financial information, transaction records, and financial services. These capabilities can support budgeting, expense tracking, and financial planning by making financial information more accessible and timely (Ren, 2022; Tay et al., 2022). From a self-regulation perspective, these tools can help individuals monitor their financial activities and make decisions aligned with their financial goals. However, the relationship between FinTech and financial management behavior remains theoretically ambiguous. While digital financial services can enhance convenience and access, seamless payments and easily obtainable credit can also facilitate unplanned purchases and weaken spending discipline. Consequently, technology adoption should not automatically be equated with improved financial management; the consequences may depend on how individuals use and regulate their responses to digital financial opportunities.

Empirical findings regarding the relationship between digital financial services and financial management are not always consistent, as various studies differ in their operationalization of technology, respondent characteristics, and behavioral outcomes. Research on the adoption of financial technology and personal financial management in Indonesia highlights the growing relevance of digital financial services, while the broader literature on digital finance emphasizes that greater access does not, in and of itself, guarantee favorable financial outcomes (Kartini et al., 2024; Ren, 2022). This discrepancy supports the need to examine whether financial technology is associated with better financial management behavior, rather than assuming that such a relationship occurs automatically. Therefore, the following hypothesis is proposed:

H1: Financial technology has a positive influence on financial management behavior.

Social Environment and Financial Management Behavior

The social environment encompasses financial norms, values, information, and examples of behavior that individuals encounter through their families, peers, coworkers, and broader social networks. These interactions contribute to financial socialization by shaping how individuals understand saving, spending, borrowing, and financial responsibility (Boto-García et al., 2022; Gudmunson & Danes, 2011). The social environment can encourage responsible financial practices when individuals are exposed to constructive financial habits and supportive expectations. However, social influences can also drive consumption through peer pressure, lifestyle comparisons, or social expectations. Therefore, the influence of the social environment on financial management behavior can vary depending on the nature of the influence and how individuals respond to it (Ren, 2022).

Recent research on financial planning emphasizes the importance of social and psychological factors in understanding financial decisions, while empirical evidence suggests that financial socialization has a positive relationship with saving habits (Boto-García et al., 2022; Yeo et al., 2024). Exposure to financial advice or positive social norms does not necessarily mean that individuals will consistently apply them in their financial decisions. The discrepancy between social exposure and actual behavior provides a basis for testing this direct relationship while also considering the internal psychological mechanisms discussed in subsequent sections. Therefore, the following hypothesis is proposed:

H2: The social environment has a positive influence on financial management behavior.

Financial Technology and Self-Control

Financial technology can contribute to self-regulation by providing tools that make financial activities more transparent and easier to evaluate. Digital transaction histories, spending alerts, account balances, and budgeting features can provide timely feedback on spending and available resources. These functions align with the monitoring and evaluation processes emphasized by Self-Regulation Theory, thereby enabling individuals to identify deviations from their financial goals and adjust their subsequent decisions (Bandura, 1969; Tay et al., 2022). In this regard, financial technology can serve as an environment that supports self-regulation, rather than merely a means of conducting transactions (Musonif et al., 2026). The potential contribution of financial technology to self-control depends on how these digital features are used. Monitoring and budgeting tools may support disciplined financial decision-making, while instant payments, promotional notifications, and convenient credit facilities can increase exposure to impulsive consumption opportunities. Thus, technology does not always strengthen self-control in every situation; its potential benefits depend on whether individuals use the available information and feedback to regulate their behavior. This rationale calls for an examination of FinTech as a prerequisite for self-control. Therefore, the following hypothesis is proposed.

H3: Financial Technology has a positive effect on Self-Control

Social Environment and Self-Control

The social environment can shape self-control through financial socialization, social learning, and the internalization of behavioral norms. Family members and peers can provide examples of budgeting, saving, exercising restraint in spending, and borrowing responsibly examples that individuals can use as a reference when

making their own financial decisions. Over time, repeated exposure to these practices can help individuals develop standards for evaluating their financial behavior and regulate responses that conflict with those standards. Research by [Boto-García et al. \(2022\)](#) supports the relevance of this mechanism by showing that financial socialization and self-control are positively correlated with saving habits.

From a self-regulation perspective, the influence of the social environment thus extends beyond the mere conveyance of financial information. Social interactions can provide external expectations and behavioral cues that individuals may internalize and use to guide their own behavior ([Kaur & Singh, 2024](#)). Social exposure alone does not guarantee stronger self-control, as individuals may interpret or respond to the same social expectations differently ([Chuang, 2024](#)). This study examines whether a more supportive social environment has a positive relationship with self-control, which may help explain how external social conditions translate into financial behavior. Thus, the following hypothesis is proposed:

H4: The social environment has a positive influence on self-control.

Self-Control and Financial Management Behavior

Self-control refers to a person's ability to regulate impulses, refrain from immediate gratification, and maintain behavior aligned with long-term goals ([Balfaqih & Altarteer, 2026](#)). In a financial context, this ability is important because individuals are often faced with conflicting demands between current consumption and future financial security. Individuals with stronger self-control may be better able to resist unnecessary spending, stick to savings plans, and evaluate the long-term consequences of financial decisions ([Mpaata et al., 2023](#)). [Strömbäck et al. \(2017\)](#) demonstrated the relevance of self-control to financial behavior and financial well-being, while [Boto-García et al. \(2022\)](#) reported a positive relationship between self-control and saving habits. These findings support the argument that responsible financial management involves not only access to financial resources but also the ability to regulate financial decisions.

In Self-Regulation Theory, self-control can be understood as a proximal psychological mechanism that links financial goals to actual behavior. A person may understand the importance of budgeting or saving, yet fail to implement these practices when momentary desires override their financial priorities. Self-control helps individuals maintain consistency between their desired goals and their actual financial decisions, making it a theoretically important determinant of financial management behavior ([Bandura, 1969](#); [Strömbäck et al., 2017](#)). Therefore, the following hypothesis is proposed:

H5: Self-control has a positive effect on financial management behavior.

The Mediating Role of Self-Control

Self-Control as a Mediator between Social Environment and Financial Management Behavior

The influence of the social environment on financial management behavior may operate through self-control, as social norms and financial practices are not automatically reflected in individual actions ([Alshebami & Aldhyani, 2022](#)). Family members, peers, and other social contacts provide examples of behavior and financial expectations; however, individuals must interpret and regulate their responses before these influences translate into consistent financial practices. Financial socialization may contribute to the development of saving habits, while self-control is independently associated with responsible saving behavior ([Boto-García et al., 2022](#)). Related research has also identified financial socialization and psychological characteristics as relevant factors for personal financial management, including through indirect pathways ([Goyal et al., 2023](#)). From this perspective, self-control provides an internal mechanism that allows social expectations and learned financial practices to be translated into disciplined decisions. Therefore, the following hypothesis is proposed:

H6: Self-Control acts as a mediator in the effect of the Social Environment on Financial Management Behavior.

Self-Control as a Mediator between Financial Technology and Financial Management Behavior

Financial technology can indirectly influence financial management behavior by supporting monitoring and evaluation processes related to self-control ([Musonif et al., 2026](#)). Digital transaction records, spending alerts, and budgeting features can help individuals recognize spending patterns and assess whether their financial decisions align with their goals. However, these technological capabilities do not guarantee responsible behavior unless individuals use this information to guide their decisions. Therefore, digital financial services can provide resources for financial management, while self-control determines whether those resources translate into disciplined spending and saving practices ([Ren, 2022](#); [Tay et al., 2022](#)). This suggests that the contribution of Financial Technology may extend beyond its direct relationship with financial behavior: Financial Technology may also operate through individuals' ability to control financial impulses and maintain decisions aligned with their goals. Therefore, the following hypothesis is proposed:

H7: Self-Control acts as a mediator in the effect of Financial Technology on Financial Management Behavior.

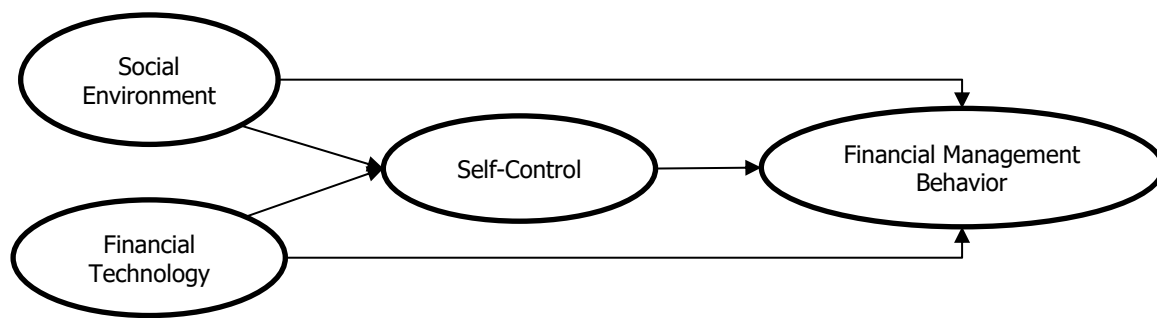


Figure 1 Research Framework

METHODS

This study employs a quantitative, explanatory, and cross-sectional design to examine the direct and indirect relationships between financial technology, the social environment, self-control, and financial management behavior. Primary data were collected through a structured online questionnaire using purposive sampling. Respondents were Indonesian citizens aged 17 years or older who held an account at a formal financial institution, had used at least one financial technology service in the past six months, and voluntarily participated in this survey. From the collected responses, 120 valid questionnaires were selected for analysis. The questionnaire measured financial technology (6 items), social environment (4 items), self-control (7 items), and financial management behavior (4 items), with all items rated on a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The measurement items were adapted from well-established instruments used in previous research, in which financial technology reflects the accessibility, convenience, efficiency, security, and usability of digital financial services; the social environment captures financial socialization and social influence; self-control reflects an individual's ability to regulate impulses and delay gratification; and financial management behavior represents budgeting, expenditure control, saving, payment, and financial planning practices.

The data were analyzed using SmartPLS 4 via Partial Least Squares Structural Equation Modeling (PLS-SEM). The analysis included an evaluation of the measurement model and the structural model. The measurement model was evaluated using outer loadings, Cronbach's alpha, composite reliability, average variance extracted (AVE), and discriminant validity using the Fornell Larcker criteria and the heterotrait–monotrait ratio (HTMT). The structural model was evaluated using the variance inflation factor (VIF), coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and path coefficients. Hypotheses were tested using 5,000 bootstrap subsamples, while mediation was evaluated through the significance of indirect effects. Statistical significance was set at the 5% level, with effects considered significant if the t-statistic exceeded 1.96 and the p-value was below 0.05.

RESULT

Measurement Model

The results of the measurement model evaluation indicate that the research instrument possesses adequate measurement quality. Although two Self-Control indicators SC2 and SC3 exhibited relatively lower loadings, no substantive issues were found with the constructs, as all constructs demonstrated internal consistency and convergent validity that met the criteria. These findings indicate that, overall, the indicators used are capable of adequately representing Financial Management Behavior, Financial Technology, Self-Control, and Social Environment.

All four constructs demonstrated strong reliability, with composite reliability ranging from 0.837 to 0.929 and AVE ranging from 0.563 to 0.766. Financial Management Behavior exhibited the highest convergent validity, while Social Environment had the lowest AVE value but still remained above the acceptance threshold. Thus, the variation in the indicators within each construct is adequately explained by the respective construct, indicating no weaknesses in the consistency or convergent validity of the measurement model. Discriminant validity further demonstrated that all constructs can be empirically distinguished. The highest HTMT value reached only 0.865 for the relationship between Self-Control and Financial Management Behavior, while the other construct pairs had lower values.

Table 1 Results of Reliability and Convergent Validity Testing

Construct	Indicator	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Financial Management Behavior	FMB1	0.884	0.898	0.929	0.766
	FMB2	0.880			
	FMB3	0.836			
	FMB4	0.900			
Financial Technology	FT1	0.897	0.898	0.922	0.664
	FT2	0.802			
	FT3	0.836			
	FT4	0.760			
	FT6	0.753			
	FT6	0.834			
Self-Control	SC1	0.793	0.888	0.913	0.601
	SC2	0.661			
	SC3	0.673			
	SC4	0.746			
	SC5	0.844			
	SC6	0.810			
	SC7	0.872			
Social Environment	SE1	0.726	0.742	0.837	0.563
	SE2	0.742			
	SE3	0.825			
	SE4	0.703			

Source: Data Pocessed (2026)

These results confirm that there are no discriminant validity issues among the research constructs, as all HTMT values are below the 0.90 threshold. With reliability, convergent validity, and discriminant validity all established, the measurement model is deemed suitable for use in testing structural relationships and research hypotheses.

Table 2 Results of the Discriminant Validity Test

	HTMT
Financial Technology -> Financial Management Behavior	0.730
Self Control -> Financial Management Behavior	0.865
Self Control -> Financial Technology	0.843
Social Environment -> Financial Management Behavior	0.771
Social Environment -> Financial Technology	0.844
Social Environment -> Self Control	0.864

Source: Data Pocessed (2026)

Structural Model and Hypothesis Testing

A structural equation model evaluation was conducted to assess the model's ability to explain endogenous variables and to test the relationships among the constructs formulated in the research hypotheses. The test results indicate that the model has a relatively strong explanatory power regarding Self-Control and Financial Management Behavior. The R^2 value for Self-Control of 0.642 indicates that Financial Technology and Social Environment together account for 64.2% of the variation in Self-Control, while the remaining 35.8% is explained by other factors outside the model. Meanwhile, the R^2 value for Financial Management Behavior of 0.629 indicates that Financial Technology, Social Environment, and Self-Control collectively explain 62.9% of the variation in financial management behavior. Thus, for both endogenous variables, a significant proportion of the variation can be explained by the predictors in the model. The adjusted R^2 values, which were 0.636 for Self-Control and 0.620 for Financial Management Behavior, also indicate that the model's explanatory power remains relatively stable after accounting for the number of predictors used.

Table 3 Coefficient of Determination

	R-square	R-square adjusted
Financial Management Behavior	0.629	0.620
Self Control	0.642	0.636

Source: Data Pocessed (2026)

The results of the direct effect tests revealed different patterns of relationships among external factors, psychological mechanisms, and financial management behavior. Financial Technology did not show a significant

direct effect on Financial Management Behavior ($\beta = 0.095$; $t = 0.910$; $p = 0.363$), thus H1 is not supported. These findings indicate that the existence or use of financial technology does not automatically lead to better financial management behavior. Financial technology can provide various facilities and conveniences in financial activities, but these facilities do not necessarily translate into responsible financial management behavior. In other words, access to digital financial instruments and services is not sufficient to explain behavioral changes at the individual level.

A similar pattern was found in the relationship between the Social Environment and Financial Management Behavior. The direct effect of the Social Environment on Financial Management Behavior was not significant ($\beta = 0.141$; $t = 1.493$; $p = 0.135$), so H2 is not supported. These results indicate that the presence of a social environment that provides information, norms, or influences regarding finance does not necessarily directly shape an individual's financial management behavior. External influences experienced by an individual do not always seem to translate directly into financial actions. Therefore, the relationship between external conditions and financial management behavior must be viewed through the lens of internal mechanisms that enable individuals to process, evaluate, and control their responses to those influences.

Table 4 Results of the Direct Effect Test

	β	t	p	Decision
Social Environment -> Financial Management Behavior	0.141	1.493	0.135	Not supported
Financial Technology -> Financial Management Behavior	0.095	0.910	0.363	Not supported
Financial Technology -> Self Control	0.524	6.679	0.000	Supported
Social Environment -> Self Control	0.342	3.982	0.000	Supported
Self-Control -> Financial Management Behavior	0.609	6.863	0.000	Supported

Source: Data Pocessed (2026)

In contrast to these two direct relationships, Financial Technology showed a positive and significant effect on Self-Control ($\beta = 0.524$; $t = 6.679$; $p < 0.001$), thus supporting H3. These results indicate that financial technology has a clearer association with self-control capacity than direct financial management behaviors. Furthermore, the Social Environment also has a positive and significant effect on Self-Control ($\beta = 0.342$; $t = 3.982$; $p < 0.001$), thus supporting H4. These two findings indicate that both digital and social factors have a significant relationship with an individual's internal mechanisms. Nevertheless, the magnitude of the coefficients indicates that the relationship between Financial Technology and Self-Control is stronger than that between Social Environment and Self-Control.

Self-Control, in turn, exerts a positive and significant influence on Financial Management Behavior ($\beta = 0.609$; $t = 6.863$; $p < 0.001$), thus supporting H5. Among all direct relationships in the model, this path has the largest coefficient and the highest t-statistic value. These findings position Self-Control as the strongest variable in explaining Financial Management Behavior within the research model. Variations in financial management behavior are more closely related to an individual's ability to control their financial actions than to the direct influence of financial technology or the social environment. These results also provide an empirical basis for testing the role of self-control as a mediating variable.

Testing for indirect effects shows that Self-Control significantly mediates the relationship between Social Environment and Financial Management Behavior. The path Social Environment $\rightarrow$ Self-Control $\rightarrow$ Financial Management Behavior yields a coefficient of 0.209 with $t = 3.189$ and $p = 0.001$, thus supporting H6. These results indicate that the influence of the Social Environment on Financial Management Behavior becomes significant when mediated by Self-Control. This finding presents a different pattern from the insignificant direct effect of the Social Environment. Thus, the social environment's contribution to financial management behavior does not primarily manifest as a direct effect but rather through its association with an individual's capacity to control financial behavior.

Table 5 Results of the Indirect Effects Test

	β	t	p	Decision
Social Environment -> Self Control -> Financial Management Behavior	0.209	3.189	0.001	Supported
Financial Technology -> Self Control -> Financial Management Behavior	0.319	5.058	0.000	Supported

Source: Data Pocessed (2026)

A stronger mediating effect was found in the relationship between Financial Technology and Financial Management Behavior via Self-Control. The path Financial Technology $\rightarrow$ Self-Control $\rightarrow$ Financial Management Behavior had an indirect coefficient of 0.319 with $t = 5.058$ and $p < 0.001$, thus supporting H7. This indirect effect coefficient is larger than the indirect effect of Social Environment via Self-Control ($\beta = 0.209$). These results indicate that, within the research model, the role of Self-Control in linking Financial Technology to Financial Management Behavior is relatively stronger than its role in linking Social Environment to Financial Management Behavior.

The results of the structural model reveal a consistent pattern: neither of the two external factors has a significant direct effect on Financial Management Behavior, but both have a significant effect on Self-Control, and Self-Control, in turn, has a strong effect on Financial Management Behavior. Both indirect paths were also found to be significant. This pattern suggests that the relationship between external factors and financial management behavior in the model is better understood through the internal mechanism of Self-Control rather than through direct relationships. Thus, the test results support all hypotheses involving Self-Control as a predictor or mediator (H3–H7), while the two hypotheses regarding the direct effects of Financial Technology and Social Environment on Financial Management Behavior (H1–H2) do not receive empirical support.

DISCUSSION

Financial Technology Does Not Significantly Influence Financial Management Behavior

The results of this study indicate that financial technology does not have a significant direct effect on financial management behavior. These findings suggest that the availability and use of financial technology do not automatically change the way individuals manage their finances. Financial technology primarily provides access, ease of transactions, information, and various financial management tools; however, the decision to use these tools in a disciplined manner still depends on the user's internal capacity. These findings are consistent with the literature, which indicates that financial management behavior is influenced by a combination of psychological, social, and technological factors; thus, the presence of technology cannot be viewed as the sole determinant of financial behavior (Goyal et al., 2021). The meta-analysis by Goyal et al. (2022) also confirms that psychological factors, particularly self-control, play a crucial role in explaining variations in financial management behavior. Thus, technology can provide the means to manage finances, but it does not directly determine how individuals use those means (Goyal et al., 2021, 2022).

The lack of significance in this direct effect also suggests that the benefits of financial technology are conditional. Digital tools can be used to track spending and plan finances, but the same tools can also speed up transactions and reduce barriers to making purchases. Therefore, the intensity of fintech use is not always synonymous with the quality of financial management. Empirical findings showing that fintech has no direct effect but that its influence may operate through psychological mechanisms further reinforce this interpretation (Li et al., 2023). In the context of this study, the results of H1 are significant because they indicate that technology is more appropriately positioned as an enabling condition rather than as a determinant of behavior. The theoretical implication is that the influence of technology on financial behavior must be understood through an individual's capacity to process information, evaluate consequences, and control actions in line with financial goals (Goyal et al., 2022).

Social Environment Does Not Significantly Influence Financial Management Behavior

The research results also indicate that the social environment does not have a significant direct effect on financial management behavior. These findings suggest that exposure to financial values, norms, experiences, and information from family, peers, the community, or social networks does not necessarily result in immediate changes in financial behavior. The process of financial socialization essentially provides a source of learning and shapes financial orientation; however, acceptance of social influences is not always synonymous with their application in day-to-day financial decisions (Fan et al., 2022). The literature on financial planning indicates that financial socialization is a relevant factor in shaping financial behavior, but this process interacts with psychological factors and decision-making processes before resulting in actual behavior (Yeo et al., 2024). Thus, the results of H2 reveal a gap between social exposure and behavioral enactment that needs to be explained through individual internal mechanisms.

This finding can also be explained by the characteristics of the increasingly heterogeneous social environment in the digital age. Individuals not only receive financial norms from family and friends but also from social media, online communities, and various digital information sources that may convey different or even conflicting financial messages (Hayes & Ben-Shmuel, 2024). The existence of an informative social environment does not guarantee that individuals will internalize all of these messages into consistent behavior. Empirical evidence shows that financial socialization and self-control are both associated with saving behavior, but their contributions may vary depending on the context and financial product (Boto-García et al., 2022). The results for H2 therefore do not indicate that the social environment is unimportant, but rather that its influence on financial management behavior is neither automatic nor direct. Within the framework of Self-Regulation Theory, social influences must first be processed and internalized before they can be translated into consistent financial actions (Bandura, 1969).

Financial Technology Positively Influences Self-Control

Unlike its direct effect on Financial Management Behavior, Financial Technology has a positive and significant effect on Self-Control. These findings suggest that the most relevant function of financial technology in the model is not merely to provide a means of conducting transactions, but to provide an information environment that enables individuals to monitor and evaluate their financial activities. Features such as transaction history,

balance information, payment notifications, digital record-keeping, and various forms of feedback can increase the visibility of financial behavior, making it easier for individuals to recognize the alignment between their actual actions and their financial goals (Dashkevich et al., 2024). From the perspective of Self-Regulation Theory, information regarding current conditions is a crucial element in the process of self-monitoring and self-evaluation (Bandura, 1969, 1991). Thus, technology can reinforce the conditions that enable individuals to engage in self-regulation more consistently.

This finding also provides an important explanation for the results of H1. If financial technology does not have a direct effect on financial management behavior but does have a significant effect on self-control, then technology is better understood as a stimulus that reinforces self-regulatory mechanisms rather than as a direct determinant of behavior. Empirical literature shows that self-control strategies which help individuals monitor spending, limit consumption, and maintain focus on financial goals can tangibly improve financial outcomes, such as reduced spending and increased savings (Davydenko et al., 2021). Thus, financial technology is more effective when its digital features are used as monitoring and feedback tools, rather than merely as payment facilities. These findings reinforce the argument that the value of fintech lies not solely in its adoption rate, but in how the technology supports users' self-regulation processes.

Social Environment Positively Influences Self-Control

The social environment has a positive and significant effect on self-control, indicating that the social environment plays a role in shaping an individual's internal capacity to control financial behavior. Family, peers, and the community can provide norms, behavioral examples, expectations, and feedback that help individuals understand what is considered appropriate financial behavior (Peeters et al., 2018). In this process, social influence does not necessarily lead directly to specific financial actions but can shape standards that individuals later use to evaluate their own behavior. Empirical evidence indicates that financial socialization from early in life is positively associated with saving behavior and self-control, suggesting a link between social experiences and the ability to manage financial behavior (Boto-García et al., 2022; Drever et al., 2015). These findings are consistent with the Self-Regulation Theory framework because the external environment can provide standards and feedback that are subsequently used in the self-evaluation process (Bandura, 1991).

The H4 results also help explain why the direct effect of the social environment on financial management behavior is not significant. The social environment appears to shape self-control capacity first, before that influence manifests in actual financial behavior. In other words, financial norms and experiences from the social environment become more effective when individuals are able to internalize them and use them to regulate financial decisions. Yeo et al. (2024) identify financial socialization as a key component in shaping financial planning behavior but note that this process is embedded within a broader network of psychological and decision-making factors. Therefore, the findings of this study expand our understanding of the social environment by demonstrating that social influence extends beyond the mere transfer of information or norms; it can contribute to the formation of internal mechanisms that underlie financial behavior.

Self-Control Positively Influences Financial Management Behavior

Self-control exhibits the strongest and most positive influence on financial management behavior in the research model. These findings confirm that an individual's ability to control short-term impulses, evaluate consequences, and maintain behavior consistent with financial goals is a critical factor in shaping financial management behavior. The meta-analysis by Goyal et al. (2022) provides strong support for the role of self-control as one of the key psychological antecedents of personal financial management behavior, based on a synthesis of 32 studies and 52 empirical relationships. Thus, the results of this study reinforce the evidence that financial management behavior is not merely a matter of resource availability or knowledge, but also the ability to control one's actions when faced with competing financial choices.

From the perspective of Self-Regulation Theory, self-control functions as a mechanism that links financial goals to actual actions through the processes of monitoring, evaluation, and behavioral adjustment (Bandura, 1991; Hernandez-Perez & Cruz Rambaud, 2025; Oaten & Cheng, 2007). Individuals may have access to technology, information, and a supportive social environment, but without the ability to control their responses to consumption temptations, social pressures, or short-term decisions, these resources do not necessarily lead to responsible financial behavior. Meta-analytic evidence on self-control strategies also indicates that strategies designed to help individuals control spending and increase savings produce significant effects on financial behavior (Davydenko et al., 2021). Therefore, the magnitude of the influence of self-control in this study suggests that strengthening self-regulatory capacity is a more direct pathway to the development of financial management behavior than simply increasing access to external factors.

The Mediating Role of Self-Control between Social Environment and Financial Management Behavior

The mediation results indicate that the social environment influences financial management behavior through self-control. This finding is important because the direct path from the social environment to financial

management behavior is not significant, whereas the indirect path through self-control is significant. This pattern suggests that the influence of the social environment becomes more meaningful when information, norms, and financial experiences from the environment first contribute to the development of self-control capacity. This finding is consistent with (Boto-García et al., 2022), who found that financial socialization and self-control are both associated with saving behavior. These results also reinforce the view that financial socialization does not work solely through the provision of knowledge but can shape psychological capacities that help individuals direct their behavior toward financial goals.

Theoretically, the findings of H6 clarify a mechanism that was previously less apparent when the social environment was treated solely as a direct predictor. Within the framework of Self-Regulation Theory, the social environment provides standards, norms, experiences, and feedback, while self-control enables individuals to process these influences and translate them into actions consistent with their financial goals (Bandura, 1991). Thus, the lack of a significant direct effect does not mean that the social environment is irrelevant; rather, it indicates that this influence requires internal mechanisms to manifest in actual behavior. Yeo et al. (2024) also demonstrate that financial socialization is an important component of the architecture of financial planning behavior, but the process leading to actual behavior involves various psychological mechanisms and decision-making processes. The results of this study therefore contribute by identifying Self-Control as the mechanism that explains how social influence is translated into Financial Management Behavior.

The Mediating Role of Self-Control between Financial Technology and Financial Management Behavior

The mediation results indicate that Financial Technology influences Financial Management Behavior through Self-Control, with a stronger indirect effect than the Social Environment mediation path. These findings provide an empirical explanation for why the direct effect of Financial Technology on Financial Management Behavior is not significant. Technology does not automatically lead to better financial behavior because its functionality depends on how users process information and manage decisions arising from the digital environment. Research on fintech and financial management behavior also indicates that technology can provide benefits for financial management, but its effects may depend on users' psychological characteristics (Shiau et al., 2020). Thus, the results of this study demonstrate that technology is more effective as a supporting mechanism for self-regulation than as a direct driver of financial behavior.

Finding H7 reinforces the study's main contribution: that the relationship between the external environment and financial management behavior occurs through internal processes. Financial technology provides information, access, and feedback that can strengthen monitoring, while self-control determines whether that information and those tools are used consistently with financial goals (Bandura, 1991; Bu et al., 2022). Evidence regarding self-control strategies in the financial domain shows that mechanisms that help individuals control their spending and maintain savings goals can lead to substantial behavioral changes (Davydenko et al., 2021). Thus, the results of H7 confirm that expanding access to fintech should not only focus on adoption and transaction efficiency but also on designing features that support monitoring, budgeting, feedback, and goal-setting. Theoretically, these findings strengthen Self-Regulation Theory by demonstrating that external conditions can influence financial behavior through internal mechanisms that transform digital stimuli into more purposeful financial actions. Evidence regarding self-control strategies in the financial domain shows that mechanisms that help individuals control their spending and maintain savings goals can lead to substantial behavioral changes (Davydenko et al., 2021). Thus, the results of H7 confirm that expanding access to fintech should not only focus on adoption and transaction efficiency but also on designing features that support monitoring, budgeting, feedback, and goal-setting. Theoretically, these findings strengthen Self-Regulation Theory by demonstrating that external conditions can influence financial behavior through internal mechanisms that transform digital stimuli into more purposeful financial actions.

CONCLUSION

This study concludes that financial management behavior in the digital age is influenced more by individuals' internal capacity to manage their financial decisions than by the direct availability of financial technology and the social environment. The findings indicate that financial technology and the social environment do not have a significant direct effect on financial management behavior; however, both significantly enhance self-control, which in turn has the strongest positive effect on financial management behavior. Furthermore, Self-Control significantly mediates the relationship between Financial Technology and Financial Management Behavior as well as between the Social Environment and Financial Management Behavior, indicating that external resources and social influences become behaviorally meaningful when internalized through the process of self-regulation. These findings expand Self-Regulation Theory by positioning Self-Control as the central psychological mechanism that translates technological and social conditions into actual financial management practices. Theoretically, this study therefore shifts the focus from viewing digital financial access and social influences as direct determinants to an understanding of how these external conditions support the regulation of internal behavior. In practice, financial technology providers, educators, and policymakers should not only focus on expanding digital financial access but also develop

digital interventions and features that strengthen monitoring, budgeting, feedback, goal-setting, and disciplined financial decision-making. Overall, this study highlights that improving financial management behavior requires not only a better external financial environment but also stronger individual capacity to regulate financial behavior.

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