

Financial Behavior among Bank Employees: Impact of Digital Tools and Social Comparison Orientation

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Abstract :

This study investigates the influence of Social Comparison Orientation (SCO) and Digital Financial Technology (DFT) on Financial Management Behavior (FMB), with Financial Self-Efficacy (FSE) as a mediating variable and Financial Socialization (FS) as a moderating variable. The novelty of this research lies in its integrated model combining psychological constructs and digital financial tools within the behavioral finance framework, applied to employees of PT BPD Sulawesi Tenggara—an underexplored population in prior studies. Employing a quantitative, cross-sectional design, the study collected data from 300 respondents through purposive sampling. Partial Least Squares Structural Equation Modeling (PLS-SEM) was used for hypothesis testing. The results show that DFT and FSE have a significant positive effect on FMB, while SCO does not significantly influence FMB directly. However, FSE mediates the relationship between SCO and FMB, as well as between DFT and FMB. FS has a direct positive effect on FMB but fails to significantly moderate the relationship between both SCO and FMB and DFT and FMB. The findings suggest that while socialization is important, its moderating role diminishes among financially literate professionals. The study contributes to extending the Theory of Planned Behavior and Social Cognitive Theory in the context of financial digitalization. These results offer practical implications for financial institutions to foster digital adoption and internal capacity-building among employees to enhance their financial management behavior.

Keywords: Digital Financial Technology, Financial Management Behavior, Financial Self-Efficacy, Financial Socialization, Social Comparison Orientation.

Introduction

In the modern digital economy, individuals are increasingly required to make independent financial decisions amidst rapid technological change and growing economic complexity. Financial management behavior (FMB), which encompasses budgeting, saving, debt management, and informed financial decision-making, has become an essential competency in everyday life (Kang et al., 2025). A significant body of research has focused on the antecedents of sound financial behavior, among which financial self-efficacy (FSE), digital financial technology (DFT), and social influence have drawn considerable attention (Napu et al., 2025), (Nurkholik, 2024), (Babu & Velmurugan, 2024).

Social comparison orientation (SCO) refers to an individual's tendency to compare themselves with others to evaluate their own abilities and opinions (Wang et al., 2024). In the context of personal finance, SCO can shape financial behavior either positively—by motivating individuals to improve—or negatively—by fostering unrealistic standards and impulsive consumption. Although several studies have examined the direct impact of SCO on financial outcomes, the results remain inconclusive. Some have shown that SCO significantly influences financial decisions through mechanisms such as peer influence and perceived norms (Wang et al., 2024), while others report a nonsignificant or inconsistent effect (Huynh et al., 2024).

Meanwhile, digital financial technology (DFT) has revolutionized how people interact with financial systems. Tools such as mobile banking, e-wallets, and online investment platforms have enabled greater access, convenience, and personalization in financial management. Research shows that DFT positively affects financial behavior by lowering barriers to financial engagement and increasing user confidence (Nurkholik, 2024). However, technology alone may not suffice in shaping behavior. The user's psychological readiness—particularly their financial self-efficacy—plays a pivotal role in translating digital access into meaningful behavioral change (Babu & Velmurugan, 2024).

Financial self-efficacy (FSE), or the belief in one's ability to manage financial tasks, has been shown to mediate the relationship between knowledge, tools, and financial action (Shah et al., 2024), (Napu et al., 2025). Individuals with high FSE are more likely to use financial technology effectively and demonstrate responsible financial behavior. Furthermore, the concept of financial socialization (FS)—the process through which individuals acquire financial knowledge, norms, and habits from family, peers, and institutions—has been highlighted as both a direct and moderating factor in financial decision-making (Kang et al., 2025). Yet, its moderating role in the context of SCO and DFT on FMB has not been sufficiently tested, especially among working adults in professional settings.

Despite these developments, most existing studies focus on students or general populations, leaving a research gap in understanding how these constructs interact among professionals in regulated financial environments. The current study addresses this gap by investigating the effect of SCO and DFT on FMB, using FSE as a mediator and FS as a moderator, among employees of PT BPD Sulawesi Tenggara, a regional development bank in Indonesia. This context is particularly relevant as banking professionals are expected to exhibit sound financial behavior, yet may still be influenced by social and technological dynamics.

This study is grounded in the Theory of Planned Behavior (TPB) and Social Cognitive Theory (SCT), which emphasize the roles of intention, perceived control, and learning from social environments in shaping behavior (Kang et al., 2025). A quantitative approach is employed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze data from 300 bank employees. The results are expected to clarify the mechanisms through which social and technological factors influence financial behavior and offer practical insights for enhancing financial literacy and digital engagement strategies in professional settings.

Accordingly, this research seeks to answer the following questions: (1) Does SCO significantly influence FMB directly or indirectly through FSE? (2) Does DFT improve FMB directly or via increased FSE? (3) Can FS enhance or weaken the effects of SCO and DFT on FMB? By addressing these questions, the study contributes to the evolving literature on behavioral finance and digital inclusion, offering a more nuanced understanding of financial behavior in emerging economies.

Methods/Materials:

This study employed a quantitative, cross-sectional design grounded in the positivist paradigm, aiming to test hypotheses regarding the effects of Social Comparison Orientation (SCO) and Digital Financial Tools (DFT) on Financial Management Behavior (FMB), with Financial Self-Efficacy (FSE) as a mediating variable and Financial Socialization (FS) as a moderator. The explanatory research design was adopted to explore causal relationships between variables (Henseler et al., 2015).

Population and Sample

The population comprised all employees of PT Bank Pembangunan Daerah Sulawesi Tenggara (Bank Sultra), totaling 1,011 individuals. A simple random sampling technique was applied to select respondents. Using Slovin's formula with a 10% margin of error, the minimum required sample size was 287. In total, 300 valid responses were collected, exceeding the minimum threshold for analysis using PLS-SEM.

Data Collection

Primary data were collected through structured questionnaires distributed via an online survey. The questionnaire measured five constructs: Social Comparison Orientation, Digital Financial Tools, Financial Self-Efficacy, Financial Socialization, and Financial Management Behavior. All items were measured on a 5-point Likert scale. Demographic data including gender, marital status, age, income, education, and employment were also collected to characterize the respondents.

Instruments and Indicators

Social Comparison Orientation (SCO): Measured by indicators of comparison frequency, awareness, and motivation (Huynh et al., 2024), (Wang et al., 2024). Digital Financial Tools (DFT): Measured through indicators of access, security, usage frequency, and usefulness (Nurkholik, 2024). Financial Self-Efficacy (FSE): Assessed via confidence in managing finances, achieving financial goals, and overcoming challenges (Napu et al., 2025), (Shah et al., 2024). Socialization (FS): Measured through financial discussion, parental guidance, and financial responsibility (Kang et al., 2025). Financial Management Behavior (FMB): Measured by indicators of budgeting, bill payments, savings, and planning for retirement (Kang & Park, 2024) .

Data Analysis

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.1.1.2 software. The analysis proceeded in two stages: evaluation of the measurement model (convergent validity, discriminant validity, and reliability) and the structural model (path coefficients, R^2 , effect size, and predictive relevance). The mediating role of FSE and moderating role of FS were tested using the bootstrapping method with 5,000 resamples (Hair et al., 2019).

Results

The measurement model was first evaluated to ensure the validity and reliability of the constructs. Figure 1 displays the outer model, showing the outer loadings of each indicator on its corresponding latent construct. All indicators have loading values greater than the recommended threshold of 0.70, indicating that the items are valid in measuring their respective constructs. The outer model evaluation provides the foundation for proceeding to the structural model analysis through the bootstrapping procedure.

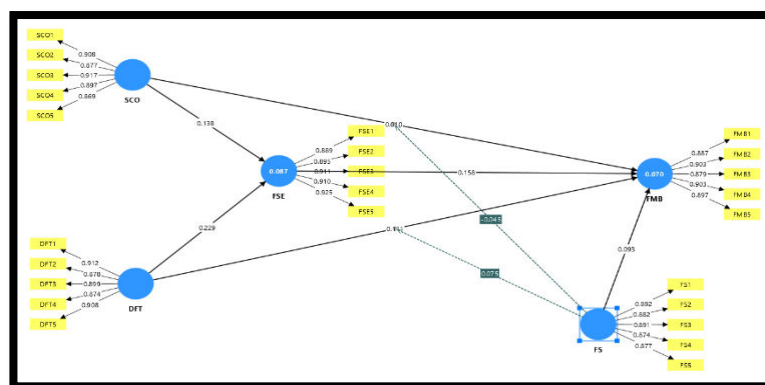


Figure 1 Construct Outer Loadings

Following this stage, the structural model was analyzed. Figure 2 illustrates the bootstrapping results with the estimated path coefficients between the latent constructs.

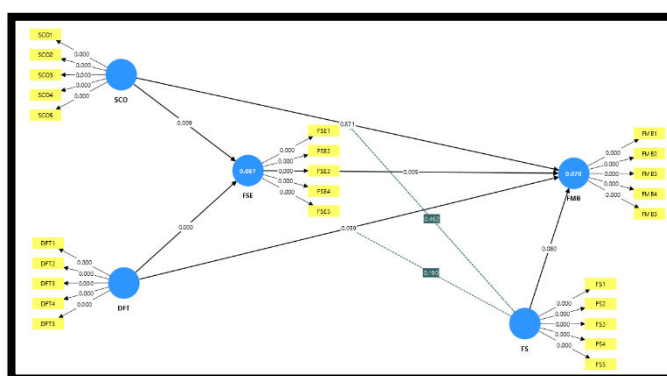


Figure 2 Bootstrapping Result

To provide more detailed information, Table 1 presents the complete path analysis results, including original sample values, standard deviations, t-statistics, and p-values for each hypothesized relationship.

Table 1 Path Analysis Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
DFT -> FMB	0.111	0.112	0.058	1.891	0.059
DFT -> FSE	0.229	0.233	0.055	4.181	0.000
FS - > FMB	0.093	0.105	0.053	1.751	0.080
FS x DFT -> FMB	0.075	0.074	0.057	1.311	0.190
FS x SCO -> FMB	-0.045	-0.043	0.062	0.735	0.462
FSE -> FMB	0.158	0.157	0.056	2.830	0.005
SCO -> FMB	0.010	0.009	0.062	0.162	0.871
SCO -> FSE	0.138	0.141	0.053	2.609	0.009

Source: Data processing results via Smart PLS 4.0, 2025

Table 1 shows the path analysis results using Smart PLS 4.0. The effect of Digital Financial Tools (DFT) on Financial Management Behavior (FMB) obtained an original sample value of 0.111, with a t-statistic of 1.891 and a p-value of 0.059. This result indicates a positive and significant effect at the 10% significance level. The relationship between DFT and Financial Self-Efficacy (FSE) was positive and significant with an original sample of 0.229, a t-statistic of 4.181, and a p-value of 0.000. Similarly, Financial

Socialization (FS) toward FMB had an original sample value of 0.093, a t-statistic of 1.751, and a p-value of 0.080, showing a significant effect at the 10% level. The moderating effect of FS on the relationship between DFT and FMB showed an original sample of 0.075, a t-statistic of 1.311, and a p-value of 0.190, which was not significant. Likewise, the moderating effect of FS on the relationship between Social Comparison Orientation (SCO) and FMB yielded an original sample of -0.045, a t-statistic of 0.735, and a p-value of 0.462, which was also not significant. Furthermore, the effect of FSE on FMB was significant with an original sample of 0.158, a t-statistic of 2.830, and a p-value of 0.005. The direct effect of SCO on FMB was not significant ($O = 0.010$, $p = 0.871$). Finally, SCO on FSE showed a positive and significant effect with an original sample of 0.138, a t-statistic of 2.609, and a p-value of 0.009.

Discussion

This study examined the influence of Social Comparison Orientation (SCO), Digital Financial Technology (DFT), Financial Self-Efficacy (FSE), and Financial Socialization (FS) on Financial Management Behavior (FMB) among employees of PT BPD Sulawesi Tenggara. The findings revealed a nuanced relationship between these variables, confirming some hypotheses while rejecting others.

First, the direct effect of SCO on FMB was found to be positive but statistically insignificant. This indicates that although individuals may often engage in social comparisons, such behavior alone does not directly shape their financial management practices. This result contradicts prior studies (Pahlevan Sharif et al., 2022), (Pillai & Nair, 2021), (Ahamed & Limbu, 2024) that found a strong link between social comparison and financial behavior, but aligns (Wang et al., 2024), who suggested that social comparison may play a more observational rather than behavioral role in certain contexts. However, this study found that SCO significantly influenced FSE, which in turn significantly predicted FMB, confirming the mediating role of self-efficacy (Napu et al., 2025), (Ahamed & Limbu, 2024). This suggests that SCO can enhance financial behavior indirectly by increasing individuals' confidence in managing their finances.

The role of DFT emerged as both directly and indirectly significant in influencing FMB. Respondents who utilized digital financial tools reported higher levels of financial self-efficacy, which in turn reinforced better financial management behavior. These findings are consistent with prior studies (Abdallah et al., 2024), which highlight that the accessibility and perceived usefulness of DFT contribute to improved financial decision-making. It also validates the argument that technology is not merely a transactional tool but can trigger behavioral improvements when paired with internal capabilities like self-efficacy (Chaity et al., 2024).

Financial socialization also had a significant direct effect on FMB. This finding reinforces the role of early and ongoing exposure to financial norms and discussions in shaping sound financial habits (Zhao & Zhang, 2020), (Kaur, 2024). However, FS did not significantly moderate the effects of either SCO or DFT on FMB. One plausible explanation is that employees in a professional banking environment are more influenced by formal training and work experiences than by informal learning or social cues. Therefore, while FS still contributes directly to financial behavior, its moderating capacity may diminish once individuals reach financial maturity within structured environments.

In summary, this study supports the notion that internal psychological factors like self-efficacy and technology adoption play a more pronounced role in driving financial behavior than external social comparisons or interactions, at least within a professional population. These insights offer practical implications for banking institutions and policymakers seeking to enhance financial literacy and behavior through targeted interventions focused on self-efficacy development and technological empowerment.

The strength of this study lies in its comprehensive model, which integrates psychosocial and technological determinants with a large sample of professional employees. This offers a nuanced understanding of financial behavior beyond students or general populations, contributing new insights to both theory and practice. The use of Partial Least Squares Structural Equation Modeling (PLS-SEM) also strengthens the statistical rigor of the findings.

However, this study has limitations. It uses a cross-sectional design, which restricts the ability to infer causality. Additionally, the scope is limited to employees of one organization, which may affect generalizability.

Conclusion

This study investigated the impact of Social Comparison Orientation (SCO), Digital Financial Technology (DFT), Financial Self-Efficacy (FSE), and Financial Socialization (FS) on Financial Management Behavior (FMB) among employees at PT BPD Sulawesi Tenggara, with a particular emphasis on the mediating role of FSE and the moderating role of FS.

- 1) The findings confirmed that DFT and FSE had a significant positive effect on FMB, indicating that both technological readiness and psychological confidence are essential drivers of responsible financial behavior in a professional context.
- 2) SCO was not directly associated with FMB, but it significantly influenced FSE, which in turn mediated its indirect effect on FMB. This suggests that the influence of social comparison is channeled through

individual perceptions of financial capability rather than directly impacting behavior.

3) FS was found to significantly influence FMB directly, but it did not significantly moderate the relationships between SCO-FMB or DFT-FMB. This reflects that while financial upbringing and learning environments shape financial habits, their influence as enhancers of specific variable interactions may diminish in structured, mature financial environments.

These results reinforce the importance of strengthening financial self-efficacy through targeted interventions and integrating digital financial tools in financial literacy programs. Future research may explore additional mediators or moderators such as financial stress or digital literacy level, and extend the scope to broader populations, such as gig workers or rural communities, to enhance the generalizability of the findings.

This study contributes theoretically by refining the understanding of how psychological and technological factors interact to shape financial behaviors, and practically by offering insights for organizations aiming to improve employee financial well-being.

Practical Recommendations

Organizations should implement structured financial education and self-efficacy programs to enhance employees' confidence in managing personal finances. Since FSE mediates both SCO and DFT influences on FMB, investing in internal financial coaching or peer mentoring can promote healthier financial behaviors.

Employers can collaborate with financial service providers to ensure that employees are well-informed and equipped to use secure and user-friendly financial apps. As DFT has a direct and significant effect on FMB, fostering digital literacy can streamline budgeting, saving, and responsible spending among staff.

Although FS did not moderate SCO and DFT effects, its direct impact on FMB indicates that financial values and norms shared at work still matter. Financial wellness seminars, success story-sharing sessions, and team-based financial challenges may foster a healthy financial culture.

Given that SCO influences FMB through FSE, interventions that address emotional and cognitive responses to social comparison (e.g., envy, motivation, self-awareness) could strengthen financial self-efficacy. Positive framing in internal communications (e.g., celebrating budgeting milestones) could serve as a subtle reinforcement.

Since the effect of FS may vary based on age, tenure, or role, HR departments are advised to tailor financial empowerment programs accordingly. Personalized nudges and digital tracking tools may be more effective than generic messages..

Future Research

Future research can explore financial management behavior across various industries beyond the banking sector. A comparative study between public and private sector employees, or between urban and rural settings, may yield richer insights into contextual financial behavior differences.

This study used a cross-sectional design. Longitudinal studies are encouraged to observe how financial self-efficacy, social comparison orientation, and digital financial tool usage influence financial behavior over time, particularly as fintech and employee financial wellness initiatives evolve.

While this study focused on financial socialization as a moderator, future studies may investigate the moderating roles of cultural orientation (e.g., collectivism vs. individualism), personality traits (e.g., conscientiousness), or financial stress, which may enrich the understanding of behavioral financial models.

Digital financial tools were assessed as a general construct. Future research should distinguish between types of tools (e.g., e-wallets, investment platforms, digital budgeting apps) and assess their differential impacts on financial behavior and efficacy.

To complement the quantitative findings, qualitative methods such as interviews or focus group discussions could uncover underlying psychological mechanisms, personal narratives, and emotional drivers influencing financial decisions.

Declarations

Author Contributions

Conceptualization, Normayana and Dedy Takdir Syaifuddin; methodology, Normayana; software, Normayana; validation, Normayana, Sulvariani Tamburaka, and Wahyuniati Hamid; formal analysis, Normayana; investigation, Normayana; resources, Normayana; data curation, Normayana; writing—original draft preparation, Normayana; writing—review and editing, Dedy Takdir Syaifuddin, Sulvariani Tamburaka, Fauzi Djibrán and Wahyuniati Hamid; visualization, Normayana; supervision, Dedy Takdir Syaifuddin; project administration, Fauzi Djibrán. All authors have read and agreed to the published version of the manuscript.

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Conflicts of Interest

The authors declare that they have no conflict of interest regarding the publication of this paper.

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