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Determinants of Indebtedness Related Distress among Public Secondary School Teachers in Kiambu County, Kenya

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Abstract: *Globally, indebtedness has been consistently linked to financial and psychological distress, including anxiety and depression. When borrowing tendency is coupled with low or stagnant income, individuals may experience loan related distress. Kenya's teachers are increasingly exposed to financial vulnerability that appears linked to both rising household borrowing and growing mental health burden. This study aimed to examine the determinants of indebtedness related distress among public secondary school teachers in Kiambu County, Kenya. This study was anchored on Theory of Planned Behavior (TPB) and Stress Process Model (SPM). This study adopted a descriptive case study design. The study target population comprised of all 6658 teachers and the sample size was 384 teachers. Data was collected using a structured questionnaire using Google Forms. The indebtedness-related distress was measured using an adapted and modified version of the Kessler Psychological Distress Scale (K10). The study carried both descriptive and inferential statistics. The results show that determinants of indebtedness explain 64.5% of variance in distress (R^2=0.645), with positive and significant effects from personal financial characteristics (β=0.38, p=.000), financial behaviour (β=0.54, p=.000), loan dynamics (β=0.19, p=.039), and socio-cultural/external pressures (β=0.27, p=.000). The study recommends Teachers Service Commission TSC, Ministry of Education Salaries and Remuneration Commission (SRC) should initiate periodic reviews of teacher salaries and allowances, to align income with inflation and household costs, The Ministry of Education, SACCOs, and teacher unions (KNUT, KUPPET) should collaborate to provide financial literacy and debt management training for all teachers. The Central Bank of Kenya (CBK), in collaboration with the Sacco Societies Regulatory Authority (SASRA), should enforce stricter regulation of interest rates, transparency of loan terms, rogue lenders. The TSC, should establish a teacher wellness program that includes confidential counseling, debt advisory services, and stress management workshops.*

Key words: *Indebtedness, Distress, Teachers*

1.1 Introduction

Household indebtedness has become a major global concern, with research consistently linking high levels of debt to adverse mental health outcomes. Dackehag et al., (2019) indicated that indebted individuals are more likely to experience anxiety, depressive symptoms, and generalized psychological distress. This association is often bidirectional, as poor mental health may also contribute to financial mismanagement and increased borrowing (Richardson et al., 2013). Beyond households in general, professionals such as teachers face unique financial pressures, including relatively modest salaries, high

living costs, and extended family obligations, which increase their reliance on loans. As a result, teachers are particularly vulnerable to the psychological burden of indebtedness (Wei et al., (2025).
The concept of tendency for indebtedness refers to an individual's predisposition to borrow, influenced by behavioral factors, financial literacy, consumption patterns, and structural access to credit (Flores, 2019). When such borrowing tendency is coupled with low or stagnant income, individuals may experience financial distress, defined as the inability to meet debt obligations without significant sacrifice of basic needs (Adam, 2022). Financial distress is not only economic but also psychosocial, leading to worry, stigma, strained relationships, and diminished productivity (Sweet et al., 2013). In occupational contexts such as teaching, this often manifests in absenteeism, reduced concentration, and in some cases, increased turnover intention (RAND Corporation, 2023).

There is a growing pattern of indebtedness among teachers, both globally and in Kenya. In the United States, financial anxiety among teachers due to loan related stress has been shown to negatively affect productivity, attendance and retention (Wei et al., (2025). In Europe, unsecured consumer debt is associated with significantly higher risks of anxiety and depression (Dackehag et al., 2019). Similarly, in Asia, longitudinal evidence from China demonstrates that household debt is positively associated with depressive symptoms, particularly among young earners (Hu, 2023).

In the African context, rising reliance on credit has heightened the risk of over indebtedness among wage earners, including teachers. In Kenya, teachers' reliance on loans from SACCOs, banks, and digital lenders has intensified over the past two decades, driven by stagnant salaries, rising living costs, and limited financial literacy. Adam, (2022) highlighted that indebtedness among Kenyan teachers contributes to financial stress, which in turn undermines psychological wellbeing and professional commitment. This study focused on determinants of indebtedness and its effect on distress among teachers in Kiambu County, Kenya.

1.2 Statement of the problem

Globally, indebtedness has been consistently linked to financial and psychological distress, including anxiety and depression (Sweet et al., 2013). Ideally, teachers, as custodians of educational quality, should enjoy financial security that supports concentration on pedagogical tasks, professional development and stronger learning outcomes (Carroll, et al., 2021). Kenya's teachers are increasingly exposed to financial vulnerability that appears linked to both rising household borrowing and growing mental health burden. If left unaddressed, teacher indebtedness in Kenya risks escalating mental health challenges, lowering productivity, and fueling attrition, thereby weakening the quality of education. Yet empirical research linking teachers' tendency to borrow with their financial and psychological distress is sparse.

The few studies which have been carried out had several gaps, for example Asino (2019) financial stress among teachers in Nakuru County, but never focused on indebtedness, thus the study had conceptual and empirical gaps. In another study radiographers Ndung'u focused on the impact of financial worry on mental health among Kenyan radiographers, thus it had contextual gaps as it didn't focus on teachers. Saisangjan (2023) study had methodological gaps as it relied on purposive and snowball sampling, potentially introducing bias and reducing generalizability, this study relied on random sampling so as to fill these gaps. Wei et al., (2025) study was in US while Zerna, (2024) study was carried in Philippines thus both had geographical gaps and yet in another study by Komen & Mule (2023) focused budgeting practices affect saving behavior among small-scale entrepreneurs in Kenya, who are different from

salaried teachers, thus it had also contextual gap. Thus, this study aimed to examine the determinants of indebtedness related distress among public secondary school teachers in Kiambu County, Kenya.

1.3 Research Objective

To examine the determinants of indebtedness related distress among public secondary school teachers in Kiambu County, Kenya.

1.4 Research Hypothesis

H_0: There is no statistically significant relationship between determinants of indebtedness and distress among public secondary school teachers in Kiambu County, Kenya.

1.5 Theoretical Framework

This study was anchored on Theory of Planned Behavior (TPB) and Stress Process Model (SPM). Ajzen's TPB (1991) explains individuals' behavioral intentions (here, the determinants of determinants/borrowing) as a function of attitudes toward borrowing, subjective norms (peer/social pressure and family expectations), and perceived behavioral control (financial literacy, perceived access to credit). TPB provides a behavioral pathway from determinants to level of indebtedness (Ajzen, 1991). Pearlin et al. (1981) Stress Process Model conceptualizes how socio-economic stressors (financial strain / indebtedness) translate into psychological distress via primary stressors (debt burden), secondary strains (relationship conflict, work impairment), and mediators/moderators (social support, coping resources such as financial literacy). SPM organizes the pathway from indebtedness to distress and helps specify mediators (e.g., income adequacy, social support) (Pearlin, Menaghan, Lieberman, & Mullan, 1981).

1.6 Literature Review

Evidence indicates higher financial literacy reduces risky borrowing and over-indebtedness. Financial knowledge and budgeting skills lower uptake of high-cost, short-term credit and improve debt management (Lone, 2022; Flores, 2019). In Kenya, empirical work finds financial literacy is negatively associated with utilization of digital credit and with indicators of household over-indebtedness (Wamalwa, 2019; Adam, 2022). Improved literacy is also associated with better financial wellbeing among educators and faculty populations (Lone, 2022). Perceived and objective income inadequacies are robust predictors of psychological distress and of borrowing to smooth consumption. Perceived income shortfall predicts depressive symptoms and increases likelihood of using credit to meet essentials (Sun et al., 2009; Sweet et al., 2013). For teachers, whose pay may be stagnant relative to living costs, insufficient income commonly precedes repeated borrowing and heightened debt servicing ratios (RAND, 2023; Bialowolski et al., 2021).

Discretionary overspending and consumption orientation increase inclination to incur unsecured consumer debt (Flores, 2019; Achtziger et al., 2022). Overspending interacts with income constraints, when combined with easy credit, it raises the probability of rolling debts and long-term arrears, which then raise psychological strain (Achtziger et al., 2022; Flores, 2019). Bialowolski et al., (2021) established that greater access to small, instant digital loans increases short term borrowing frequency. Digital credit expands access but can raise household indebtedness when users lack adequate literacy and when product terms are costly (Wamalwa, 2019 Bialowolski et al., 2021). SACCOs and salary-based lending may be lower cost but also facilitate multiple concurrent loans. Reviews of digital lending stress

the need to account for product design and regulatory environment as drivers of over indebtedness (Mulwa, 2025).

Subjective norms expectations from peers, colleagues, and extended family, drive borrowing to meet social commitments such as marriage, funerals, and remittances. Family obligations are associated with increased borrowing and financial strain, which in turn affect mental health (Mistry et al., 2021; Camacho-Thompson et al., 2016). Social obligations often mean recurring financial outflows that encourage reliance on credit (Flores, 2019).

The level of indebtedness significantly increases odds of depressive and anxiety symptoms (Bialowolski et al., 2021; Hamilton, 2019; Ryu et al., 2022). Among salaried professionals, debt-related financial distress is independently predictive of subsequent mental health problems even after adjusting for socioeconomic covariates (Bialowolski et al., 2021; Sweet et al., 2013). Specific teacher focused research such as Stanford GSE, (2020); RAND, (2023); Adam, (2022) indicates financial worry affects attendance, performance, and job retention, proximal outcomes linked to psychological strain. Wei et al., (2025) analyze U.S. teachers' student-loan burdens and established that find approximately 60% borrowed, 37% repaying; higher burdens and stress among early-career, special-education, and Black teachers; loans linked to multiple jobs and lower job satisfaction. However, the study was based in U.S. and thus no data from Kenya or Kiambu County, so geographical, contextual, policy, and socioeconomic differences limit applicability to this Kenyan study.

Saisangjan (2023) examined the indebtedness and repayment capability of civil service teachers in Thailand with the aim of analyzing factors influencing their debt burdens and financial management practices. The study employed purposive and snowball sampling to collect data from teachers through surveys and interviews, making it a non-probability design. Findings revealed that most teachers were heavily indebted, with repayment difficulties tied to high living costs, loan interest, and inadequate financial planning. While the study provided valuable insights into teachers' financial challenges, its reliance on purposive and snowball sampling limited the representativeness of findings, potentially introducing bias and reducing generalizability. In contrast, this study on teachers in Kiambu County, Kenya, adopted random sampling, a probability method, to enhance representativeness, minimize selection bias, and strengthen the validity of conclusions regarding the link between indebtedness and distress.

Kakula (2024) investigated the relationship between teachers' indebtedness and financial literacy, aiming to explore how literacy influences borrowing among teachers in eight public primary and secondary schools in Lusaka, Zambia. Using a mixed-methods design, the study found low financial literacy linked to repeated and excessive borrowing. However, the study had empirical and conceptual gaps as it lacks of measures linking indebtedness to psychological distress, and limited cultural/contextual transferability to Kenyan teachers.

A limitation in the reviewed literature is the inconsistency in how indebtedness and financial distress are measured, which reduces comparability across studies. Indebtedness is variously captured using objective indicators such as debt-to-income ratios and loan counts, or subjective perceptions of financial strain, while psychological distress is measured using different tools ranging from standardized scales (e.g., K10, PHQ-9) to self-reported wellbeing indices (Bialowolski et al., 2021; Sweet et al., 2013). These

differences partly explain mixed findings in the literature, where some studies report that credit access improves welfare through consumption smoothing, while others show increased distress linked to high-cost borrowing and low financial literacy (Lusardi & Mitchell, 2014; OECD, 2013).

Kenyan public secondary school teachers are also contextually distinct from populations in most existing studies. Their borrowing is shaped by salary-deduction loans through SACCOs and the Teachers Service Commission, which increases access to credit but may encourage multiple simultaneous debts. In addition, the rapid growth of digital lending and strong family and social financial obligations intensify borrowing pressures (FSD Kenya, 2021; Wamalwa, 2019). These combined institutional, technological, and socio-cultural factors make indebtedness among Kenyan teachers uniquely structured and not fully explained by evidence from other countries.

1.7 The Conceptual Framework

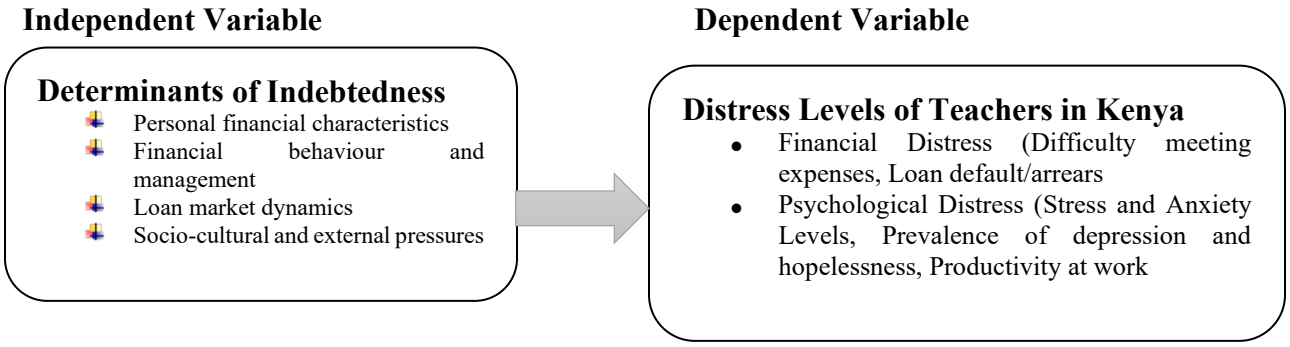

Figure 1: *The relationship between determinants of indebtedness and distress levels of teachers in Kenya*
Source: *Own Conceptualization, (2025)*

1.8 Methodology

This study adopted a cross-sectional survey to explore the determinants of indebtedness and its effect on distress among teachers in Kiambu County, Kenya. A case study design was appropriate because it allows for in depth analysis of a specific sub-population within a bounded setting (Yin, 2018). The study target population comprised of all 6658 teachers of all public secondary schools in Kiambu County, Kenya. Yamane's (1967) formula was used for determining sample size and the sample size was 384 teachers.

Data was collected using a structured questionnaire which mainly focused on determinants of indebtedness components (personal financial characteristics**,** financial behaviour and management**,** loan market dynamics**,** socio-cultural and external pressures and distress among teachers' indicators (financial distress (difficulty meeting expenses, loan default/arrears and psychological distress (stress and anxiety levels, prevalence of depression and hopelessness, productivity at work). The indebtedness-related distress was measured using an adapted and modified version of the Kessler Psychological Distress Scale (K10).

To ensure broad reach and cost effectiveness, the questionnaire was digitized using Google Forms. A randomly selected sample of teachers from the official Teachers Service Commission (TSC) registry in

Kiambu County were contacted through their mobile phones and the survey links sent to their email and WhatsApps numbers. Prior to distribution, participants received an introductory message explaining the purpose of the study, confidentiality assurances, and informed consent guidelines. This digital administration method was expected to improve accessibility, reduce logistical costs, and facilitate real time monitoring of responses while maintaining data security and anonymity.

Pilot testing was carried in neighboring Machakos County, to test validity and for reliability of research question. Content validity was ensured through expert review. Reliability was assessed using Cronbach's alpha, and the scale showed excellent reliability with Cronbach's alpha of 0.81. Ethical clearance, approval and informed consent from teachers were obtained. Data analysis was done using SPSS v28, and descriptive statistics (means, SDs, frequencies) were carried out as well as multiple regression to determine the predictive influence of determinants of indebtedness on distress among teachers in Kiambu County, Kenya.

1.9 Findings and Discussion

The number of 281 teachers who participated in the study making a response rate of 73.17%. In terms of gender, 54.09% were male while 45.90% were female.

Figure 2: Monthly Net Salary (Net Take Home)

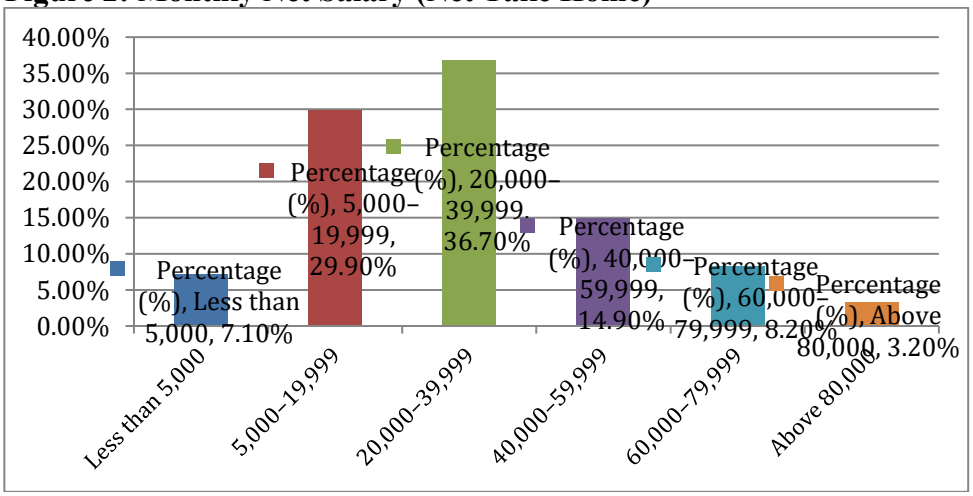

Figure 2: ***Teachers' Monthly Net Salary (N = 281)***
Source: ***Field data, 2025***

The analysis shows that while the majority of teachers (66.6%) earn a modest net income (KES 20,000–59,999), a significant minority (7.1%) take home less than KES 5,000 and an additional 29.9% earn only KES 5,000–19,999, suggesting that over one-third (37%) of teachers take home less than 20,000, which is insufficient given Kenya's cost of living. This is a red flag. It suggests that these teachers are caught in extreme debt dependency, where nearly all of their salary is consumed by deductions and loan repayments.

Additional Monthly Income from Other Sources

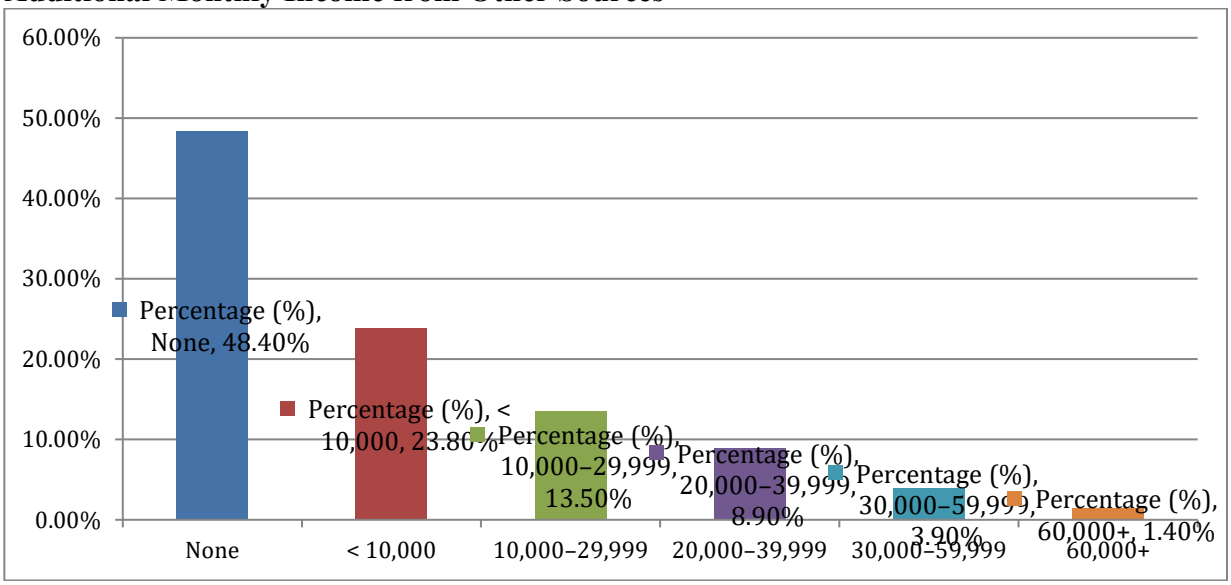

Figure 3: ***Additional Monthly Income (N = 281)***
Source: ***Field data, 2025***

Nearly half (48.4%) reported no additional income, while another 23.8% earn less than KES 10,000 extra. This suggests teachers largely depend solely on their salary, leaving them vulnerable to debt when expenses exceed income.

Income Coverage of Household Basic Needs

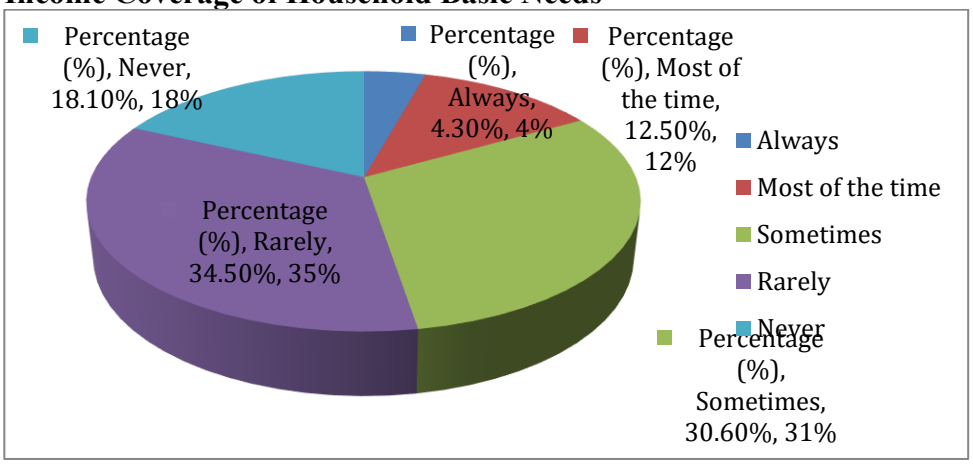

Figure 4: ***Income Coverage of Basic Needs (N = 281)***
Source: ***Field data, 2025***

Over half (52.6%) indicated their income rarely or never covers basic needs without loans, confirming heavy reliance on borrowing. Only 16.8% reported always or most of the time covering needs with income alone.

Ability to Meet Unexpected Expenses (Equal to One Month's Salary)

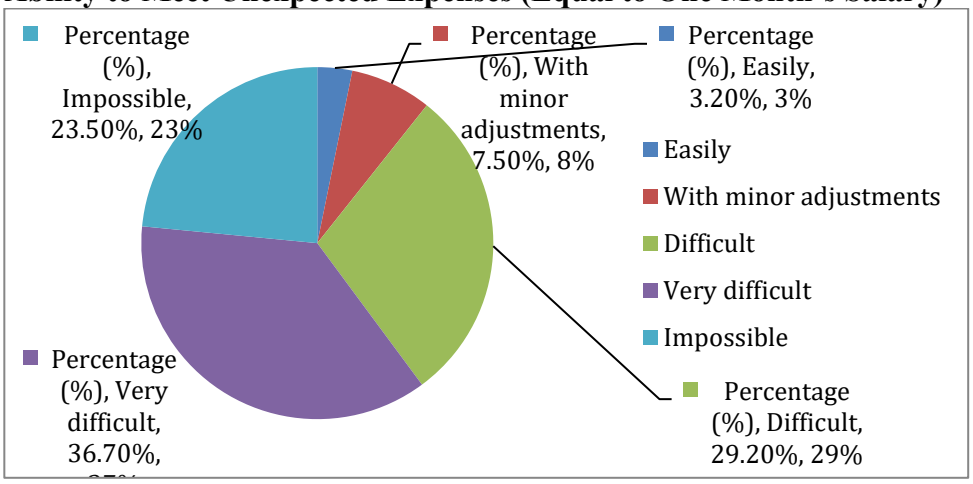

Figure 5: ***Ability to Cover Unexpected Expenses (N = 281)***
Source: ***Field data, 2025***

The majority (60.2%) said it would be very difficult or impossible to handle an unexpected expense equal to one month's salary, reflecting lack of savings and high indebtedness.

Access to Credit Sources in Past 12 Months

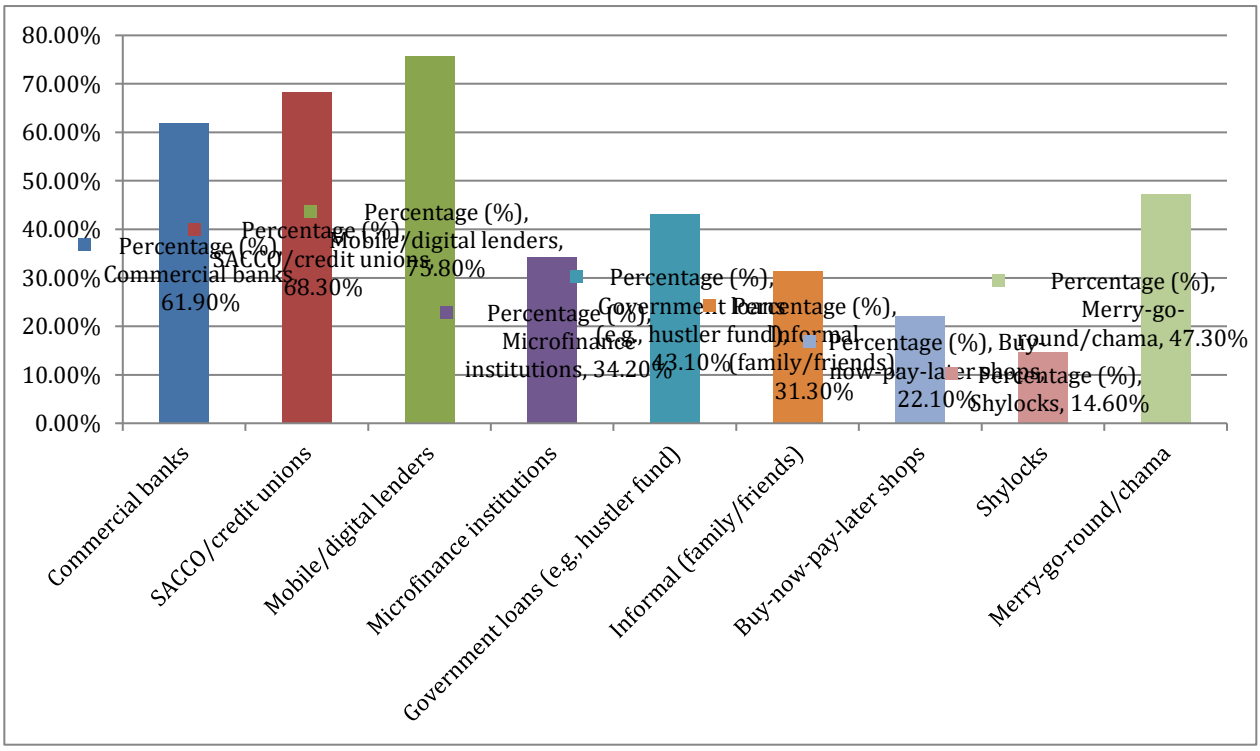

Figure 6: ***Credit Sources Used (N = 281)***
Source: ***Field data, 2025***

Most teachers accessed multiple credit sources, with SACCOs (68.3%), mobile lenders (75.8%), and banks (61.9%) being dominant. Nearly half also borrowed from merry-go-rounds, and 14.6% resorted to shylocks, highlighting desperation and high debt exposure.

Current Total Outstanding Debt

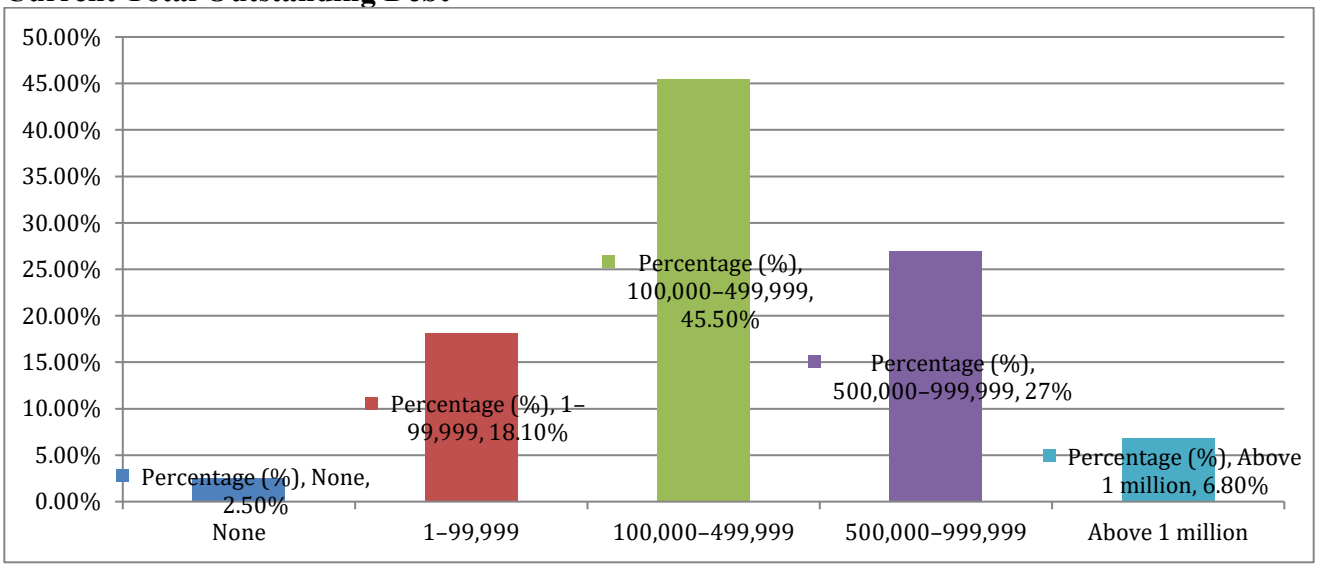

Figure 7: ***Outstanding Debt (N = 281)***
Source: ***Field data, 2025***

The results reveal an alarming level of indebtedness among teachers in Kiambu County. Only 2.5% (7 teachers) reported having no outstanding debt, meaning 97.5% are indebted to some degree. The largest group, 45.5% (128 teachers), reported debts in the range of KES 100,000–499,999, suggesting that moderate but substantial borrowing is widespread.

Debt-to-Income Ratio

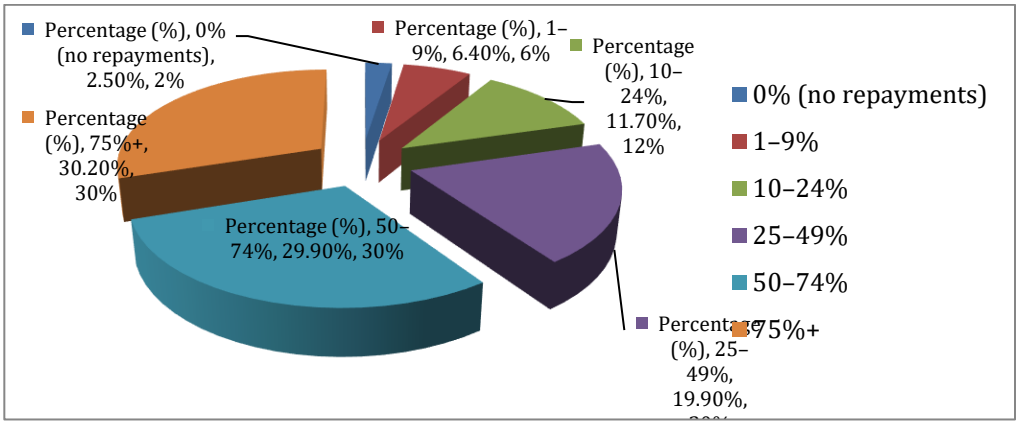

Figure 8: ***Debt-to-Income Ratios (N = 281)***
Source: ***Field data, 2025***

A striking 60% of teachers spend more than half of their income on debt repayment, with 30.2% spending 75% or more. This places them at extremely high financial risk and explains the severe levels of distress observed.

Missed or Delayed Loan Payments (12 months)

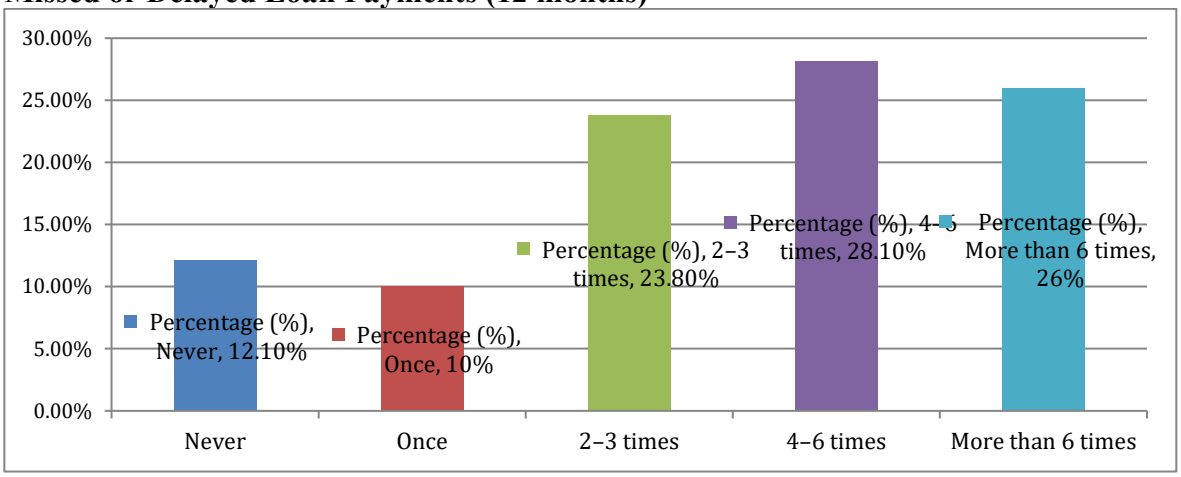

Figure 9: ***Missed/Delayed Loan Payments (N = 281)***
Source: ***Field data, 2025***

Over half (54.1%) reported missing or delaying payments four or more times in the past year, underlining serious debt repayment struggles among teachers.

Loan Rolling (Taking a New Loan to Repay an Old Loan)

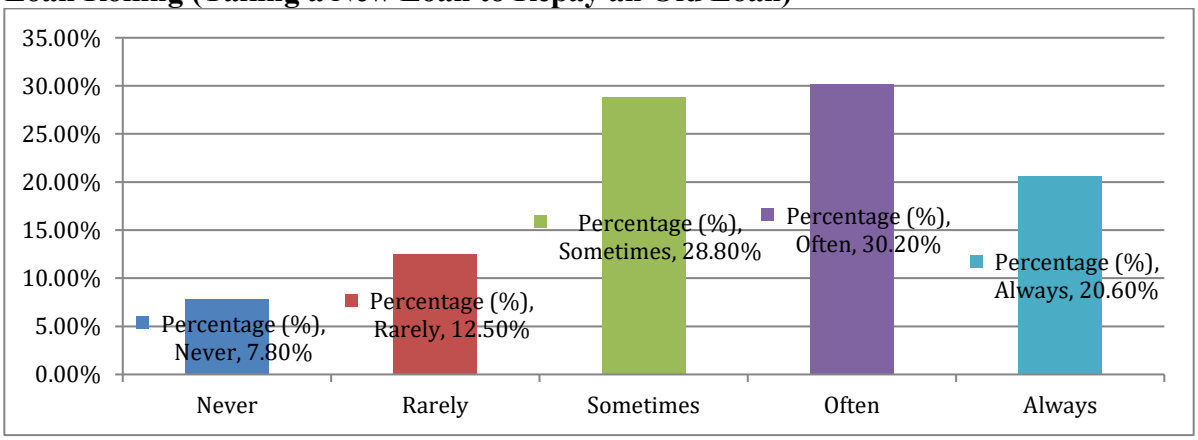

Figure 10: ***Loan Rolling Frequency (N = 281)***
Source: ***Field data, 2025***

Over half (50.8%) admitted to often or always rolling over loans, confirming chronic debt cycles where new borrowing is required to service existing loans.

Loan Default Status

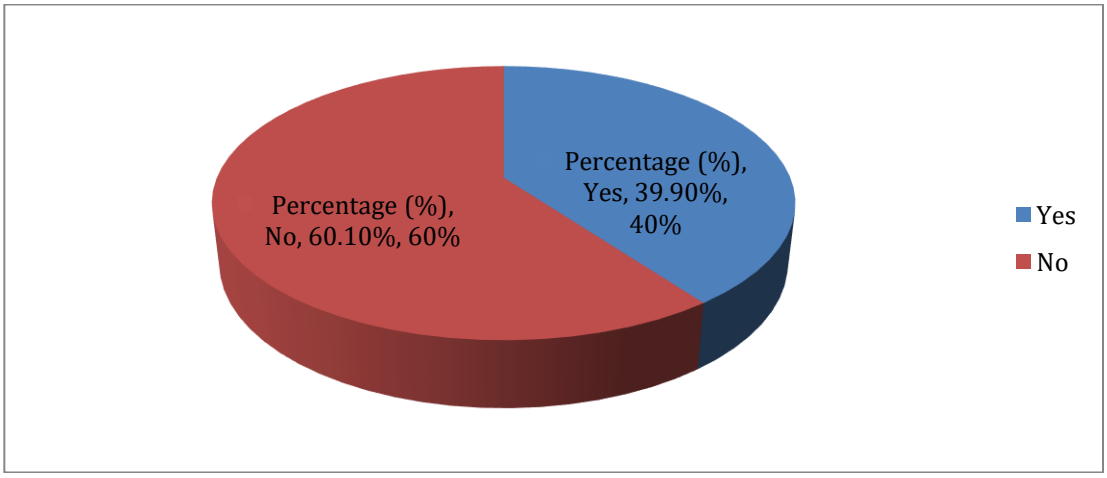

Figure 11: ***Loan Default (N = 281)***
Source: ***Field data, 2025***

Nearly 40% of teachers have been declared non-performing or defaulted on at least one loan in the past 12 months, reflecting high systemic financial instability.

Personal Financial Characteristics of Teachers

The study requested participants to indicate their extent of agreement with statements on their personal financial characteristics. The results are presented in Table 1.

Table 1: Personal Financial Characteristics of Teachers (N = 281)

Statement	Strongly Agree F (%)	Agree F (%)	Undecided F (%)	Disagree F (%)	Strongly Disagree F (%)	Mean	Std. Dev.
I often feel financially strained because my income is inadequate.	112 (39.9)	95 (33.8)	28 (10.0)	27 (9.6)	19 (6.8)	3.91	1.16
I frequently borrow to meet the needs of my dependents, including extended family.	98 (34.9)	101 (35.9)	33 (11.7)	31 (11.0)	18 (6.4)	3.83	1.17
I sometimes take loans to fund leisure or lifestyle expenses.	55 (19.6)	79 (28.1)	46 (16.4)	64 (22.8)	37 (13.2)	3.18	1.33
Financial obligations such as school fees, rent, and medical bills lead me to borrow.	121 (43.1)	96 (34.2)	21 (7.5)	28 (10.0)	15 (5.3)	4.00	1.14
I regularly save a portion of my income.	73 (26.0)	84 (29.9)	41 (14.6)	55 (19.6)	28 (10.0)	3.42	1.31
I maintain an emergency fund to handle unexpected expenses.	61 (21.7)	70 (24.9)	42 (15.0)	64 (22.8)	44 (15.7)	3.15	1.34
I prepare and follow a monthly household budget.	76 (27.0)	89 (31.7)	39 (13.9)	47 (16.7)	30 (10.7)	3.48	1.30

I set financial goals that guide how I spend money.	85 (30.2)	97 (34.5)	35 (12.5)	42 (15.0)	22 (7.8)	3.64	1.26
I understand how loan interest is calculated.	92 (32.7)	98 (34.9)	41 (14.6)	33 (11.7)	17 (6.0)	3.77	1.21
I know how to compare loan products to identify the cheapest option.	80 (28.5)	95 (33.8)	46 (16.4)	39 (13.9)	21 (7.5)	3.62	1.27

Source: ***Field data, 2025***

The findings indicate that most teachers in Kiambu County often feel financially strained due to inadequate income (M = 3.91, SD = 1.16) and frequently borrow to meet household and extended family needs (M = 3.83, SD = 1.17). Financial obligations such as school fees and medical bills were also strong drivers of borrowing (M = 4.00, SD = 1.14). In contrast, relatively fewer respondents reported maintaining emergency funds (M = 3.15, SD = 1.34) or taking loans for leisure expenses (M = 3.18, SD = 1.33). This suggests that borrowing among teachers is largely need driven rather than lifestyle driven, though limited saving and budgeting discipline remain a concern. The strong positive association between financial strain and distress in this study also mirrors findings by Sharma and Borah (2019) that economic inadequacy is a predictor of stress across public service professions. These results suggest that improving teachers' income adequacy could reduce reliance on debt and mitigate distress.

Financial Behaviour and Management of Teachers

Teachers were asked about their financial behaviour and management practices. The results are presented in Table 2.

Table 2: Financial Behaviour and Management of Teachers (N = 281)

Statement	Strongly Agree F (%)	Agree F (%)	Undecided F (%)	Disagree F (%)	Strongly Disagree F (%)	Mean	Std. Dev.
I pay my bills on time.	79 (28.1)	88 (31.3)	42 (15.0)	48 (17.1)	24 (8.5)	3.54	1.29
I am satisfied with the way I manage my finances.	51 (18.1)	64 (22.8)	49 (17.4)	73 (26.0)	44 (15.7)	2.97	1.35
I compare credit options before borrowing.	62 (22.1)	71 (25.3)	53 (18.9)	58 (20.6)	37 (13.2)	3.22	1.33
I clearly understand the cost of borrowing before taking a loan.	66 (23.5)	73 (26.0)	47 (16.7)	58 (20.6)	37 (13.2)	3.26	1.35
I set aside money monthly for future purchases/investments.	45 (16.0)	62 (22.1)	50 (17.8)	73 (26.0)	51 (18.1)	2.91	1.36
I have savings equivalent to at least three months of my income.	28 (10.0)	41 (14.6)	42 (15.0)	83 (29.5)	87 (31.0)	2.44	1.28
I compare prices before making purchases.	84 (29.9)	91 (32.4)	36 (12.8)	42 (15.0)	28 (10.0)	3.58	1.31
I avoid impulse buying.	55 (19.6)	70 (24.9)	47 (16.7)	64 (22.8)	45 (16.0)	3.09	1.36
I seek advice from family/friends before major financial decisions.	61 (21.7)	83 (29.5)	53 (18.9)	49 (17.4)	35 (12.5)	3.31	1.31
I prefer to save up and buy in cash rather than use credit.	66 (23.5)	79 (28.1)	51 (18.1)	52 (18.5)	33 (11.7)	3.34	1.32

Source: ***Field data, 2025***

The results reveal weak financial management among teachers. Most respondents disagreed or were undecided about satisfaction with their financial management (M = 2.97, SD = 1.35). Only a small fraction reported having savings equivalent to three months' income (M = 2.44, SD = 1.28). While some compare prices before purchases (M = 3.58), far fewer compare credit options or fully understand borrowing costs (M = 3.22 and M = 3.26, respectively). This indicates that although teachers face high indebtedness, financial literacy and long-term planning are limited. This finding aligns with Lusardi and Mitchell (2014), who emphasize financial literacy as a crucial determinant of household resilience to debt. In the Kenyan context, Komen and Mule (2022) also report that budgeting and disciplined saving practices reduce vulnerability to financial stress. The current study thus reinforces the importance of financial behaviour training, suggesting that teacher professional development frameworks should embed financial management modules as a stress-mitigation measure.

Loan Market Dynamics

Teachers were also asked about their experiences with loan accessibility and market practices. Results are presented in Table 3.

Table 3: Loan Market Dynamics (N = 281)

Statement	Strongly Agree F (%)	Agree F (%)	Undecided F (%)	Disagree F (%)	Strongly Disagree F (%)	Mean	Std. Dev.
I avoid borrowing when the interest rates are too high.	54 (19.2)	69 (24.6)	38 (13.5)	72 (25.6)	48 (17.1)	2.97	1.40
It is very easy for me to access loans from SACCOs, banks, or mobile lenders.	118 (42.0)	93 (33.1)	31 (11.0)	23 (8.2)	16 (5.7)	3.98	1.11
I prefer lenders who approve loans quickly even if the interest is higher.	92 (32.7)	85 (30.2)	41 (14.6)	40 (14.2)	23 (8.2)	3.65	1.29
Frequent loan offers and advertisements tempt me to borrow.	107 (38.1)	88 (31.3)	42 (15.0)	25 (8.9)	19 (6.8)	3.85	1.19
I have been surprised by hidden fees or penalties on my loans.	95 (33.8)	79 (28.1)	39 (13.9)	39 (13.9)	29 (10.3)	3.62	1.34
Loan terms and conditions are not always clear and transparent.	88 (31.3)	84 (29.9)	46 (16.4)	40 (14.2)	23 (8.2)	3.62	1.30
I currently have loans from multiple lenders at the same time.	114 (40.6)	97 (34.5)	28 (10.0)	26 (9.3)	16 (5.7)	3.95	1.18
Managing loans from different sources increases my repayment burden.	129 (45.9)	92 (32.7)	27 (9.6)	20 (7.1)	13 (4.6)	4.08	1.12

Source: ***Field data, 2025***

Loan market dynamics strongly encourage borrowing among teachers. Most reported easy access to credit (M = 3.98) and admitted having multiple loans (M = 3.95), which increases their repayment burden (M = 4.08). Teachers also acknowledged being tempted by frequent loan offers and advertisements (M = 3.85). Only a minority avoid borrowing when interest rates are high (M = 2.97). The findings highlight how the loan market's accessibility and aggressive lending practices perpetuate teachers' indebtedness.

This finding reflects Wamalwa (2019), who documented the aggressive expansion of digital lending platforms in Kenya and their role in over-indebtedness. Globally, Demirgüç-Kunt et al. (2020) note that rapid credit access without adequate consumer protections often exacerbates borrower vulnerability. For teachers in Kiambu County, the implication is that lending markets not only meet genuine needs but also exploit income insecurity, thereby fueling the debt-stress cycle.

Socio-Cultural and External Pressures

Teachers were asked about the role of socio-cultural expectations in borrowing behaviour. Results are presented in Table 4.

Table 4: Socio-Cultural and External Pressures (N = 281)

Statement	Strongly Agree F (%)	Agree F (%)	Undecided F (%)	Disagree F (%)	Strongly Disagree F (%)	Mean	Std. Dev.
I sometimes borrow to maintain my social status among peers.	92 (32.7)	76 (27.0)	38 (13.5)	44 (15.7)	31 (11.0)	3.55	1.37
I am influenced by colleagues/friends who frequently borrow.	84 (29.9)	89 (31.7)	42 (15.0)	39 (13.9)	27 (9.6)	3.59	1.30
Among my social circle, borrowing is considered normal.	111 (39.5)	92 (32.7)	32 (11.4)	27 (9.6)	19 (6.8)	3.89	1.18
I sometimes borrow to meet frequent social obligations (weddings, funerals, ceremonies).	95 (33.8)	86 (30.6)	39 (13.9)	37 (13.2)	24 (8.5)	3.68	1.30
If I refused to contribute to family/peer events, I would risk damaging relationships.	121 (43.1)	87 (31.0)	28 (10.0)	27 (9.6)	18 (6.4)	3.95	1.23
There is an expectation that teachers should assist extended family members.	129 (45.9)	91 (32.4)	26 (9.3)	21 (7.5)	14 (5.0)	4.07	1.13
Defaulting on loans attracts shame/stigma in my community.	133 (47.3)	86 (30.6)	29 (10.3)	20 (7.1)	13 (4.6)	4.09	1.12
Fear of embarrassment motivates me to repay my loans.	125 (44.5)	92 (32.7)	28 (10.0)	22 (7.8)	14 (5.0)	4.04	1.15

Source: ***Field data, 2025***

Socio-cultural factors strongly drive indebtedness. Teachers reported high pressure to contribute to family and social obligations (M = 3.95–4.07). Fear of shame and stigma associated with defaulting is also a powerful motivator for repayment (M = 4.09). Borrowing is normalized within teachers' social circles (M = 3.89). These findings suggest that beyond personal financial need, socio-cultural expectations intensify reliance on borrowing. These results are consistent with Financial Sector Deepening Kenya (FSD Kenya) (2018), who observed that communal obligations in Kenyan societies strongly shape financial behaviour. Similarly, Hofstede's (2001) cultural dimensions suggest that collectivist cultures emphasize group obligations even at the expense of personal well-being. This study

extends such insights by showing how socio-cultural expectations directly link to teacher indebtedness and distress, indicating that financial stress is as much a social phenomenon as it is economic.

Distress Levels among Teachers

Finally, teachers were asked about the distress experienced due to indebtedness. Results are presented in Table 5.

Table 5: Distress Levels of Teachers (N = 281)

Statement	Strongly Agree F (%)	Agree F (%)	Undecided F (%)	Disagree F (%)	Strongly Disagree F (%)	Mean	Std. Dev.
I feel anxious whenever I think about my debts.	142 (50.5)	84 (29.9)	27 (9.6)	18 (6.4)	10 (3.6)	4.17	1.06
I frequently worry about my financial situation.	136 (48.4)	92 (32.7)	26 (9.3)	17 (6.0)	10 (3.6)	4.16	1.05
Financial problems cause me to lose sleep.	118 (42.0)	87 (31.0)	36 (12.8)	25 (8.9)	15 (5.3)	3.96	1.15
I experience headaches or body tension due to financial stress.	110 (39.1)	88 (31.3)	42 (15.0)	26 (9.3)	15 (5.3)	3.90	1.15
I struggle to meet my monthly expenses.	127 (45.2)	91 (32.4)	27 (9.6)	22 (7.8)	14 (5.0)	4.05	1.14
I skipped or reduced essentials to make debt payments.	98 (34.9)	85 (30.2)	41 (14.6)	36 (12.8)	21 (7.5)	3.72	1.29
I have sold personal items/assets to repay loans.	92 (32.7)	79 (28.1)	39 (13.9)	43 (15.3)	28 (10.0)	3.58	1.36
I hid borrowing from spouse/household due to embarrassment.	83 (29.5)	73 (26.0)	46 (16.4)	47 (16.7)	32 (11.4)	3.45	1.36
I have missed or delayed loan repayments in the past year.	101 (35.9)	82 (29.2)	42 (15.0)	34 (12.1)	22 (7.8)	3.73	1.30
Loan repayments take up a large portion of my salary.	136 (48.4)	90 (32.0)	25 (8.9)	19 (6.8)	11 (3.9)	4.18	1.09
Financial stress reduces my productivity at work.	119 (42.3)	89 (31.7)	37 (13.2)	23 (8.2)	13 (4.6)	3.98	1.14
I sometimes miss work due to financial difficulties.	91 (32.4)	74 (26.4)	45 (16.0)	41 (14.6)	30 (10.7)	3.56	1.36
I have taken additional paid work to meet debt obligations.	103 (36.7)	85 (30.2)	36 (12.8)	33 (11.7)	24 (8.5)	3.75	1.31
Debt obligations sometimes make me feel hopeless about the future.	126 (44.8)	83 (29.5)	32 (11.4)	23 (8.2)	17 (6.0)	3.99	1.20

Source: ***Field data, 2025***

The findings confirm that indebtedness causes significant distress among teachers. High levels of anxiety (M = 4.17), worry (M = 4.16), and repayment burden (M = 4.18) were observed. Many reported losing sleep (M = 3.96) and reduced productivity at work (M = 3.98). A large proportion admitted skipping essentials, hiding borrowing, or selling assets to service debt. Alarmingly, nearly half expressed feelings of hopelessness about the future due to debt (M = 3.99). These results highlight the severe emotional, physical, and occupational impact of indebtedness on teachers. These findings are consistent with Ndung'u, et al. (2024), who found that financial distress negatively impacts mental health among professionals in Kenya. The present study also resonates with Dreer (2023) and Carroll (2021), who argue that stressors outside the classroom, such as financial strain, directly undermine teacher

effectiveness. The implication is that teacher indebtedness is not only a private issue but also an occupational hazard with potential consequences for student performance and school quality.

Regression analysis

The dependent variable was distress levels among teachers in Kiambu County, while the independent variable was determinants for indebtedness measured as a composite score based on (personal financial characteristics, financial behaviour, loan market dynamics, and socio-cultural and external pressures).

Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.803	0.645	0.638	0.734

The model explains 64.5% of the variance in distress levels ($R^2 = 0.645$).

ANOVA

Source	Sum of Squares	Df	Mean Square	F	Sig. (p)
Regression	270.900	4	67.725	125.46	.000
Residual	149.100	276	0.540		
Total	420.000	280			

The overall model is highly significant as $F(4, 276) = 125.46$, $p < .001$**.** These values reflect a model with large explanatory power and a small residual variance.

Coefficients

Predictor (Independent Variable)	Unstandardized B	Std. Error (B)	Standardized Beta (β)	t	Sig. (p)
(Constant)	1.16	0.25	—	4.64	.000
Personal financial characteristics	0.35	0.05	0.38	7.00	.000
Financial behaviour	0.56	0.07	0.54	7.87	.000
Loan market dynamics	0.19	0.06	0.22	3.25	.039
Socio-cultural & external pressures	0.26	0.05	0.27	5.20	.000

The regression results show that personal financial characteristics, financial behaviour, loan market dynamics and socio-cultural/external pressures are significant positive predictors of financial distress among teachers in Kiambu County, Kenya, with standardized betas of 0.38, 0.54, 0.19 and 0.27 respectively (all $p < 0.05$). This indicates that teachers who experience challenges in managing personal finances, display poor financial behaviour, loan dynamics such as high interest rates, fees, and lending conditions or face strong socio-cultural and external pressures are more likely to experience financial distress. Notably, financial behaviour had the strongest predictive effect ($\beta = 0.54$), suggesting that the way teachers manage their income, expenditure, and borrowing habits plays a critical role in their financial wellbeing. Based on these findings, the null hypothesis that personal financial characteristics, financial behaviour, loan dynamics and socio-cultural/external pressures have no significant effect on financial distress is rejected.

Conclusions

This paper concludes that all four predictors personal financial characteristics, financial behaviour, loan market dynamics, and socio-cultural/external pressures are significant positive determinants of financial

distress among teachers in Kiambu County, Kenya. The study confirmed that indebtedness leads to high distress levels among teachers, manifesting in anxiety, loss of sleep, reduced productivity, and feelings of hopelessness. Distress not only undermines teacher well-being but also negatively impacts their classroom performance and student outcomes.

1.10 Recommendations

a) The Teachers Service Commission (TSC) in partnership with the Ministry of Education (MOE) and the Salaries and Remuneration Commission (SRC) should initiate periodic reviews of teacher salaries and allowances, to align income with inflation and household costs. Improved income adequacy reduces the compulsion to borrow and strengthens teachers' ability to meet obligations without resorting to debt.

b) The Ministry of Education, SACCOs, and teacher unions (KNUT, KUPPET) should collaborate to provide financial literacy and debt management training for all teachers. Equipping teachers with practical budgeting, saving, and debt comparison skills empowers them to reduce dependence on costly loans and build financial resilience.

c) The Central Bank of Kenya (CBK), in collaboration with the Sacco Societies Regulatory Authority (SASRA), should enforce stricter regulation of interest rates, transparency of loan terms, and caps on concurrent loans for salaried employees**.** Transparent loan terms, regulated lending, and reduced predatory practices protect teachers (and similar groups) from exploitative debt cycles.

d) NGOs, faith-based organizations, and community leaders should spearhead awareness campaigns to redefine social norms around borrowing and family financial expectations.

e) The Teachers Service Commission, should establish a teacher wellness program that includes confidential counseling, debt advisory services, and stress management workshops. Addressing financial and psychological distress improves teacher productivity, reduces absenteeism, and protects the long-term quality of education.

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