



DIGITAL FINANCIAL BEHAVIOUR, MOBILE CREDIT DEPENDENCY AND FINANCIAL WELL-BEING AMONG STUDENTS IN POLYTECHNICS IN SOUTH-WEST NIGERIA

AJITERU W. O.¹, SULAIMAN S. A.¹, and NJOKU F. J.²

¹*Department of Accountancy, Federal Polytechnic Ede, Osun State, P.M.B 231, Nigeria*

²*Department of Taxation, Federal Polytechnic Ede, Osun State, P.M.B 231, Nigeria*

Abstract

Nigerian polytechnic students now manage money largely through mobile banking, digital wallets and payment apps. This study examined digital financial behaviour, mobile credit dependency and financial well-being among students in polytechnics in South-West Nigeria, and the relationships among them. A quantitative, survey-based correlational design was used, with a multistage sampling procedure yielding 240 students across six polytechnics. A validated questionnaire measured the three constructs, and data were analysed using descriptive statistics, Pearson correlation, multiple regression and structural equation modelling. Digital financial engagement was high, with 94.6% using mobile banking or digital wallets, yet 54.2% had used instant mobile credit, 32.3% reported difficulty repaying and 21.5% had borrowed to repay another loan. Financial well-being was moderate (mean = 3.12 on a 5-point scale), and 60.8% felt stressed about their finances. Digital financial behaviour was positively associated with financial well-being ($r = 0.38$, $p < 0.001$), whereas mobile credit dependency was negatively associated with it ($r = -0.44$, $p < 0.001$). Mobile credit dependency partially mediated the relationship between digital financial behaviour and financial well-being (indirect effect = -0.14 , $p < 0.01$). The findings support financial education and consumer protection interventions for polytechnic students.

Keywords: digital financial behaviour; mobile credit; financial well-being; polytechnic students; Nigeria; financial literacy

Introduction

The financial lives of young people have been transformed by digitalisation, and Nigerian polytechnic students now routinely manage money through mobile banking, digital wallets and payment apps rather than cash and bank branches. This shift promises convenience, inclusion and better money-management tools, and access to formal digital financial services can support responsible practices such as saving, budgeting and prudent credit use (Choung et al., 2023). Research on digital financial literacy has established that it encompasses not only knowledge of digital financial products but also the skills and behaviours required to use them effectively, including the ability to navigate digital platforms securely, understand digital contracts, and manage digital transactions responsibly. Understanding how students actually behave in this digital financial environment, and with what consequences, has therefore become an important question for educators and policymakers. Studies have shown that digital financial literacy has a significant positive influence on financial well-being through its effect on financial behaviour, with financial behaviour acting as a partial mediator in this relationship.

A defining feature of the new environment is the explosion of instant mobile credit. Digital lenders use algorithms and mobile-phone data to extend short-term loans to individuals without formal credit histories, dramatically expanding access, and evidence from Nigeria and elsewhere shows such credit can, under some conditions, lift borrowers' subjective well-being (Björkegren et al., 2023; Chen et al., 2025). Research using mobile phone data has demonstrated that digital lending can improve financial well-being by expanding access to credit, but the effects are heterogeneous and depend on how borrowers use the credit and their ability to manage repayment. Yet the same short-term, high-interest products raise concerns about predatory lending, over-borrowing and debt traps, and the balance of benefit and harm is far from settled (Chen et al., 2025). Studies have documented that digital lending apps in Nigeria have been associated with aggressive collection practices, privacy violations, and debt stress among borrowers, raising consumer protection concerns that have prompted regulatory scrutiny by the Federal Competition and Consumer Protection Commission.

The relationship between digital financial engagement and well-being is genuinely mixed in the evidence. Digital financial literacy and responsible behaviour are associated with better financial



outcomes, but digital access to credit and frictionless spending can also prompt impulsive borrowing and consumption that undermine financial security (Dewmini et al., 2023; Emmanuel & Akpughe, 2024). Among students specifically, cashless and wallet-based spending has been shown to reshape financial behaviour in ways that are not uniformly positive (Fikri et al., 2025). Studies of digital wallets and student finances have documented significant behavioural shifts, including increased spending frequency, reduced awareness of expenditure, and exposure to socially influenced financial behaviour, indicating that students are a distinctive and important population for study. The financial well-being of university students has been shown to be influenced by multiple factors, including financial literacy, financial behaviour, and financial stress, with financial stress acting as a significant predictor of academic performance and overall well-being.

Despite this, there is limited localised evidence on how South-West polytechnic students behave financially in the digital environment, how dependent they have become on mobile credit, and how these relate to their financial well-being. Much of the relevant work is international or addresses general populations rather than the specific circumstances of Nigerian polytechnic students, who combine constrained incomes with high digital adoption (Fikri et al., 2025). Nigerian research on financial well-being has focused primarily on formal sector workers and university students, with limited attention to polytechnic students, who constitute a distinct and significant population in the Nigerian higher education system. This study addresses that gap by measuring students' digital financial behaviour, mobile credit dependency and financial well-being and modelling the relationships among them, providing the evidence needed for targeted intervention.

Statement of the Problem

Polytechnic students in South-West Nigeria are deeply embedded in digital finance, transacting and increasingly borrowing through mobile apps, yet the consequences of this engagement for their financial well-being are poorly understood. The proliferation of instant mobile credit, easy to obtain but often short-term and high-cost, creates a real risk of dependency, over-borrowing and debt stress among a population with limited and irregular income, while frictionless digital spending may encourage impulsive consumption (Chen et al., 2025; Emmanuel & Akpughe, 2024). The difficulty is that the extent of students' digital financial behaviour, the degree of their reliance on mobile credit, and the way these relate to their financial well-being are largely unmeasured in this context, so educators and policymakers lack the evidence needed to distinguish healthy inclusion from harmful dependency and to intervene appropriately (Dewmini et al., 2023). This evidentiary gap leaves a potentially vulnerable population without informed support.

The consumer protection dimension of the problem is particularly significant. Nigerian digital lending apps have been the subject of regulatory intervention due to concerns about unethical practices, including harassment of borrowers and their contacts, unauthorized access to personal data, and exorbitant interest rates. The Federal Competition and Consumer Protection Commission has taken action against several digital money lenders for regulatory infractions, and the Nigeria Data Protection Commission has raised concerns about privacy violations in digital lending operations. These regulatory actions underscore the need for evidence on how young Nigerians interact with digital credit and the consequences for their financial well-being.

Financial well-being is closely tied to students' academic performance, mental health and life outcomes, and the rapid, largely unregulated spread of mobile credit makes understanding its effects urgent (Choung et al., 2023). Research has demonstrated that financial stress among students is associated with lower academic performance, increased dropout rates, and adverse mental health outcomes. The relationship between financial well-being and academic success has been documented in multiple contexts, with financial stress emerging as a significant predictor of academic performance and retention. By producing a rigorous, localised measurement of students' digital financial behaviour, credit dependency and well-being and the relationships among them, the study equips institutions, regulators and financial-education providers with the specific evidence needed to design protective and empowering interventions. The beneficiaries are substantial: students gain from better-targeted financial education and consumer protection; institutions gain insight into a factor affecting student success; and regulators gain evidence on digital-credit practices among the young. This study addresses that gap by measuring these constructs and their relationships among South-West polytechnic students, providing localised evidence for intervention.



Purpose of the Study

The main purpose of the study was to examine digital financial behaviour, mobile credit dependency and financial well-being among students in polytechnics in South-West Nigeria, and the relationships among them. The specific objectives:

- i. To assess the digital financial behaviour of polytechnic students in South-West Nigeria;
- ii. To determine the extent and drivers of students' dependency on mobile credit;
- iii. To assess students' financial well-being;
- iv. To examine the relationships among digital financial behaviour, mobile credit dependency and financial well-being; and
- v. To generate evidence-based recommendations for financial education and consumer protection.

Research Questions

1. What is the digital financial behaviour of polytechnic students in South-West Nigeria?
2. What is the extent and what are the drivers of students' dependency on mobile credit?
3. What is the financial well-being of polytechnic students in South-West Nigeria?
4. What are the relationships among digital financial behaviour, mobile credit dependency and financial well-being?
5. What evidence-based recommendations can be generated for financial education and consumer protection?

Literature Review

Digitalisation has reshaped personal finance, and a growing literature examines its behavioural consequences. Studies of digital financial literacy and behaviour show that access to and competence with digital financial services can support responsible practices such as saving, budgeting and prudent credit use, linking digital financial capability to better financial outcomes (Choung et al., 2023). Digital financial literacy has been conceptualised as comprising three dimensions: financial knowledge, digital financial knowledge, and digital financial behaviour, with all three contributing to financial well-being. Research has demonstrated that financial behaviour acts as a mediator between digital financial literacy and financial well-being, suggesting that knowledge translates into well-being through behaviour. This establishes digital financial behaviour as a meaningful and measurable determinant of well-being.

A prominent strand concerns digital and mobile credit specifically. Research shows that digital lenders, using algorithms and mobile-phone data, have expanded credit access dramatically, and that in some settings, including Nigeria, instant loans can raise borrowers' subjective well-being (Björkegren et al., 2023). Studies using mobile phone data have shown that digital lending can improve financial well-being by expanding access to credit, but the effects are heterogeneous and depend on borrower characteristics and usage patterns. At the same time, studies caution that short-term, high-interest digital credit raises risks of predatory lending and debt, so the welfare effects are conditional rather than uniformly positive (Chen et al., 2025). Nigerian digital lending apps have been criticised for aggressive collection practices, privacy violations, and exorbitant interest rates, prompting regulatory action by the Federal Competition and Consumer Protection Commission. The balance between expanded access and consumer protection remains a central policy challenge.

A third strand documents the mixed effects of digital finance on well-being and behaviour. Evidence indicates that while digital financial literacy supports security, frictionless digital access to credit and spending can prompt impulsive borrowing and consumption that undermine financial health, producing contradictory findings across studies (Dewmini et al., 2023; Emmanuel & Akpughe, 2024). Research has shown that e-payment systems can alter consumer spending habits by reducing the psychological "pain of paying," leading to increased expenditure and reduced saving. Studies on digital wallets among students have reported changes in spending patterns, with increased frequency of transactions and reduced awareness of total expenditure, indicating that digital payment methods can encourage impulsive spending. This tension is central to the present study's concern with dependency.

A fourth strand focuses on students and young people, who are early and intensive adopters of digital finance. Studies of digital wallets and cashless payment among students report significant behavioural shifts, including changes in spending patterns and exposure to irrational and socially influenced financial behaviour, indicating that students are a distinctive and important population for



study (Fikri et al., 2025). Research has documented that student spending behaviour is influenced by peer effects and social norms, with digital platforms amplifying these influences through social media and peer-to-peer payment features. The financial well-being of students has been shown to be influenced by multiple factors, including financial literacy, financial behaviour, and financial stress, with financial stress acting as a significant predictor of academic performance and overall well-being. This motivates a student-specific investigation.

Across these strands a consistent gap emerges. Much of the evidence is international or addresses general populations, with limited localised study of how Nigerian polytechnic students behave financially in the digital environment, how dependent they are on mobile credit, and how these relate to their financial well-being (Dewmini et al., 2023). While research on financial well-being has been conducted among Nigerian university students and formal sector workers, limited attention has been given to polytechnic students, who constitute a distinct and significant population with particular characteristics, including lower average incomes, higher rates of part-time employment, and different educational and career trajectories. This study addresses that gap by measuring these constructs and their relationships among South-West polytechnic students, providing localised evidence for intervention.

Methods

The study adopted a quantitative, survey-based correlational design. The target population comprised students in polytechnics across the six South-West states, sampled through a multistage procedure that treated institutions as clusters, selected departments across disciplines, and proportionately sampled students to yield a target of 240 respondents. The sample size was determined to provide adequate statistical power for correlation and regression analyses, consistent with recommendations for structural equation modelling with the number of constructs and indicators involved. The multistage sampling procedure ensured representation across the six states, with one polytechnic selected from each state, and within each institution, departments selected across a range of disciplines including engineering, business, science, and technology.

The principal instrument was a structured, validated questionnaire with sections measuring digital financial behaviour (use of digital payments, saving, budgeting and borrowing), mobile credit dependency (frequency, reliance and debt-stress indicators), financial well-being (validated well-being scale items) and relevant background variables, using established scales adapted to the context. The digital financial behaviour scale was adapted from established instruments measuring digital financial literacy and behaviour, including items on frequency of digital payment use, use of mobile banking, budgeting practices, and saving behaviour. The mobile credit dependency scale was developed based on the literature on digital lending and debt dependency, with items measuring frequency of borrowing, reliance on mobile credit for daily expenses, difficulty in repayment, and borrowing to repay other loans. The financial well-being scale was adapted from validated instruments, including the Consumer Financial Protection Bureau's Financial Well-Being Scale and the InCharge Financial Distress/Financial Well-Being Scale, with items measuring financial security, financial stress, and satisfaction with financial situation. The instrument was reviewed by five experts in finance, consumer behaviour, and educational research for face and content validity, and their suggestions were incorporated into the final version.

The instrument underwent a pilot pre-test with 30 students from a polytechnic not included in the main sample, with internal-consistency reliability estimated using Cronbach's alpha. The reliability coefficients were: digital financial behaviour scale ($\alpha = 0.84$), mobile credit dependency scale ($\alpha = 0.82$), and financial well-being scale ($\alpha = 0.87$), indicating acceptable to high internal consistency. For reflective constructs, composite reliability was also computed, with values exceeding 0.80 for all constructs. Data were collected through self-administered questionnaires, with research assistants available to clarify any questions. Data were analysed in SPSS and a structural-equation-modelling package (SmartPLS) using descriptive statistics, correlation, multiple regression and structural equation modelling to test the hypothesised relationships and possible mediation among the constructs, with attention to relevant subgroup differences (gender, year of study, income level). The analysis strategy followed established procedures for mediation analysis, using the bootstrapping method with 5,000 resamples to estimate indirect effects. Ethical clearance was obtained from the institutional research ethics committee, informed consent secured from all respondents, participation kept voluntary and anonymous, and confidentiality and data-protection safeguards maintained



throughout, with particular care given the financial sensitivity of the data. This study addressed the gap by measuring these constructs and their relationships among South-West polytechnic students.

Results

The study successfully surveyed 240 polytechnic students across six institutions in South-West Nigeria. The findings are organised below according to the five research questions.

Research Question 1: What is the digital financial behaviour of polytechnic students in South-West Nigeria?

Table 1

Digital Financial Behaviour of Respondents (N = 240)

Digital Financial Behaviour	Frequency	Percentage
<i>Digital Payment Use</i>		
Use mobile banking or digital wallets	227	94.6
Use digital payment platforms weekly or more	164	68.3
Use digital payment platforms daily	89	37.1
<i>Saving and Budgeting</i>		
Use digital savings apps or features	142	59.2
Maintain a budget (digital or manual)	96	40.0
Track expenses digitally	118	49.2
<i>Borrowing</i>		
Have used instant mobile credit	130	54.2
Currently have outstanding mobile credit	78	32.5
Have borrowed from multiple digital lenders	42	17.5
<i>Digital Financial Literacy</i>		
Understand interest rates on digital loans	94	39.2
Read terms and conditions before borrowing	68	28.3
Know how to check credit reports	52	21.7

Table 1 presents the digital financial behaviour of respondents. The results show high levels of digital financial engagement, with 94.6% of respondents using mobile banking or digital wallets, and 68.3% using digital payment platforms weekly or more frequently. Daily use was reported by 37.1% of respondents. However, engagement with saving and budgeting tools was more modest: 59.2% used digital savings apps or features, 40.0% maintained a budget, and 49.2% tracked expenses digitally. The borrowing data is particularly significant: 54.2% of respondents reported having used instant mobile credit, 32.5% currently had outstanding mobile credit, and 17.5% had borrowed from multiple digital lenders. Digital financial literacy indicators were concerning: only 39.2% understood interest rates on digital loans, 28.3% read terms and conditions before borrowing, and only 21.7% knew how to check credit reports. These findings are consistent with the literature on digital financial behaviour among young people, which has documented high adoption rates of digital payment tools alongside limited engagement with planning and literacy practices. The high usage of instant mobile credit (54.2%) is notable and consistent with the rapid expansion of digital lending in Nigeria. The low levels of digital financial literacy, particularly the low percentage who understand interest rates (39.2%) and read terms and conditions (28.3%), raise concerns about informed decision-making in credit use.



Research Question 2: What is the extent and what are the drivers of students' dependency on mobile credit?

Table 2

Mobile Credit Dependency Indicators (N = 130 who have used mobile credit)

Dependency Indicator	Frequency	Percentage
<i>Borrowing Frequency</i>		
Borrow at least once a month	58	44.6
Borrow at least once a week	24	18.5
Borrow multiple times per month	38	29.2
<i>Reliance</i>		
Use mobile credit for daily expenses	62	47.7
Use mobile credit for emergencies	52	40.0
Would struggle without mobile credit	48	36.9
<i>Debt Stress</i>		
Have difficulty repaying	42	32.3
Have borrowed to repay another loan	28	21.5
Have received collection calls/messages	36	27.7
<i>Drivers of Dependency</i>		
Insufficient income/allowance	84	64.6
Easy access and quick approval	72	55.4
Peer influence	38	29.2
Lack of financial literacy	46	35.4

Table 2 presents the mobile credit dependency indicators for the 130 respondents who had used mobile credit. The results reveal significant dependency among this subgroup. Borrowing frequency was high: 44.6% borrowed at least once a month, 18.5% borrowed at least once a week, and 29.2% borrowed multiple times per month. Reliance on mobile credit was substantial: 47.7% used mobile credit for daily expenses, 40.0% for emergencies, and 36.9% indicated they would struggle without mobile credit. Debt stress indicators were concerning: 32.3% had difficulty repaying, 21.5% had borrowed to repay another loan, and 27.7% had received collection calls or messages, consistent with reports of aggressive collection practices by digital lenders in Nigeria. The primary drivers of dependency were insufficient income or allowance (64.6%), easy access and quick approval (55.4%), peer influence (29.2%), and lack of financial literacy (35.4%). These findings are consistent with the literature on digital credit dependency, which has documented that easy access, low initial barriers, and insufficient income are key drivers of reliance on instant loans. The finding that 21.5% had borrowed to repay another loan indicates a debt trap pattern that has been identified as a risk of digital lending. The collection practices reported (27.7% receiving collection calls or messages) align with documented concerns about aggressive collection tactics in Nigerian digital lending.



Research Question 3: What is the financial well-being of polytechnic students in South-West Nigeria?

Table 3

Financial Well-Being Scores (N = 240)

Financial Well-Being Dimension	Mean (SD)*	Interpretation
Financial security	3.02 (0.86)	Moderate
Financial stress (reverse-scored)	2.94 (0.92)	Moderate
Satisfaction with financial situation	3.18 (0.88)	Moderate
Ability to handle financial shocks	2.86 (0.94)	Low-Moderate
Financial freedom	3.24 (0.84)	Moderate
Overall financial well-being	3.12 (0.78)	Moderate

Note. Scale: 1 = Strongly disagree, 5 = Strongly agree. Higher scores indicate better financial well-being, except financial stress which is reverse-scored.

Table 4

Financial Stress Indicators (N = 240)

Indicator	Frequency	Percentage
Worry about money frequently	128	53.3
Have difficulty meeting expenses	102	42.5
Have skipped meals due to lack of money	48	20.0
Have borrowed to cover basic needs	86	35.8
Feel stressed about financial situation	146	60.8

Table 3 presents the financial well-being scores. The overall financial well-being score was 3.12 (SD = 0.78) on a 5-point scale, indicating a moderate level of financial well-being. The highest-scoring dimension was financial freedom (3.24), followed by satisfaction with financial situation (3.18) and financial security (3.02). The lowest-scoring dimension was ability to handle financial shocks (2.86), indicating vulnerability to unexpected expenses. Table 4 presents the financial stress indicators. A substantial proportion of respondents reported financial stress: 53.3% worried about money frequently, 42.5% had difficulty meeting expenses, 20.0% had skipped meals due to lack of money, 35.8% had borrowed to cover basic needs, and 60.8% felt stressed about their financial situation. These findings are consistent with research on student financial well-being, which has documented moderate levels of financial well-being and significant financial stress among students. The finding that 20.0% had skipped meals due to lack of money indicates severe financial hardship among a subset of respondents. The association between financial stress and academic performance has been documented in the literature, with financial stress emerging as a significant predictor of academic outcomes and retention. The moderate financial well-being scores and high financial stress indicators highlight the need for interventions to support student financial well-being.

Research Question 4: What are the relationships among digital financial behaviour, mobile credit dependency and financial well-being?

Table 5

Correlation Matrix of Key Variables (N = 240)

Variable	1	2	3	4	5
1. Digital financial behaviour	1				
2. Mobile credit dependency	0.42**	1			
3. Financial well-being	0.38**	-0.44**	1		



Variable	1	2	3	4	5
4. Digital financial literacy	0.56**	-0.28**	0.42**	1	
5. Income level	0.24**	-0.32**	0.36**	0.18*	1

Note. * $p < 0.05$, ** $p < 0.01$.

Table 6
Regression Analysis Predicting Financial Well-Being

Predictor	B	SE	β	t	p
Digital financial behaviour	0.28	0.06	0.32	4.67	<0.001
Mobile credit dependency	-0.34	0.07	-0.38	-4.86	<0.001
Digital financial literacy	0.22	0.07	0.24	3.14	0.002
Income level	0.18	0.06	0.19	3.00	0.003
Model Summary					
R ²	0.42				
Adjusted R ²	0.41				
F(4, 235)	42.58				<0.001

Table 5 presents the correlation matrix. Digital financial behaviour was positively associated with financial well-being ($r = 0.38$, $p < 0.001$), indicating that students who engage more actively with digital financial tools tend to have better financial well-being. Mobile credit dependency was negatively associated with financial well-being ($r = -0.44$, $p < 0.001$), indicating that dependency on mobile credit is associated with lower financial well-being. Digital financial behaviour and mobile credit dependency were positively correlated ($r = 0.42$, $p < 0.001$), suggesting that students who are more engaged with digital finance are also more likely to use mobile credit. Digital financial literacy was positively associated with financial well-being ($r = 0.42$, $p < 0.001$) and negatively associated with mobile credit dependency ($r = -0.28$, $p < 0.001$). Income level was positively associated with financial well-being ($r = 0.36$, $p < 0.001$) and negatively associated with mobile credit dependency ($r = -0.32$, $p < 0.001$). Table 6 presents the regression analysis. The model explained 42% of the variance in financial well-being ($R^2 = 0.42$, $F(4, 235) = 42.58$, $p < 0.001$). Digital financial behaviour ($\beta = 0.32$, $p < 0.001$), mobile credit dependency ($\beta = -0.38$, $p < 0.001$), digital financial literacy ($\beta = 0.24$, $p = 0.002$), and income level ($\beta = 0.19$, $p = 0.003$) were all significant predictors of financial well-being. These findings are consistent with the literature on digital financial literacy and financial well-being, which has demonstrated that digital financial literacy and behaviour are positively associated with financial well-being, while debt dependency is negatively associated with financial well-being.

Table 7
Structural Equation Modelling Results: Mediation Analysis

Path	Direct Effect	Indirect Effect	Total Effect	Significance
Digital financial behaviour → Financial well-being	0.28**	-	0.28**	**
Digital financial behaviour → Mobile credit dependency	0.42**	-	0.42**	**
Mobile credit dependency → Financial well-being	-0.34**	-	-0.34**	**
Digital financial behaviour → Mobile credit dependency → Financial well-being	-	-0.14**	-	**

Note. ** $p < 0.01$. Bootstrapping with 5,000 resamples.



Table 7 presents the structural equation modelling results for mediation analysis. The direct effect of digital financial behaviour on financial well-being was significant ($\beta = 0.28$, $p < 0.01$), as was the direct effect of digital financial behaviour on mobile credit dependency ($\beta = 0.42$, $p < 0.01$) and the direct effect of mobile credit dependency on financial well-being ($\beta = -0.34$, $p < 0.01$). The indirect effect of digital financial behaviour on financial well-being through mobile credit dependency was significant and negative ($\beta = -0.14$, $p < 0.01$), indicating partial mediation. This means that while digital financial behaviour has a positive direct effect on financial well-being, it also has a negative indirect effect through increased mobile credit dependency. The total effect of digital financial behaviour on financial well-being was $0.28 + (-0.14) = 0.14$, indicating that the positive direct effect is partially offset by the negative indirect effect through mobile credit dependency. These findings are consistent with the literature on the mixed effects of digital finance, which has documented that digital financial engagement can have both positive and negative effects on financial well-being depending on the specific behaviours involved. The mediation finding suggests that interventions to promote digital financial behaviour should also address mobile credit dependency to maximise positive outcomes.

Research Question 5: What evidence-based recommendations can be generated for financial education and consumer protection?

Based on the findings of this study, several evidence-based recommendations were developed for financial education and consumer protection:

Short-term interventions (0–6 months): (1) Develop and disseminate financial literacy materials specifically addressing digital credit, including interest rates, repayment terms, and risks of over-borrowing; (2) Integrate digital financial literacy modules into student orientation programmes, focusing on practical skills such as reading loan terms, understanding interest calculations, and checking credit reports; (3) Establish peer education programmes where trained students provide guidance on responsible digital financial behaviour; (4) Partner with digital lenders to promote responsible lending practices, including clear disclosure of terms and fair collection practices; and (5) Provide emergency financial assistance or short-term loans at reasonable rates to reduce reliance on high-cost instant credit.

Medium-term interventions (6–24 months): (1) Embed digital financial literacy into the curriculum across all disciplines, with practical exercises in budgeting, saving, and responsible borrowing; (2) Establish financial counselling services on campus, staffed by trained counsellors with expertise in digital finance; (3) Develop partnerships with financial institutions to provide student-friendly savings products and credit options with fair terms; (4) Advocate for regulatory oversight of digital lending practices targeting students, including caps on interest rates and restrictions on aggressive collection practices; and (5) Conduct regular surveys to monitor student financial well-being and credit dependency, identifying emerging trends and at-risk groups.

Long-term approaches (2–5 years): (1) Develop a national framework for financial literacy in tertiary institutions, with digital financial literacy as a core component; (2) Integrate financial well-being into institutional policies and support services, recognising its impact on academic success; (3) Support research on digital financial behaviour and its consequences, contributing to evidence-based policy and practice; (4) Advocate for strengthened consumer protection for digital financial services, particularly for young and vulnerable consumers; and (5) Establish partnerships between educational institutions, financial regulators, and financial service providers to promote responsible digital finance.

Discussion

The central finding of this study is the demonstration that digital financial behaviour and mobile credit dependency have significant, contrasting relationships with financial well-being among polytechnic students in South-West Nigeria. Digital financial behaviour was positively associated with financial well-being ($r = 0.38$, $p < 0.001$), while mobile credit dependency was negatively associated with financial well-being ($r = -0.44$, $p < 0.001$). These findings are consistent with the literature on digital financial literacy and financial well-being, which has demonstrated that digital financial literacy and behaviour are positively associated with financial well-being, while debt dependency is negatively associated with financial well-being. The regression analysis showed that the model explained 42% of the variance in financial well-being, with all four predictors (digital financial behaviour, mobile credit dependency, digital financial literacy, and income level)



contributing significantly. These findings underscore the importance of considering both the positive and negative dimensions of digital financial engagement in understanding student financial well-being.

The mediation analysis revealed that mobile credit dependency partially mediates the relationship between digital financial behaviour and financial well-being, with a significant negative indirect effect ($\beta = -0.14$, $p < 0.01$). This finding is particularly significant because it suggests that while digital financial behaviour has a positive direct effect on financial well-being, it also has a negative indirect effect through increased mobile credit dependency. The total effect (0.14) is smaller than the direct effect (0.28), indicating that the positive effect of digital financial behaviour is partially offset by the negative effect through mobile credit dependency. This finding is consistent with the literature on the mixed effects of digital finance, which has documented that digital financial engagement can have both positive and negative effects depending on the specific behaviours involved. The finding that 54.2% of respondents had used instant mobile credit, and that 32.3% of those had difficulty repaying, and 21.5% had borrowed to repay another loan, indicates a significant dependency problem among a substantial subset of students. These findings align with concerns raised in the literature about the risks of digital credit, including over-borrowing, debt traps, and aggressive collection practices. The high levels of digital financial literacy deficits (only 39.2% understood interest rates, 28.3% read terms and conditions, 21.7% knew how to check credit reports) are concerning and suggest that students are making financial decisions without adequate understanding of the terms and implications.

The findings on financial well-being indicate moderate levels of financial well-being (mean = 3.12) and significant financial stress, with 53.3% worrying about money frequently, 42.5% having difficulty meeting expenses, and 20.0% having skipped meals due to lack of money. These findings are consistent with research on student financial well-being, which has documented moderate levels of financial well-being and significant financial stress among students. The association between financial stress and academic performance has been documented in the literature, with financial stress emerging as a significant predictor of academic outcomes and retention. The recommendations developed in this study address the identified challenges through a multi-level approach, from short-term financial literacy interventions to medium-term curriculum integration and long-term policy advocacy. The emphasis on digital financial literacy is consistent with the literature, which has demonstrated that digital financial literacy is positively associated with financial well-being and responsible financial behaviour. The mediation finding suggests that interventions should address both digital financial behaviour and mobile credit dependency to maximise positive outcomes. By targeting the specific drivers of dependency identified in the study (insufficient income, easy access, peer influence, and lack of financial literacy), interventions can be tailored to the specific needs of polytechnic students in South-West Nigeria. Overall, the findings confirm that digital financial behaviour and mobile credit dependency have significant implications for student financial well-being, and they provide evidence-based recommendations for financial education and consumer protection interventions.

Conclusion

This study examined digital financial behaviour, mobile credit dependency and financial well-being among students in polytechnics in South-West Nigeria. The findings revealed high levels of digital financial engagement (94.6% using mobile banking or digital wallets), but also significant mobile credit dependency (54.2% had used instant mobile credit, with 32.3% reporting difficulty repaying and 21.5% having borrowed to repay another loan). Financial well-being was moderate (mean = 3.12), with significant financial stress reported by 60.8% of respondents. Digital financial behaviour was positively associated with financial well-being ($r = 0.38$), while mobile credit dependency was negatively associated with financial well-being ($r = -0.44$). Structural equation modelling showed that mobile credit dependency partially mediated the relationship between digital financial behaviour and financial well-being (indirect effect = -0.14). The study provides evidence-based recommendations for financial education and consumer protection interventions targeting polytechnic students in South-West Nigeria. The principal implication is that while digital financial engagement offers opportunities for improved financial well-being, it also poses risks through mobile credit dependency, and that interventions should address both dimensions to promote positive outcomes. Future research should extend this work in several directions: longitudinal studies to track



changes in digital financial behaviour and well-being over time; comparative studies across different student populations; intervention studies to evaluate the effectiveness of financial education programmes; and qualitative research to explore the lived experiences of students navigating digital finance and credit dependency.

Funding

This research was funded through the Tertiary Education Trust Fund (TETFund) Institution-Based Research (IBR) Intervention, The Federal Polytechnic Ede, Osun State, Nigeria. The funding agency provided financial support for the execution of the study. The funder had no role in the study design; data collection, analysis, or interpretation; manuscript preparation; or the decision to publish the findings.

Conflict of Interest

The authors declare that there are no competing financial interests or personal relationships that could have influenced the work reported in this study.

References

- Björkegren, D., Blumenstock, J., Folajimi-Senjobi, O., Mauro, J., & Nair, S. R. (2023). Instant loans can lift subjective well-being: A randomized evaluation of digital credit in Nigeria (SSRN Working Paper No. 4385266). <https://doi.org/10.2139/ssrn.4385266>
- Chen, A. J., Even-Tov, O., Kang, J. K., & Wittenberg-Moerman, R. (2025). Digital lending and financial well-being: Through the lens of mobile phone data. *The Accounting Review*, 100(4), 135–159. <https://doi.org/10.2308/TAR-2024-0046>
- Choung, Y., Chatterjee, S., & Pak, T. Y. (2023). Digital financial literacy and financial well-being. *Finance Research Letters*, 58, Article 104438. <https://doi.org/10.1016/j.frl.2023.104438>
- Consumer Financial Protection Bureau. (2023). *Financial well-being scale*. CFPB. <https://www.consumerfinance.gov>
- Dewmini, E. A. T., Wijekumara, J. M. N., & Sugathadasa, D. D. K. (2023). Digital financial literacy on financial behaviour among management undergraduates of state universities in Sri Lanka. *Journal of Management Matters*, 10(2), 1–18.
- Emmanuel, A. O., & Akpughe, W. (2024). E-payments and the dynamics of consumer spending habits. *British Journal of Management and Marketing Studies*, 7(4), 143–156. <https://doi.org/10.52589/bjmms-l6vfsd0v>
- Federal Competition and Consumer Protection Commission. (2024). *Regulatory actions on digital money lenders in Nigeria*. FCCPC. <https://fccpc.gov.ng>
- Fikri, A. A. H. S., Sholeh, M., Susilowati, N., Afandi, M. R., & Febrianto, I. (2025). Digital wallets and student finances: Analyzing behavioral shifts in the era of cashless payments. *Sinergi International Journal of Management and Business*, 3(4), 254–268.
- Nigeria Data Protection Commission. (2024). *Privacy concerns in digital lending operations in Nigeria*. NDPC. <https://ndpc.gov.ng>
- Ozili, P. K. (2024). Digital financial literacy and financial well-being: The mediating role of financial behaviour. *Journal of Economic and Administrative Sciences*. <https://doi.org/10.1108/JEAS-05-2024-0156>