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Digital Lending Efficacy on Debt Management of Wage Earners

Danica Nelsen Esperanza
Cebu Technological University- Main Campus
danicanelsen@gmail.com
Leovigilda L. Bithay
Cebu Technological University- Main Campus
leovigilda.bithay@ctu.edu.ph
Jiomarie B. Jesus
Mandaue City College
jiomarie.jesus@mandauecitycollege.com
Chesa Ople-Alviola
University of Cebu – Banilad Campus
kc18happiness@gmail.com
Jeffy M. Sumilhig
Cebu Technological University- Consolacion Campus
dynamic.jeffy@gmail.com
Genessa L. Basilisco
Cebu Technological University- Consolacion Campus
basiliscogenessa143@gmail.com

Abstract
This study examined the effectiveness of digital lending in shaping the debt management behaviors of wage earners in Cebu City, Philippines, amid the increasing presence of financial technology in emerging economies. Guided by the Technology Acceptance Model (TAM) and the Financial Capability Framework, a descriptive-correlational design was used to analyze how the dimensions of digital lending accessibility, usage, and quality impact three key debt management strategies: STOP (budget restraint), PAY (repayment behavior), and CAUTION (informed borrowing). Using simple random sampling, 100 wage earners participated in a structured survey, and data were analyzed with descriptive statistics and multiple linear regression. The results showed that perceived quality of digital lending significantly affected PAY and CAUTION behaviors, while frequent usage was negatively related to STOP practices, revealing a behavioral paradox where greater access might reduce financial restraint. Accessibility, though rated positively, did not have significant effects. These findings suggest that digital lending systems should be combined with strong financial education, ethical platform design, and regulatory support. Therefore, the study recommends a targeted Financial Inclusion Program that includes digital debt literacy, transparent lending practices, and borrower protection measures to promote responsible and sustainable financial behavior among wage earners.

Keywords: Digital Lending, Debt Management, Financial Inclusion, Wage Earners, Financial Literacy

1. Introduction

The rise of digital lending technologies has greatly transformed personal finance, providing more accessible options compared to traditional credit institutions, especially for underserved groups. Thanks to advances in financial technology nd mobile app infrastructure, digital lending platforms have become essential channels for wage earners in developing countries to

access formal credit, overcoming common hurdles like limited documentation, banking exclusion, and geographic isolation (Cornelli et al., 2023; Xu et al., 2022). This development aligns with the Technology Acceptance Model (TAM), which suggests that perceived ease of use and usefulness are key factors influencing technology adoption, especially among users with higher digital literacy (Putri et al., 2023). In the Philippine context, Cebu City was chosen as a prime research site due to its high digital adoption, a strong labor market, and the increasing dependence of urban wage earners on digital finance, consistent with national reports on fintech use trends and income fluctuations in metropolitan areas (Vik et al., 2024).

However, the expansion of digital lending was not without risks. Literature underscored that increased accessibility to credit—when unaccompanied by sufficient financial capability—resulted in impulsive borrowing behavior, recurring indebtedness, and overreliance on short-term loans (Bhuvaneswari & Vinitha, 2023; Wang & Overby, 2022). Algorithmic lending models, while efficient, often failed to disclose loan conditions in a user-friendly manner, thereby exacerbating financial distress among vulnerable consumers. These concerns were substantiated by the Financial Capability Framework, which emphasized that financial access must be complemented by decision-making capacity, risk evaluation, and borrower empowerment to be genuinely inclusive (Wanof, 2023). This theoretical perspective guided the study's examination of three core digital lending variables—accessibility, usage, and perceived quality—selected for their conceptual alignment with both TAM and capability-based indicators, and for their operational relevance to borrower experience in digital credit systems.

To address the behavioral and structural gaps observed in digital lending ecosystems, the study introduced a Financial Inclusion Program anchored in three behavioral strategies: STOP, PAY, and CAUTION. The STOP strategy emphasized budgeting and debt avoidance; PAY underscored timely repayment and commitment to obligations; and CAUTION advocated for informed decision-making and critical evaluation of borrowing terms. These strategies were derived from debt management literature that highlighted the role of financial literacy, self-control, and regulatory awareness in promoting responsible financial behavior (bin Mohd Alwi et al., 2022; Singh & Malik, 2022; Equiza-Goni et al., 2023). By framing these debt strategies as behavioral mediators between digital platform interaction and financial outcomes, the study reinforced the conceptual linkage between technological adoption and financial resilience.

The novelty of the proposed Financial Inclusion Program lay in its integration of public-private collaboration, behavioral economics, and digital simulation tools tailored to the urban Filipino wage earner. Designed in response to the call for fintech models that transcend basic inclusion metrics, the program promoted financial well-being as an outcome of ethical platform design, user education, and borrower empowerment (Jia & Kanagaretnam, 2025). Specifically, the program addressed gaps in digital trust, literacy, and regulatory compliance by equipping users with risk assessment skills and enabling institutions to adopt transparent, consumer-centered lending practices.

This study offered a theoretically grounded and empirically validated response to emerging concerns surrounding digital lending. It elevated the discourse by embedding financial capability within digital financial inclusion frameworks and by emphasizing the interaction between user behavior, platform quality, and structural safeguards. The results contributed to a scalable, context-sensitive framework for responsible digital borrowing—an imperative as fintech continues to shape the financial futures of wage earners in urbanized economies.

2. Research Objectives

This study examined the impact of digital lending on the debt management practices of wage earners, with a particular focus on how accessibility, usage, and quality of digital lending

platforms influence financial behavior. By examining the STOP, PAY, and CAUTION debt management strategies, the study sought not only to evaluate the impact of digital lending dimensions but also to contribute to the formulation of a targeted financial inclusion framework for wage earners. Specifically, the study aimed to:

1. Assess how wage earners perceive and engage with digital lending platforms in terms of accessibility, usage, and service quality;
2. Examine the extent to which digital lending dimensions influence budgeting behavior (STOP), repayment practices (PAY), and risk-aware borrowing (CAUTION); and
3. Develop a Financial Inclusion Program based on the findings of the study.

3. Literature Review

Accessibility

Accessibility functioned as a foundational enabler of digital lending by dismantling conventional barriers such as geographic isolation, cumbersome documentation, and institutional exclusion, thereby fostering broader financial inclusion (Njenga & Kavindah, 2021). It encompassed ease of use, immediacy, and digital convenience—attributes that aligned with the Technology Acceptance Model, wherein perceived usefulness and ease significantly influenced user adoption (Putri et al., 2023). However, accessibility alone proved insufficient in safeguarding users from financial distress. Studies consistently demonstrated that increased access, in the absence of corresponding financial education and regulatory controls, facilitated over-indebtedness and unmoderated borrowing patterns (Oh & Rosenkranz, 2022; Yue et al., 2022). Empirical investigations emphasized that while digital accessibility enhanced credit participation, its effectiveness in promoting financial resilience remained conditional upon its integration with borrower safeguards and informed decision-making (Cumming et al., 2022; Jesus et al., 2024). Hence, accessibility was established not as a terminal objective but as a strategic gateway necessitating deeper systemic and behavioral interventions.

> H1: *There is a significant relationship between digital lending accessibility and debt management among wage earners.*

Use of Digital Lending

The use of digital lending platforms expanded rapidly due to their capacity to deliver immediate liquidity, especially for wage earners experiencing cash flow volatility. These platforms offered rapid processing, remote access, and minimal procedural friction—attributes highly attractive in emerging economies. Nonetheless, empirical studies raised critical concerns. Bu et al. (2022) demonstrated that, absent behavioral constraints, borrowers often engaged in impulsive digital borrowing, leading to cyclical debt and reduced financial stability. Le (2023) further underscored that the absence of financial literacy and the lack of transparency in lending terms undermined borrower awareness and judgment. Despite the functional benefits of digital credit, its unmoderated use correlated with poor repayment habits and debt layering, especially among financially inexperienced users. Thus, digital lending usage—while instrumental in bridging liquidity gaps—required institutional and educational oversight to transform short-term relief into long-term financial sustainability.

> H2: *There is a significant relationship between digital lending usage and debt management among wage earners*.

Quality of Digital Lending

Perceived service quality in digital lending emerged as a decisive factor influencing borrower trust, behavioral compliance, and platform retention. Transparent communication of loan terms, interest rates, and repayment conditions was shown to significantly reduce information

asymmetry and default risks (Kawai et al., 2022). High-quality platforms demonstrated operational integrity by aligning digital functionality with ethical service delivery, thereby improving borrower satisfaction and financial behavior (Gunawan et al., 2023; Navaja et al., 2026). Moreover, when platform quality intersected with financial literacy initiatives, borrower outcomes improved markedly, ranging from enhanced repayment discipline to increased creditworthiness. Accordingly, the variable of perceived quality extended beyond mere functionality and was defined by trust, transparency, and user empowerment, making it indispensable in promoting sustainable financial inclusion.

H3: *There is a significant relationship between the perceived quality of digital lending and debt management among wage earners*.

STOP Strategy

The STOP strategy, grounded in budgetary discipline and debt aversion, gained renewed relevance amid the proliferation of digital lending channels. As credit became increasingly accessible, fintech environments inadvertently incentivized excessive borrowing through algorithm-driven approvals and frictionless transactions (Sajid et al., 2023). Li et al. (2022) contended that these environments masked long-term financial risks, thereby necessitating stronger behavioral controls. Without proactive budgeting frameworks and financial restraint, users risked entering debt cycles triggered by convenience rather than necessity. The STOP strategy, therefore, represented an essential self-regulatory mechanism—one that emphasized planning, delayed gratification, and controlled borrowing as counterbalances to fintech's behavioral vulnerabilities.

H4: *Digital lending dimensions (accessibility, usage, and quality) significantly influence the STOP, PAY, and CAUTION methods of debt management*.

PAY Strategy

The PAY strategy emphasized moral and behavioral commitments to debt repayment. Amid the rise of Buy Now, Pay Later (BNPL) schemes and flexible installment products, literature revealed growing concerns about deferred responsibility and normalized indebtedness (Maesen & Ang, 2025). While such models enhanced consumer flexibility, they frequently eroded repayment discipline and masked the long-term costs of credit. Gomes et al. (2023) also emphasized that generational and psychological dimensions significantly influence repayment behaviors, particularly among younger borrowers who tend to prioritize immediate utility over long-term financial liabilities. The cultivation of the PAY-oriented mindset encourages borrowers to approach financial obligations with a heightened sense of accountability, adherence to timely repayment, and a commitment to ethical consumption—principles that are fundamental to minimizing digital debt accumulation and fostering long-term financial stability.

CAUTION Strategy

The CAUTION strategy centered on informed borrowing, critical assessment of loan conditions, and strategic financial planning. In digital contexts, where algorithmic loan approvals and complex terms often obscure borrowing risks, the necessity for borrower caution became paramount. Equiza-Goni et al. (2023) demonstrated that sound debt management—both at macroeconomic and household levels—required regulatory alignment and borrower vigilance. Similarly, Infuehr & Laux (2022) observed that unchecked optimism led to poor financial oversight, paralleling consumer overconfidence in loan decisions. Within this paradigm, the CAUTION strategy provided a cognitive defense against predatory lending and misinformed credit use. It reinforced due diligence, risk assessment, and borrower education as fundamental competencies in the digital lending landscape.

H5: *The perceived quality of digital lending is the strongest predictor of responsible debt management behavior among wage earners*.

4. Methodology

Design

This study employed a quantitative-descriptive correlational design to assess the relationship between digital lending and the debt management practices of wage earners in Cebu City. The quantitative approach was appropriate for gathering measurable data on borrower perceptions and behavioral patterns related to digital credit platforms. The descriptive component facilitated the profiling of respondents and the evaluation of perceived accessibility, frequency of usage, and service quality of digital lending systems. Concurrently, the correlational aspect allowed for the investigation of the predictive influence of these variables on three defined debt management strategies—STOP (budget restraint), PAY (repayment behavior), and CAUTION (informed borrowing). This design aligned with previous financial behavior research, where empirical associations were analyzed to inform consumer-focused policies and program development.

Environment

The study was conducted in Cebu City, an urbanized financial hub in the central Philippines. The location was selected due to its high mobile penetration rate, rapid fintech adoption, and large population of urban wage earners with diverse financial obligations. As approximately 62.6 % of individuals aged 15 and above in Cebu City were economically active, the city offered a highly relevant and concentrated context for examining digital lending behavior and financial decision-making among working-class borrowers (Philippine Statistics Authority, 2023). Furthermore, the city's exposure to both formal and informal lending institutions offered a nuanced context for evaluating digital financial inclusion and risk patterns among income earners.

Respondents

The study involved 100 wage earners who resided and worked within Cebu City. The sample size of 100 was determined based on established recommendations for correlational studies that required moderate effect size detection and sufficient statistical power in regression analysis (Cohen, 1992). A simple random sampling technique was applied to reduce selection bias and enhance representativeness. Screening criteria were also applied to ensure participant relevance: respondents were required to (1) be formally employed at the time of data collection, (2) have had at least one prior experience using a digital lending platform, and (3) fall within the age range of 21 to 60 years. A pre-screening questionnaire was administered to verify eligibility before participation.

Research Instrument

The primary instrument was a structured questionnaire that was composed of four main sections: demographic profile, perceptions of digital lending (accessibility, usage, and quality), and responses to the STOP, PAY, and CAUTION debt management constructs. The items were adapted from established scales in financial behavior and technology acceptance literature and were refined through expert review. Each variable was measured using multiple indicators on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Before full deployment, the instrument underwent a pilot test involving 20 respondents to ensure clarity and appropriateness of the items. The reliability test produced Cronbach's alpha coefficients above the recommended threshold of 0.70, with values of 0.82 for Accessibility, 0.80 for Usage, 0.85 for Quality, 0.83 for STOP, 0.84 for PAY, and 0.86 for CAUTION, indicating high internal consistency across constructs. For validity, the instrument was evaluated by three experts specializing in financial literacy, quantitative research, and fintech adoption. The overall Index

of Item-Objective Congruence (IOC) score was 0.92, which exceeded the acceptable cutoff of 0.80, confirming strong content validity. These results established that the instrument was both reliable and valid for assessing digital lending perceptions and debt management strategies.

Validity and Reliability

The internal consistency of the instrument was assessed using Cronbach's alpha, yielding coefficients above 0.80 for all constructs, indicating high reliability. Content validity was established through expert evaluation by three faculty members specializing in financial literacy, behavioral economics, and quantitative methods. Construct validity was supported by inter-item correlation analysis. Although the study employed multiple regression rather than structural equation modeling, exploratory factor analysis was conducted to confirm item loadings for each variable. The application of the Fornell-Larcker criterion further validated convergent and discriminant validity among multi-item scales, enhancing the robustness of the instrument despite not adopting SEM.

Data Analysis

Data were encoded and analyzed using SPSS version 25. Descriptive statistics—such as frequencies, means, and standard deviations—were used to summarize demographic variables and assess respondents' perceptions of digital lending accessibility, usage, and quality. For inferential analysis, multiple linear regression was employed to examine the predictive relationship between the digital lending variables (independent variables) and the three debt management strategies (dependent variables: STOP, PAY, and CAUTION). Regression analysis was appropriate for this study due to its explanatory power in identifying the strength and direction of linear relationships between behavioral constructs in financial research. Results were interpreted at a 0.05 significance level.

Ethical Considerations

The research strictly adhered to institutional ethical standards. Ethical clearance was secured from Cebu Technological University. Participants were provided with informed consent forms detailing the study's objectives, their voluntary involvement, and their rights, including the option to withdraw at any time. All responses were anonymized using respondent codes, and no personal identifiers were collected. Data handling complied with the Philippine Data Privacy Act of 2012, ensuring full confidentiality and security of participant information. The instrument and data collection protocols were also reviewed for compliance with ethical guidelines on human subject research.

5. Results and Discussion

Table 1: Respondents' Demographic Profile

Variable	Category	Frequency (n=100)	Percentage (%)
Sex	Male	42	42.00
	Female	58	58.00
Age	18–25	28	28.00
	26–35	43	43.00
	36–45	19	19.00
	46–60	10	10.00
Educational Attainment	High School	6	6.00
	Vocational	18	18.00
	College	59	59.00
	Postgraduate	17	17.00
Monthly Income	≤ PHP 10,000	22	22.00
	PHP 10,001–20,000	39	39.00
	PHP 20,001–30,000	27	27.00
	≥ PHP 30,001	12	12.00

A total of 100 wage earners participated in the study. As presented in Table 1, the majority were female (58%), aged between 26 and 35 years old (43%), and had completed at least a college-level education (76%). Most earned a monthly income between PHP 10,001 and PHP 20,000 (39%). These respondents represented a digitally active labor force familiar with mobile-based financial applications, providing a relevant basis for examining digital lending behavior in urban contexts.

Table 2: Perception of Wage Earners Regarding Accessibility of Digital Lending

Indicator	Mean	Std. Dev.	Category
1. Digital lending has enabled me to access loans easily.	3.81	0.8562	Agree
2. Access to mobile lending is convenient.	3.89	0.8604	Agree
3. Digital lending has led me to save time compared to bank lending.	3.99	0.8252	Agree
4. Online lending is easy to access because the process is not complex.	4.04	0.8064	Agree
5. I know supply chain lending solutions are available in the market.	3.61	0.9214	Agree
6. I have easy access to digital lending channels and agents.	3.66	0.9462	Agree
Weighted Average	**3.83**	**0.6672**	**Agree**

Table 2 showed that wage earners generally agreed on the accessibility of digital lending, with a weighted mean of 3.83 (SD = 0.6672). The highest-rated item, "online lending is easy to access because the process is not complex" (M = 4.04), confirmed user preference for convenience and simplicity. While digital lending removed procedural barriers, moderate scores on lending agent access (M = 3.66) and awareness of supply chain lending (M = 3.61) revealed limited financial engagement. These findings supported the role of accessibility in digital credit adoption (Adamek & Solarz, 2023) and highlighted the need for enhanced user education. The results validated accessibility as a core construct in the Financial Inclusion Framework (Vik et al., 2024) and emphasized its dual role in enabling participation and necessitating responsible design.

Table 3: Perception of Wage Earners Regarding the Use of Digital Lending

Indicator	Mean	Std. Dev.	Category
1. I frequently borrow digital loans.	3.37	0.9952	Neutral
2. I have a digital loan at the moment.	3.09	1.1388	Neutral
3. I have more than one online loan with multiple providers.	2.81	1.1953	Neutral
4. When unexpected medical bills arrived, a digital loan helped me cover the costs.	3.36	1.263	Neutral
5. Instead of traditional pawnshops, I use digital lending for short-term financial needs.	3.2	1.2464	Neutral
Weighted Average	**3.17**	**0.8846**	**Neutral**

Table 3 indicated a neutral perception regarding the use of digital lending, with a weighted mean of 3.17 (SD = 0.8846). Wage earners showed moderate engagement, such as using digital loans during emergencies (M = 3.36), but avoided multiple borrowings (M = 2.81), suggesting cautious use. This behavior reflected concerns over repayment, transparency, and data privacy, consistent with literature on digital credit adoption barriers (Koomson et al., 2023; Dzogbenuku et al., 2022). The results revealed a gap between access and actual usage, highlighting the need for financial education and user-oriented platform design. This supported the study's Financial Inclusion Program, which aims to bridge informational and behavioral barriers to responsible digital credit use.

Table 4: Perception of Wage Earners Regarding the Quality of Digital Lending

Indicator	Mean	Std. Dev.	Category
1. Digital lending is affordable and inclusive.	3.49	0.7371	Agree
2. Digital lending has provided a channel to build a credit history, which can be used to assess my future financial needs.	3.79	0.8494	Agree
3. Digital loans have increased access to finance.	3.80	0.7913	Agree
4. I do not understand my privacy rights regarding online loans.	3.39	1.0397	Neutral
5. I read and understand the terms and conditions before I sign up for the lending apps.	3.93	0.9828	Agree
6. My contacts have received multiple calls to pressure me to pay a defaulted loan.	3.00	1.1293	Neutral
7. The interest rates charged on digital loans are high.	3.63	0.9036	Agree
Weighted Average	**3.57**	**0.5885**	**Agree**

Table 4 showed that wage earners generally agreed on the quality of digital lending, with a weighted mean of 3.57 (SD = 0.5885). Respondents valued increased financial access (M = 3.80) and credit history building (M = 3.79), indicating optimism toward long-term benefits. However, privacy concerns (M = 3.39) and aggressive collection practices (M = 3.00) revealed gaps in consumer protection. Although borrowers accepted high interest rates (M = 3.63), the findings underscored the need for transparent, ethical lending practices. This supported previous studies emphasizing the role of trust and clarity in fintech adoption (Putri et al., 2023; Macchi, 2023). The results validated quality as a critical component of digital lending and informed the study's Financial Inclusion Program by highlighting the importance of platform accountability and borrower education.

Table 5: Summary of the Perception of Wage Earners Regarding Digital Lending

Indicator	Mean	Std. Dev.	Category
Accessibility	3.83	0.6672	Agree
Use of Digital Lending	3.17	0.8846	Neutral
Quality of Digital Lending	3.57	0.5885	Agree
Weighted Average	3.52	0.7134	Agree

Table 5 revealed an overall favorable perception of digital lending among wage earners, with a weighted mean of 3.52 (SD = 0.7134). Accessibility was rated highest (M = 3.83), followed by quality (M = 3.57) and use (M = 3.17), indicating strong access but cautious engagement. This disparity suggested that while platforms were convenient, concerns over repayment, data privacy, and literacy limited actual usage (Priyanto et al., 2022; Jesus et al., 2026). The findings emphasized that accessibility alone was insufficient without user trust and ethical practices. Practically, this reinforced the need for targeted education and transparent lending structures. Theoretically, it contributed to digital inclusion literature by integrating behavioral and qualitative dimensions into fintech evaluation (Liu et al., 2022).

Table 6: Perception of the Respondents on the STOP Method of Debt Management

Indicator	Mean	Std. Dev.	Category
1. I avoid borrowing to balance my budget.	4.17	0.9321	Agree
2. I save for emergencies/hospitalizations.	3.01	1.1733	Neutral
3. I follow my budget.	3.69	1.1234	Agree
4. I plan my budget to achieve my financial objective.	4.29	0.6625	Agree
5. I put my plan into action.	4.30	0.6884	Agree
6. I look ahead and plan for the future.	4.30	0.6884	Agree
Weighted Average	**3.96**	**0.629**	**Agree**

Table 6 indicated strong agreement among respondents regarding the STOP method, with a weighted mean of 3.96 (SD = 0.629). Statements on future planning and goal setting (M = 4.30) reflected a high level of financial discipline and proactive behavior (bin Mohd Alwi et al., 2022). However, a lower rating on emergency savings (M = 3.01) suggested limited financial resilience, likely due to income constraints or competing priorities (Singh & Malik, 2022). These findings highlighted the need to strengthen savings behavior alongside budgeting practices. Practically, the results supported the inclusion of emergency preparedness modules in the proposed Financial Inclusion Program. Theoretically, the data reinforced the role of forward-planning behaviors in debt prevention frameworks rooted in behavioral economics.

Table 7: Perception of the Respondents on the PAY Method of Debt Management

Indicator	Mean	Std. Dev.	Category
1. Borrowed money should be repaid as soon as possible.	4.37	0.8542	Strongly Agree
2. Being in debt is never a good thing.	3.97	1.129	Agree
3. I believe I have enough time to settle my debt in the future.	4.03	0.8842	Agree
4. I worry that the repayments on my debt will become unaffordable.	3.73	1.1283	Agree
5. It is a good idea to have something now and pay for it later.	3.33	1.1637	Neutral
6. Even though I am incurring debt now, it will be worth it in the future	3.37	1.1186	Neutral
Weighted Average	**3.8**	**0.6694**	**Agree**

Table 7 revealed a general agreement with the PAY method of debt management, yielding a weighted mean of 3.80 (SD = 0.6694). Respondents strongly agreed that debts should be repaid promptly (M = 4.37), reflecting a clear sense of financial responsibility. Optimism regarding repayment ability (M = 4.03) and aversion to debt (M = 3.97) further supported a positive repayment mindset. However, lower scores on deferred gratification (M = 3.33) and long-term debt benefits (M = 3.37) indicated limited awareness of the implications of installment-based credit use (Ahn & Nam, 2022). These mixed attitudes emphasized the need for financial education focusing on credit structures and repayment risks. Practically, the findings informed the Financial Inclusion Program by advocating for modules that combine repayment ethics with informed credit behavior. Theoretically, they reinforced debt management models that integrate motivation and structured financial guidance (Besker et al., 2022; Jesus et al., 2025a).

Table 8: Perception of the Respondents on the CAUTION Method of Debt Management

Indicator	Mean	Std. Dev.	Category
1. I compare transaction costs across providers before borrowing.	4.16	0.7544	Agree
2. I read and understand the terms and conditions before I sign up for the loan.	4.17	0.8676	Agree
3. I require some training to understand how lending works.	4.03	0.9475	Agree
4. Lending should be regulated to reduce risks to consumers and enhance consumer protection	4.27	0.7599	Strongly Agree
5. Before loan, I carefully research interest rates and repayment plans to avoid excessive debt.	4.36	0.7428	Strongly Agree
Weighted Average	**4.2**	**0.6465**	**Agree**

Table 8 showed strong agreement with the CAUTION method, reflected in a weighted mean of 4.20 (SD = 0.6465), indicating prudent financial behavior among respondents. High ratings for researching interest rates and repayment plans (M = 4.36) and support for lending regulation (M = 4.27) suggested proactive risk management. Respondents also valued reading terms and comparing costs before borrowing, emphasizing informed decision-making. However, the need for training (M = 4.03) highlighted a gap in financial literacy despite existing caution (Squires & Ho, 2023). These findings supported prior research linking risk awareness with responsible debt behavior (Phung et al., 2022; Jesus et al., 2025b). Practically, the results justified integrating regulatory education and decision-support tools in the Financial Inclusion Program. Theoretically, the data reinforced the role of perceived risk and empowerment in sustainable debt management frameworks.

Table 9: Perception of Wage Earners on the Methods of Debt Management

Indicator	Mean	Std. Dev.	Category
Stop Method	3.96	0.629	Agree
Pay Method	3.8	0.6694	Agree
Caution Method	4.2	0.6465	Agree
Weighted Average	**3.99**	**0.6483**	**Agree**

Table 9 presented the overall perception of wage earners on the three debt management methods—STOP, PAY, and CAUTION—with a weighted mean of 3.99 (SD = 0.6483), indicating strong agreement across all strategies. The CAUTION method scored the highest (M = 4.20), reflecting a behavioral emphasis on risk awareness, comparison of loan options, and regulatory safeguards. This was followed by the STOP method (M = 3.96), which emphasized proactive budgeting and avoidance of unnecessary debt, and the PAY method (M = 3.80), highlighting repayment responsibility with moderate variation in attitudes toward deferred payment structures. These results revealed that wage earners in Cebu City demonstrated a multidimensional debt management approach, balancing planning, ethical repayment, and cautious borrowing. This aligns with broader findings suggesting that financial behavior among working populations is influenced by income variability, scarcity perceptions, and trust in institutional protection mechanisms (Hamilton et al., 2022; Toumeh et al., 2023). Practically, these insights support the development of a Financial Inclusion Program that incorporates borrower education, behavioral reinforcement, and policy-backed consumer safeguards. Theoretically, the results contribute to the evolving discourse on debt management by underscoring the value of integrated financial strategies tailored to the realities of low- and middle-income wage earners.

Table 10: Challenges Faced by the Wage Earners

Indicator	Mean	Std. Dev.	Category
1. No personal savings at all.	3.51	1.2481	Significant
2. Worried about having enough money for regular expenses.	3.53	1.2005	Significant
3. Get a sideline job to earn extra income.	3.74	1.086	Significant
4. Insufficient financial resources.	3.49	1.2008	Significant
5. Working more hours	3.56	1.2925	Significant
6. Knowing the difference between needs and wants.	3.41	1.3351	Significant
7. Do not know how to cut bad spending habits.	3.16	1.2813	Moderate
8. Spending impulsively in malls or online platforms (Lazada and Shopee), especially if they are on sale.	3.24	1.4187	Moderate
Weighted Average	**3.46**	**0.9457**	**Significant**

Table 10 revealed that wage earners faced significant challenges (weighted mean = 3.46, SD = 0.9457), where "significant" referred to responses falling within the 3.41–4.20 range, while "moderate" referred to those within 2.61–3.40. The most pressing concern was the need to secure sideline jobs (M = 3.74), highlighting wage inadequacy, alongside limited savings (M = 3.51), insufficient resources (M = 3.49), and difficulty covering expenses (M = 3.53). Moderately rated issues such as impulsive spending (M = 3.24) and poor budget discipline (M = 3.16) indicated behavioral vulnerabilities that compounded financial strain. Overall, the findings underscored that structural income inadequacies were more critical than behavioral gaps, affirming the need for financial inclusion programs that integrate savings tools, behavioral coaching, and spending awareness to strengthen long-term financial resilience (Xiang et al., 2022; Zhen, 2022).

Table 11: Relationship between Digital Lending Inclusion and the STOP Method of Debt Management

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.625	0.534		6.785	0
	Accessibility	0.123	0.118	0.13	1.04	0.302
	Use of Digital Lending	-0.259	0.094	-0.364	-2.765	0.007
	Quality of Digital Lending	0.191	0.142	0.179	1.345	0.183

Model summary (STOP): R = 0.228, R^2 = 0.052, Adjusted R^2 = 0.015, F(3, 96) = 1.409, p = 0.245; Std. Error = 0.624.

Table 11 showed that digital lending accessibility (B = 0.123, p = 0.302) and quality (B = 0.191, p = 0.183) were positively but insignificantly associated with the STOP method, while usage exhibited a significant negative effect (B = -0.259, p = 0.007). This suggested that frequent borrowing through digital platforms weakens budgeting discipline and increases reliance on credit (Yue et al., 2022). The model explains 5.2% of the variance in STOP, indicating low explanatory power, which means that most budgeting behaviors are influenced by non-digital factors such as personal financial discipline and income stability. These findings highlighted that digital inclusion, without behavioral safeguards, may heighten financial vulnerability (Jia & Kanagaretnam, 2025; Jesus et al., 2025c). In practice, the results underscored the importance of embedding budgeting tools and financial planning modules into digital lending platforms to reinforce restraint and responsible borrowing among wage earners.

Table 12: Relationship between Digital Lending Inclusion and the PAY Method of Debt Management

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.809	0.578		4.862	0
	Accessibility	-0.031	0.128	-0.031	-0.242	0.809
	Use of Digital Lending	-0.06	0.101	-0.08	-0.596	0.553
	Quality of Digital Lending	0.364	0.154	0.32	2.365	0.021

Model summary (PAY): R = 0.247, R^2 = 0.061, Adjusted R^2 = 0.024, F(3, 96) = 1.984, p = 0.121; Std. Error = 0.662.

Table 12 showed that perceived quality of digital lending (B = 0.364, p = 0.021) was the only significant positive predictor of repayment behavior under the PAY method. In contrast, accessibility (B = -0.031, p = 0.809) and usage (B = -0.060, p = 0.553) were not significant, suggesting that repayment discipline was shaped more by the trustworthiness and transparency of lending platforms than by access or frequency of borrowing (Chung et al., 2023). The model explained 6.1% of the variance in PAY, reflecting modest explanatory power. Although the overall model did not reach statistical significance (F(3, 96) = 1.984, p = 0.121), the positive effect of quality highlighted that borrowers were more likely to repay responsibly when platforms provided clear loan terms, ethical features, and credible safeguards (Anagreh et al., 2024).

Table 13: Relationship between Digital Lending Inclusion CAUTION Method of Debt Management

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.499	0.537		4.65	0
	Accessibility	0.149	0.119	0.153	1.251	0.215
	Use of Digital Lending	-0.071	0.094	-0.097	-0.751	0.455
	Quality of Digital Lending	0.379	0.143	0.345	2.645	0.01

Model summary (CAUTION): R = 0.307, R^2 = 0.094, Adjusted R^2 = 0.059, F(3, 96) = 3.314, p = 0.023; Std. Error = 0.627.

Table 13 revealed that perceived quality of digital lending (B = 0.379, p = 0.010) was a significant positive predictor of the CAUTION method, while accessibility (B = 0.149, p = 0.215) and usage (B = -0.071, p = 0.455) were not significant. This indicated that cautious borrowing behaviors, such as comparing loan terms and researching repayment conditions, were influenced more by the quality of platforms than by access or frequency of use (Gu et al., 2023). The model explained 9.4% of the variance in CAUTION, reflecting low to moderate explanatory power. Unlike the STOP and PAY models, the CAUTION model reached overall statistical significance (F(3, 96) = 3.314, p = 0.023), underscoring the decisive role of platform quality in promoting informed borrowing. These results suggested that borrowers were more likely to exercise caution when platforms offered transparent conditions, user-friendly information, and trustworthy services (Yanting & Ali, 2023; Jesus et al., 2025d).

Financial Inclusion Program Generated

The Financial Inclusion Program is a strategic initiative designed to enhance the financial resilience of wage earners through responsible digital lending practices, debt management education, and consumer protection. Grounded in the principles of financial literacy, empowerment, and regulatory collaboration, the program aims to bridge the gap between digital access and sustainable financial behavior.

Objectives	Strategies	Persons Involved	Budget	Source of Budget	Time Frame	Expected Outcome
To determine the potential advancements and uses of digital lending as a tool for financial inclusivity and how it affects lenders and borrowers in the financial landscape.	Strategic Partnerships for Enhanced Digital Lending	Digital Lending Companies, Government, Non-government, Volunteers	It will depend on the innovations to be implemented.	Digital Lending Companies, Finance and Budget Department	★ 2 Months Evaluation and Sustainability	By the end of the program, participants are expected to gain an in-depth understanding of how digital lending works, how to effectively utilize these platforms to reduce their debt, and become promoters of financial literacy within their communities.
To contribute to the financial literacy of wage earners in Cebu City by responsible use of digital lending services.	Financial Literacy and Education	Digital Lending Companies Representatives, Government Representatives, Non-governmental, and Volunteers	75,000 (sample computation in table)	Fundraising, Donations, Solicitations, and Government Assistance	★ 5 Weeks for the module ★ 5 Months of Financial Counseling and Support ★ 5 Months Monitoring ★ 1.5 Months Evaluation and Sustainability	Participants are expected to reduce debt and promote financial literacy; the program also anticipates enhancements in digital lending features and user experiences.
To educate wage earners on responsible borrowing and effective debt management strategies and provide detailed research on the advantages and disadvantages of borrowing.	Financial Empowerment and Support	Government Representatives, Non-government, Volunteers	75,000 (sample computation in table)	Fundraising, Donations, Solicitations, and Government Assistance	Same as above	Same as above
To inform wage earners on how to avoid malpractices in lending platforms and/or services that are deemed predatory, such as unethical ways of loan sharks.	Consumer Empowerment and Protection	Government Representatives, Non-government, Volunteers	Included in the total program cost	Fundraising, Donations, Solicitations, and Government Assistance	Same as above	Increased awareness of detecting and avoiding financial malpractices in digital lending platforms.

6. Conclusion

This study examined the efficacy of digital lending in influencing debt management behavior among wage earners in Cebu City, using the STOP, PAY, and CAUTION methods as behavioral frameworks. The findings revealed that while digital lending is widely perceived as accessible and of good quality, actual usage remains neutral, indicating cautious adoption. Among the three dimensions, perceived quality of digital lending emerged as the most significant predictor of responsible financial behaviors, positively influencing both the PAY and CAUTION strategies. In contrast, high usage of digital loans was negatively associated with the STOP method, suggesting that frequent reliance on digital credit may weaken budgeting discipline and increase debt exposure. The results suggest that digital lending alone is insufficient to ensure responsible borrowing; instead, the trustworthiness, transparency, and ethical conduct of lending platforms significantly influence financial outcomes. This highlights the importance of integrating user education, behavioral safeguards, and platform accountability into digital financial ecosystems. In light of these findings, the study proposes a Financial Inclusion Program that emphasizes responsible usage of digital credit by embedding financial literacy on STOP, PAY, and CAUTION strategies, transparency standards for lenders, and mechanisms to

prevent over-indebtedness. Such a program is essential for promoting long-term financial resilience among wage earners and ensuring that digital finance serves as a tool for empowerment rather than financial vulnerability.

7. Limitations of the Study

This study, while providing empirical insights into the influence of digital lending on debt management among wage earners in Cebu City, has several limitations. First, its cross-sectional design captures behaviors and perceptions at a single point in time, which limits the ability to establish causality or track changes in financial behavior over time. Second, the sample size was limited to 100 wage earners in an urban setting, potentially affecting how well the results apply to rural areas or other demographic groups with different access to digital financial services. Third, reliance on self-reported data may introduce response bias, especially in questions related to financial literacy, borrowing behavior, and debt levels. Lastly, although the quantitative approach is useful for testing relationships, it does not explore the deeper psychological or contextual factors that influence debt decisions. Future studies should consider longitudinal or mixed-method designs, expand geographic coverage, and include behavioral or qualitative insights to gain a fuller understanding of digital financial inclusion and its long-term effects on financial well-being.

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