

Financial Literacy and Loan Repayment Behavior Among Philippine Uniformed Personnel: Inputs for a Responsible Financing Policy Framework

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ABSTRACT

This study examined the influence of financial literacy on loan repayment behavior among Philippine uniformed personnel as a basis for a responsible financing policy framework. A descriptive-correlational design was used among 391 personnel with active loan obligations from the Philippine National Police, Armed Forces of the Philippines, Bureau of Fire Protection, and Bureau of Jail Management and Penology. Respondents were selected through stratified sampling, and data were gathered using a validated 27-item questionnaire. The instrument obtained an overall Scale-Level Content Validity Index of 1.00 and reported Cronbach's alpha and McDonald's omega coefficients of .78. Descriptive statistics, Welch analysis of variance, standard analysis of variance, Spearman's rho correlation, multiple regression, and moderation analysis were applied. Financial literacy was

manifested at a moderate level, with a recalculated overall mean of 3.02. Awareness of financial rights and obligations received the highest dimension mean ($M = 3.20$), while budgeting and financial planning received the lowest ($M = 2.82$). Loan repayment behavior was also moderately manifested, with a recalculated overall mean of 3.17. No statistically significant institutional differences were found in financial literacy or repayment behavior. Financial literacy had a statistically significant positive relationship with loan repayment behavior ($\rho = .346, p < .001$). In the multiple-regression model, financial literacy was the only significant predictor of repayment behavior ($B = .596, \beta = .576, p < .001$), while age, rank, and income indicators were not significant. Moderation analysis showed that institutional affiliation changed the strength of the relationship for the AFP and BJMP groups but not for the BFP group. The findings support mandatory financial-capability development, responsible-lending safeguards, advisory services, institution-specific interventions, and systematic monitoring.

Keywords: *financial literacy, loan repayment behavior, responsible borrowing, uniformed personnel, institutional moderation, financing policy framework*

INTRODUCTION

Financial literacy is an important foundation for personal financial stability, responsible borrowing, and sustainable debt management. Individuals who understand budgeting, interest rates, credit terms, repayment schedules, savings, and financial rights are better equipped to make informed decisions and manage financial obligations. In contrast, limited financial capability may contribute to poor planning, loan stacking, reduced take-home pay, and vulnerability to financial stress.

In the Philippines, financial education is recognized within the National Strategy for Financial Inclusion 2022-2028, which emphasizes the need to strengthen financial knowledge, behavior, and attitudes across sectors of society (Bangko Sentral ng Pilipinas, 2022; Financial Inclusion Steering Committee, 2022). The issue is particularly relevant to government employees who have access to institutional credit facilities, automatic payroll deductions, and multiple lending channels.

Uniformed personnel represent a distinct public-sector group. Members of the Philippine National Police (PNP), Armed Forces of the Philippines (AFP), Bureau of Fire Protection (BFP), and Bureau of Jail Management and Penology (BJMP) perform essential public-safety and national-security functions. Their structured employment and regular income may improve access to loans from the Government Service Insurance System, private lenders, provident funds, banks, cooperatives, and savings-and-loan associations. However, easier access to credit may also increase the risk of concurrent loans and overextension.

Previous research consistently links financial literacy with financial behavior and repayment outcomes (Baidoo et al., 2020; Brown et al., 2016; Cacnio & Romarate, 2024; Grohmann, 2018; Lusardi & Mitchell, 2014). Nevertheless, empirical evidence focusing on Philippine uniformed personnel remains limited, especially comparative evidence across institutions and evidence on whether institutional context changes the relationship between literacy and repayment behavior.

This study examined the profile of uniformed personnel with active loans, assessed their financial literacy and repayment behavior, tested institutional differences, determined the relationship between financial literacy and repayment behavior, evaluated predictors of repayment behavior, examined the moderating role of institutional affiliation, and developed a responsible financing policy framework.

Literature Review

Financial Literacy and Responsible Borrowing

Financial literacy involves the knowledge and capability required to understand financial concepts and use them in decision-making. Huston (2010) emphasized the measurement of financial literacy as a combination of understanding and application. Lusardi and Mitchell (2014) described its economic importance, while Atkinson and Messy (2012) highlighted financial knowledge, behavior, and attitudes as central dimensions. In borrowing contexts, financial literacy helps individuals assess repayment capacity, compare loan terms, understand interest costs, and avoid unsustainable obligations.

Financial Behavior and Debt Management

Financial knowledge is valuable when it is translated into disciplined behavior. Hilgert et al. (2003) linked household financial-management knowledge with practices such as budgeting, saving, and credit management. Grohmann (2018) likewise examined the relationship between financial literacy and financial behavior. Borrowers who plan expenses, monitor obligations, and prioritize payments are more likely to maintain repayment discipline.

Loan Repayment Behavior

Loan repayment behavior reflects a borrower's commitment and ability to fulfill agreed obligations. It includes timely payments, adherence to repayment schedules, monitoring of balances, avoidance of excessive additional borrowing, and a responsible attitude toward financial commitments. Baidoo et al. (2020) reported that financial literacy matters for loan repayment, while Brown et al. (2016) showed that financial education can influence debt behavior. These findings support closer examination of financial capability among groups with regular access to credit.

Institutional Context and Uniformed Personnel

Institutional environments can influence financial behavior through compensation systems, payroll-deduction arrangements, lending partnerships, organizational culture, and access to financial support. The source dissertation examined whether institutional affiliation moderated the relationship between financial literacy and

repayment behavior. This question is important because the same level of financial knowledge may not translate into identical repayment practices across different organizational settings.

Theoretical Foundation

The study was anchored on the Theory of Planned Behavior (Ajzen, 1991), which explains how attitudes, behavioral intentions, and perceived control shape behavior. It was also guided by Huston's (2010) financial literacy framework and the principles of responsible borrowing. Applied to the study, financial capability was expected to improve repayment behavior, while institutional affiliation was examined as a contextual moderator.

METHODS

Research Design

The study employed a quantitative descriptive-correlational design. The descriptive component summarized respondent characteristics, financial literacy, and loan repayment behavior. The correlational component tested the association between financial literacy and repayment behavior. Multiple regression and moderation analysis were used to examine predictive relationships and institutional differences in the strength of the literacy-repayment relationship.

Population, Participants, and Sampling Technique

The target population consisted of active uniformed personnel from the PNP, AFP, BFP, and BJMP. The sample included 391 respondents with active loan obligations. The sample size was determined using Cochran's formula for large populations, and stratified sampling was used to obtain representation across the four institutions.

Research Instrument

A structured researcher-developed questionnaire was used. The instrument included profile questions and 27 four-point Likert-scale statements. Fifteen items assessed financial literacy across budgeting and financial planning, understanding of interest rates and loan terms, credit and debt management, savings and investment behavior, and awareness of financial rights and obligations. Twelve items assessed repayment behavior across timeliness of payments, adherence to repayment schedules, debt-management practices, and financial attitude toward repayment.

Validity and Reliability

Six validators reviewed the instrument for relevance, clarity, coherence, and alignment. All reported item-level Content Validity Index values were 1.00, and the overall Scale-Level Content Validity Index was 1.00. The source dissertation reported Cronbach's alpha and McDonald's omega coefficients of .78 for the subscales and for the overall 27-item instrument, interpreted as acceptable.

Data Gathering Procedure

The researcher secured the necessary permission to conduct the survey and informed respondents of the study's purpose, procedures, voluntary nature, and confidentiality safeguards. Completed questionnaires were organized, encoded, checked, and analyzed. Only respondents with active loan obligations were included in the study.

Data Analysis

Frequency and percentage were used to describe the profile of the respondents. Mean, median, and standard deviation summarized financial-literacy and repayment-behavior indicators. Welch ANOVA was used when the homogeneity assumption was violated, while standard ANOVA was used when the assumption was satisfied. Spearman's rho assessed the relationship between financial literacy and repayment behavior. Multiple linear regression tested predictors of repayment behavior, and moderated regression examined institutional affiliation as a moderator. Statistical significance was evaluated at the .05 level.

Ethical Consideration

Participation was voluntary. Respondents received information about the study, and the researcher protected confidentiality and anonymity. The information was used solely for academic purposes. The institutional identity of respondents was used only for aggregated comparisons and moderation analysis.

RESULTS AND DISCUSSION

Profile of Respondents with Active Loan Obligations

Table 1. *Selected Profile Characteristics of the Respondents (N = 391)*

Profile Variable	Category	Frequency	Percentage
Institution	PNP	214	54.70%
	AFP	116	29.59%
	BFP	37	9.62%
	BJMP	24	6.10%
Age	20-29 years old	182	46.55%
Gender	Male	193	49.36%
Marital status	Married	258	65.98%
Rank or position	Non-Commissioned Officer	185	47.30%
Years of service	5-10 years	112	28.64%
Monthly income	PHP 25,000-PHP 40,000	224	57.29%
Number of active loans	3 loans	157	40.15%
Most common loan type	Private lending institution	383	97.95%

The sample was primarily composed of PNP personnel, followed by AFP, BFP, and BJMP respondents. Nearly half were 20 to 29 years old, and most were married. The most common monthly-income bracket was PHP 25,000 to PHP 40,000. Notably, 40.15% reported three active loans, and 18.93% reported more than three active loans. Private lending institutions were the most commonly reported loan source. Since respondents could select multiple loan types, the loan-source percentages do not total 100%.

Level of Financial Literacy

Table 2. *Summary of Financial Literacy Dimensions*

Financial Literacy Dimension	Mean	Median	SD	Interpretation	Rank
Awareness of financial rights and obligations	3.195	3	0.811	Agree	1
Credit and debt management	3.112	3	0.866	Agree	2
Understanding of interest rates and loan terms	3.099	3	0.842	Agree	3
Savings and investment behavior	2.893	3	0.828	Agree	4
Budgeting and financial planning skills	2.823	3	0.890	Agree	5
Recalculated overall mean	3.024	-	-	Agree	

Financial literacy was moderately manifested across all dimensions. Awareness of financial rights and obligations obtained the highest mean ($M = 3.195$), while budgeting and financial-planning skills obtained the lowest ($M = 2.823$). The pattern suggests that respondents generally understood loan-related rights, policies, and sources of assistance but needed stronger day-to-day budgeting, expense monitoring, savings, and pre-loan planning practices.

Level of Loan Repayment Behavior

Table 3. *Summary of Loan Repayment Behavior Dimensions*

Loan Repayment Behavior Dimension	Mean	Median	SD	Interpretation	Rank
Adherence to repayment schedule	3.182	3	0.815	Agree	1
Debt management practices	3.179	3	0.858	Agree	2

Timeliness of payments	3.176	3	0.827	Agree	3
Financial attitude toward repayment	3.132	3	0.922	Agree	4
Recalculated overall mean	3.167	-	-	Agree	

Repayment behavior was also moderately manifested. Adherence to repayment schedules obtained the highest dimension mean ($M = 3.182$), closely followed by debt-management practices ($M = 3.179$) and timeliness of payments ($M = 3.176$). The findings indicate that respondents generally attempted to maintain payments and manage obligations, but the absence of dimension-level Strongly Agree ratings shows room for stronger repayment discipline.

Institutional Differences in Financial Literacy and Repayment Behavior

Table 4. *Differences Across Institutions*

Outcome Variable	Statistical Test	F-value	df	p-value	Decision
Financial literacy	Welch ANOVA	2.634	3, 128.49	.053	Not significant
Loan repayment behavior	ANOVA	0.981	3, 387	.401	Not significant

Financial literacy did not significantly differ across institutions, Welch $F(3, 128.49) = 2.634, p = .053$. Repayment behavior also did not significantly differ across institutions, $F(3, 387) = .981, p = .401$. These results suggest broad similarity in the reported literacy and repayment levels of the four uniformed groups.

Relationship Between Financial Literacy and Repayment Behavior

Table 5. *Spearman Correlation Between Financial Literacy and Loan Repayment Behavior*

Variables	Spearman rho	p-value	Decision	Interpretation
Financial literacy and loan repayment behavior	.346	< .001	Reject H0	Significant positive relationship

Financial literacy had a statistically significant positive relationship with loan repayment behavior, $\rho = .346, p < .001$. The result indicates that higher financial literacy was associated with more responsible repayment behavior. The relationship was meaningful but not strong enough to suggest that literacy alone explains repayment outcomes.

Predictors of Loan Repayment Behavior

Table 6. *Multiple Regression Model Predicting Loan Repayment Behavior*

Model	R	R-squared	Adjusted R-squared	RMSE	F	df	p-value
Regression model	.584	.341	.316	.317	24.612	8, 381	< .001

Table 7. *Regression Coefficients*

Predictor	B	Beta	t	p-value	Decision
Financial literacy	.596	.576	13.668	< .001	Significant
Age	-.002	-.062	-.904	.366	Not significant
Rank: NCO	.057	.074	1.565	.118	Not significant
Rank: commissioned officer	-.028	-.021	-.465	.642	Not significant
Rank: senior officer	.022	.017	.339	.734	Not significant
Income indicator: PHP 25,000	-.021	-.027	-.378	.706	Not significant
Income indicator: PHP 40,000	-.035	-.034	-.446	.656	Not significant
Income indicator: PHP 60,000	-.058	-.054	-.655	.513	Not significant

The regression model was statistically significant, $F(8, 381) = 24.612, p < .001$, and explained 34.1% of the variance in repayment behavior. Financial literacy was the only significant predictor ($B = .596, \beta = .576, p < .001$). Age, rank indicators, and income indicators were not significant. The model supports the central role of financial capability while also showing that other unmeasured factors account for a substantial proportion of repayment behavior.

Moderating Role of Institutional Affiliation

Table 8. *Moderation Model and Institution-Specific Interaction Effects*

Model or Interaction	Coefficient Summary	Test Statistic	p-value	Interpretation
Overall moderation model	R = .605; R-squared = .366; adjusted R-squared = .354	F (7, 383) = 31.569	< .001	Significant
AFP interaction	B = -.523; beta = -.207	t = -4.485	< .001	Significant moderation
BJMP interaction	B = -.420; beta = -.111	t = -2.566	.011	Significant moderation
BFP interaction	B = -.102; beta = -.031	t = -.667	.505	Not significant

The moderation model was statistically significant and explained 36.6% of the variance in repayment behavior. The interaction terms for AFP and BJMP were significant, while the BFP interaction was not. Using the PNP as the reference group, the findings indicate that institutional context changed the strength of the relationship between financial literacy and repayment behavior for selected institutions. The direct institutional coefficients were not significant, which means that affiliation did not independently explain repayment behavior after accounting for literacy and interaction effects.

Responsible Financing Policy Framework

The findings support a responsible financing policy framework that combines individual capability-building with institutional safeguards. The proposed framework prioritizes literacy, behavior, regulation, advisory support, institutional alignment, and monitoring.

Table 9. *Proposed Responsible Financing Policy Framework*

Policy Area	Objective	Key Policy Actions	Expected Outcome
Financial capability development	Enhance financial literacy	Mandatory tiered programs on budgeting, loan evaluation, savings, and debt management	Improved financial decision-making
Behavioral interventions	Bridge the knowledge-behavior gap	Coaching, mentoring, budgeting tools, and incentives for disciplined practices	More consistent financial discipline
Responsible lending regulation	Reduce over-indebtedness	Loan limits, monitoring of active loans, pre-loan counseling, and transparent lending policies	Reduced financial risk
Institutional system alignment	Support informed decisions	Loan dashboards, deduction transparency, and pre- and post-loan mechanisms	Balanced responsibility
Targeted institutional intervention	Address moderation effects	Institution-specific programs and policy review, particularly for AFP and BJMP contexts	Stronger translation of literacy into behavior
Financial advisory services	Provide support	Confidential counseling units and partnerships with qualified advisers	Better financial decisions
Financial culture development	Institutionalize discipline	Leadership advocacy, awareness campaigns, and values integration	Internalized responsibility
Monitoring and evaluation	Ensure policy effectiveness	Key-performance indicators, audits, and periodic literacy assessments	Continuous improvement

CONCLUSION

Financial literacy and loan repayment behavior among the surveyed Philippine uniformed personnel were moderately manifested. Respondents generally understood loan terms, credit-management considerations, and

financial rights, but budgeting, expense monitoring, savings, and pre-loan planning remained important areas for improvement. Repayment practices were generally responsible, although the prevalence of three or more active loans indicates a need for stronger preventive safeguards against financial overextension. Financial literacy was positively related to repayment behavior and emerged as the only significant predictor in the multiple-regression model. Institutional affiliation did not directly explain differences in repayment behavior, but it moderated the relationship between literacy and repayment outcomes in selected groups. The results support an integrated policy response that strengthens individual capability while improving lending controls, counseling, institutional systems, and continuous monitoring.

Recommendations

1. The PNP, AFP, BFP, and BJMP may institutionalize mandatory and periodic financial-literacy programs covering budgeting, interest rates, amortization, debt management, emergency funds, savings, and investment planning.
2. Uniformed institutions may establish responsible-lending safeguards, including pre-loan counseling, active-loan monitoring, transparent salary-deduction dashboards, and reasonable controls against unsustainable loan stacking.
3. Confidential financial-advisory services may be made available to personnel experiencing repayment difficulty or reduced take-home pay.
4. Institution-specific interventions may be developed for AFP and BJMP contexts because the moderation analysis indicates that institutional affiliation changes the strength of the relationship between financial literacy and repayment behavior in these groups.
5. Leaders may promote a financial culture that treats responsible repayment, prudent borrowing, and long-term planning as integral aspects of professional discipline and personnel welfare.
6. The proposed responsible financing policy framework may be reviewed by relevant institutional, legal, financial, and personnel-welfare units before implementation.
7. Future studies may include objective repayment records, debt-to-income ratios, qualitative interviews, longitudinal designs, and additional institutions to validate and extend the findings.

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