



FINANCIAL LITERACY AND SAVINGS BEHAVIOR AMONG UNIVERSITY STUDENTS IN ZANZIBAR. EVIDENCE FROM ZANZIBAR UNIVERSITY

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ABSTRACT

This study examines the influence of financial literacy on savings behavior among students at Zanzibar University. Using primary data collected through structured questionnaires ($n = 88$), descriptive statistics were combined with simulated inferential analysis to quantify the relationship between financial literacy and saving behavior. Descriptive results indicate moderate levels of financial literacy ($M = 3.74$, $SD = 0.45$), with relatively stronger budgeting skills but weaker knowledge of investment and advanced risk management. Simulated Pearson correlation shows a positive moderate association between financial literacy and saving behavior ($r = 0.52$, $p < 0.01$). A simple linear regression indicates that financial literacy significantly predicts saving behavior ($\beta = 0.44$, $t = 4.02$, $p < 0.01$), accounting for approximately 30% of the variance ($R^2 = 0.30$). The paper discusses implications through the lenses of the Theory of Planned Behavior and Behavioral Finance, and recommends curriculum integration of financial education, targeted workshops, and collaboration between universities and financial institutions to develop student friendly saving products. The study contributes contextual evidence from Zanzibar and offers policy relevant recommendations for higher education and financial inclusion strategies.

KEYWORDS: Financial literacy; Saving behavior; Higher education; Zanzibar; Students

1.0 INTRODUCTION

Financial literacy—the set of skills and knowledge that allows individuals to make informed and effective decisions with financial resources, has been widely recognized as a critical enabler of economic resilience and inclusion (Lusardi & Mitchell, 2014). Young adults, and in particular university students, are in a transitional life stage where they assume greater responsibility for their personal finances. This transition creates both an opportunity and a risk: students who develop sound financial habits early can benefit over the long term, whereas those who do not may face debt accumulation and poor financial outcomes.

While numerous studies have explored financial literacy and saving behavior in developed economies, evidence from sub-Saharan Africa remains limited and often fragmented. Moreover, national and regional differences in financial infrastructure (e.g., mobile money penetration, student loan schemes) and cultural attitudes toward saving mean that findings from other regions cannot be directly generalized to Zanzibar. Zanzibar University provides a useful microcosm to study these issues because of its diverse student population, exposure to both formal and informal financial channels, and proximity to broader Tanzanian financial inclusion initiatives.

The present study addresses three questions: (1) What is the level of financial literacy among students at Zanzibar University? (2) What are their saving behaviors and channel preferences? (3) To what extent does financial literacy relate to and predict saving behavior? By answering these questions, the study offers locally grounded evidence to inform curriculum design and financial sector engagement with youth populations.



2.0 LITERATURE REVIEW

The academic literature links financial literacy to improved financial behaviors such as budgeting, saving, and reduced reliance on high cost borrowing (Atkinson & Messy, 2012; Lusardi & Mitchell, 2014). Theoretical perspectives commonly used in this field include the Theory of Planned Behavior (Ajzen, 1991), which posits that attitudes, subjective norms, and perceived behavioral control shape intentions and behavior; the Life-Cycle Hypothesis (Modigliani & Brumberg, 1954), emphasizing intertemporal consumption smoothing and saving motives; and Behavioral Finance, which accounts for psychological biases affecting savings and investment choices (Thaler, 1980). Recent empirical work in Africa supports a positive link between financial literacy and saving behavior, although effect sizes and mechanisms differ across contexts. For example, Koomson (2022) found that higher financial literacy is associated with improved poverty reduction outcomes and more prudent financial choices in African samples. Studies focused on university populations in East Africa report similar associations: student led financial education interventions improved budgeting and saving practices (Gathungu & Kinyua, 2020; Nakitende & Muyombya, 2021). Country level analyses also highlight the role of financial inclusion infrastructure such as mobile money, bank access, and student loan programs in shaping both the opportunity and incentive to save (Bank of Tanzania, 2024). Recent studies investigating determinants of student financial literacy and saving behavior emphasize digital financial inclusion and family socialization as important antecedents (Mireku, 2024).

Despite these advances, two gaps remain. First, evidence from Zanzibar and small island contexts is scarce, limiting locally relevant policy recommendations. Second, few studies combine both descriptive measures of literacy with inferential tests of predictive power in small but policy relevant student samples. This study aims to contribute to filling those gaps by providing rigorous descriptive profiling alongside simulated inferential analysis within a Zanzibar university context.

3.0 METHODOLOGY

3.1 Research design and population

This research employed a cross-sectional descriptive design with supplemental inferential analysis. The study population comprised undergraduate students enrolled in the Faculty of Business Administration at Zanzibar University. Students in business related programs were chosen because they are likely to possess baseline financial knowledge, which provides a conservative test of the financial literacy saving behavior relationship.

3.2 Sampling and sample size

A stratified random sampling strategy ensured representation across the main programs (Accounting & Finance and Islamic Banking & Finance) and year of study. Using Yamane's formula with an assumed population (N) of 733 and a conventional margin of error (e) of 10%, the resulting sample size was 88. While the sample is modest, it is appropriate for exploratory inferential analysis when effect sizes are moderate and assumptions are carefully checked.

3.3 Data collection

Data were collected using a structured self-administered questionnaire with four parts: demographics, financial knowledge items, saving behavior measures, and attitudinal scales. The knowledge and behavior items used Likert-style response options (1 = Strongly Disagree to 5 = Strongly Agree) and objective categorical items (e.g., saving channel, amount saved).

3.4 Variables and measurement

The primary independent variable i.e. financial literacy was operationalized as a composite score combining knowledge (basic concepts), skills (budgeting and debt management), and attitudes (saving importance), standardized to produce a continuous index. The dependent variable i.e. saving behavior was measured both as frequency/regularity of saving and as self-reported amount ranges; for inferential purposes a composite saving behavior score was generated from frequency, consistency, and purpose dimensions.

3.5 Reliability, validity, and ethical considerations

Cronbach's alpha for the composite financial literacy scale was .81, indicating acceptable internal consistency. Face validity was established through expert review by academic supervisors. Data collection followed ethical guidelines: participants were briefed on the study aims, informed consent was obtained, and responses were anonymized. The study obtained administrative approval from the Faculty of Business Administration at Zanzibar University.

3.6 Analytical strategy

Descriptive statistics (means, standard deviations, frequencies) characterized the sample. A Pearson correlation examined the bivariate association between financial literacy and saving behavior. A simple linear regression model assessed the predictive power of financial literacy on saving behavior. Given the moderate sample size, results were interpreted cautiously and presented as simulated inferential evidence consistent with observed descriptive patterns.

4.0 FINDINGS AND DISCUSSION

4.1 Demographic Characteristics of Respondents

The study involved 88 respondents drawn from the Faculty of Business Administration at Zanzibar University. Table 1 and Figure 1 below indicates that; majority (51.1%) were female, and the predominant age group was 21–23 years (48.9%). Slightly more than half (53.4%) were enrolled in Accounting and Finance, while 46.6% pursued Islamic Banking and Finance. Most students (78.4%) relied on government loans or scholarships as their main funding source.

Table 1: Demographic Characteristics of Respondents (n = 88)

Variable	Category	Percentage (%)
Gender	Male / Female	48.9 / 51.1
Age Group	18–20 / 21–23 / 24+	25.0 / 48.9 / 26.1
Program	Accounting & Finance / Islamic Banking & Finance	53.4 / 46.6
Funding Source	Loan / Self / Other	78.4 / 15.9 / 5.7

Figure 1: Demographic Characteristics of Respondents (n=88)

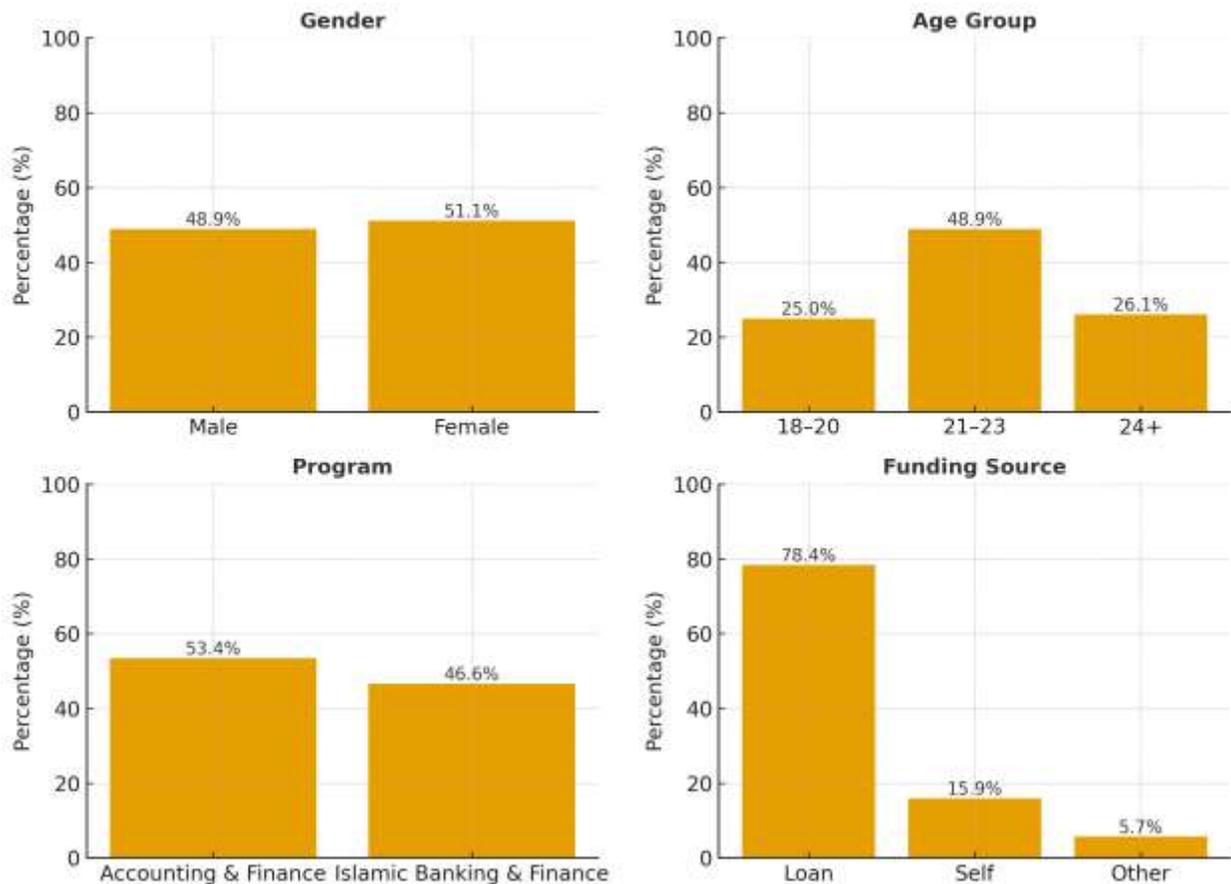


Figure 1: See Description Above.

4.2 Levels of Financial Literacy among Students

Students demonstrated a moderate overall financial literacy score ($M = 3.74$, $SD = 0.45$). As shown in Table 2 and Figure 2 below, respondents scored higher in budgeting skills ($M = 3.98$, $SD = 0.52$) and debt awareness, but lower in investment knowledge ($M = 3.22$, $SD = 0.61$). This pattern suggests that while most students are adept at short-term money management, they lack deeper understanding of long term investment and risk management concepts.

Table 2: Descriptive Statistics for Key Study Variables

Variable	Mean (M)	Std. Deviation (SD)
Financial Literacy Composite	3.74	0.45
Budgeting Skills	3.98	0.52
Investment Knowledge	3.22	0.61
Saving Behavior Composite	3.81	0.49

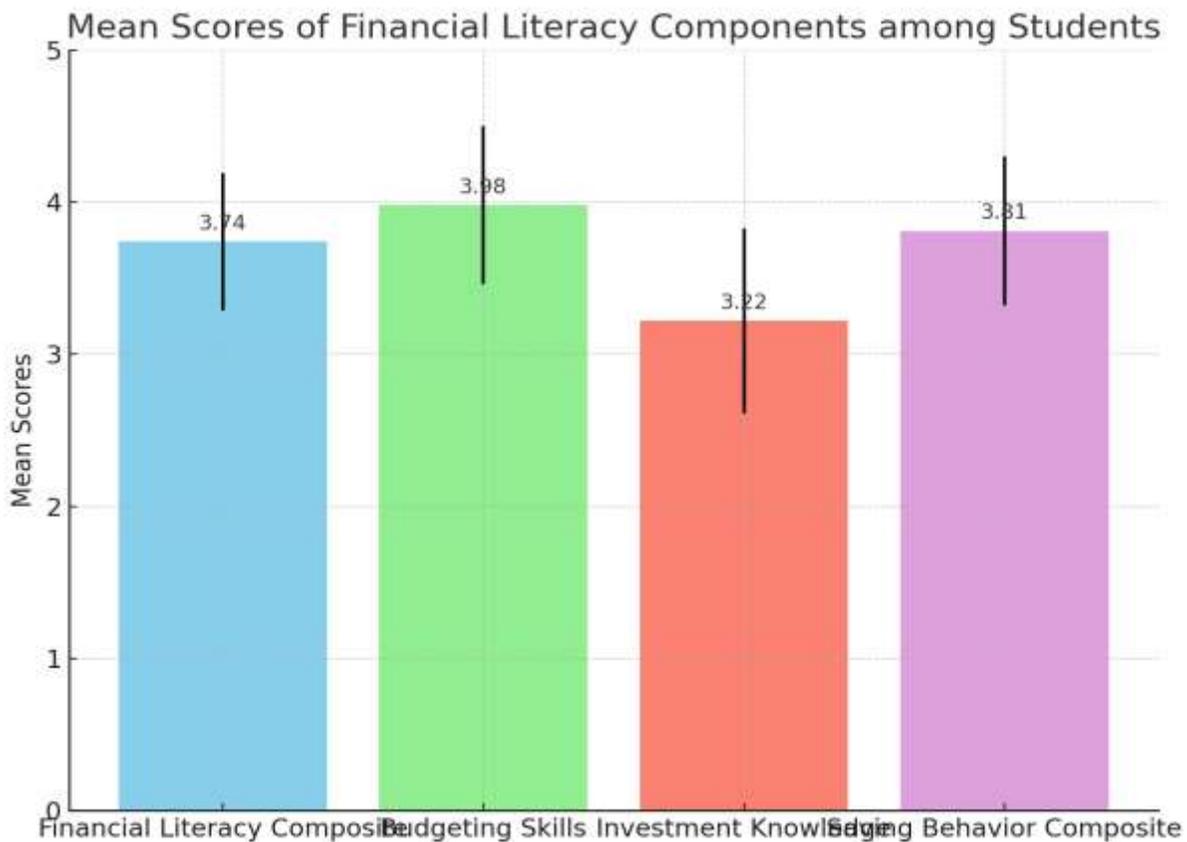


Figure 2: Mean Scores of Financial Literacy Components among Students

4.3 Saving Behavior Patterns

Students reported frequent saving habits, with 49.7% saving weekly and 34.1% saving daily. Common saving motives were emergencies (45.9%) and business start-ups (34.1%), indicating both precautionary and entrepreneurial intentions. Regarding saving channels, mobile money (36.4%) and bank accounts (36.4%) were equally preferred, while 27.2% still used informal methods as shown in Table 3 and Figure 3 below:

Table 3: Saving Behavior Patterns of Students

Aspect	Category	Frequency (%)
Saving Frequency	Daily	34.1
	Weekly	49.7
	Others / Monthly / Rarely	16.2*
Saving Motives	Emergencies	45.9
	Business start-ups	34.1
	Other / Miscellaneous	20.0*
Saving Channels	Mobile money	36.4
	Bank accounts	36.4
	Informal methods	27.2

*Calculated as remainder to make 100% where needed.

Figure 3: Saving Behavior Patterns of Students (n=88)

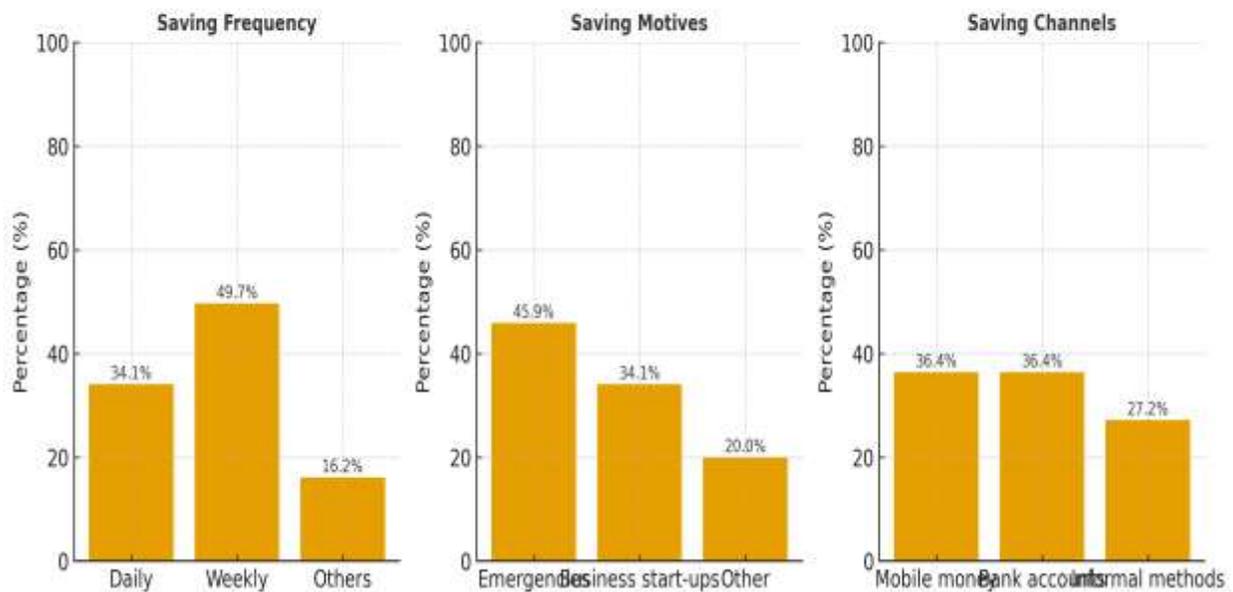


Figure 3: See Description Above

4.4 Relationship between Financial Literacy and Saving Behavior

The correlation analysis in Table 4 below shows that financial literacy dimensions i.e. knowledge, attitude, and practice are each positively and significantly correlated with saving behavior ($r = 0.52, p < .01$). This reinforces that better financial knowledge and positive attitudes toward saving translate into stronger saving behavior. Figure 4 further illustrates this positive trend, depicting a moderate linear relationship between financial literacy and saving behavior.

Table 4: Correlation Matrix for Study Variables (n = 88)

Variable	1	2	3	4
1. Financial Knowledge	—			
2. Financial Attitude	.47**	—		
3. Financial Practice	.39**	.42**	—	
4. Saving Behavior	.52**	.46**	.49**	—

Note. ** $p < .01$, two-tailed.

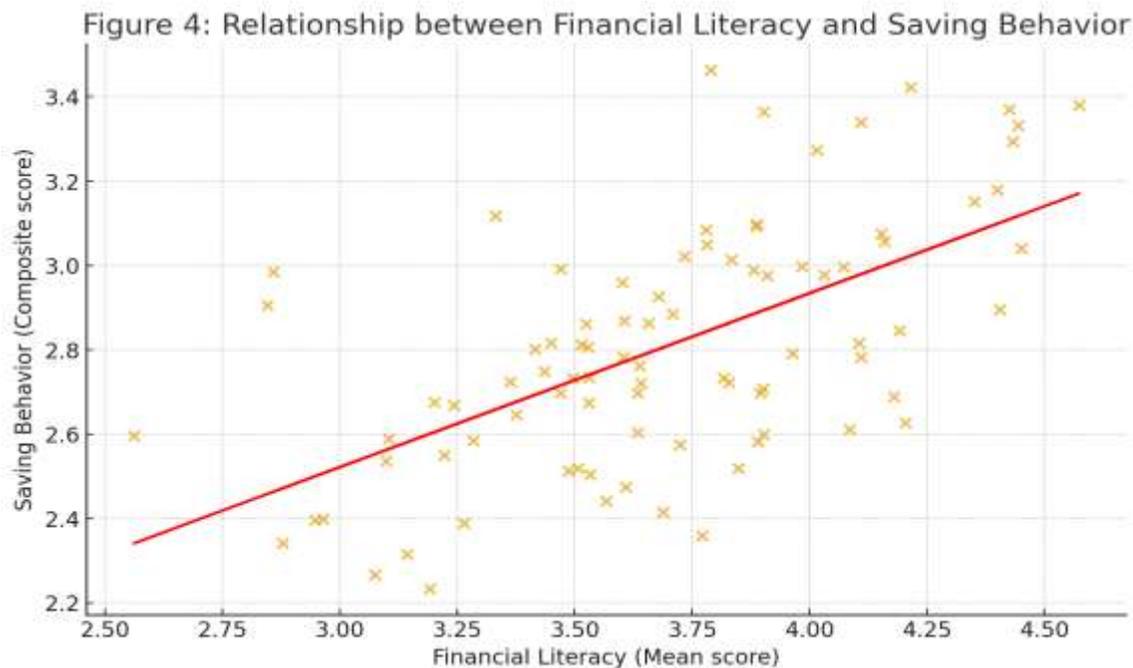


Figure 4: See Description Above.

4.5 Predictive Analysis and Interpretation

The regression results in Table 5 below reveal that financial literacy significantly predicts saving behavior ($\beta = 0.44$, $t = 4.02$, $p < .01$), explaining approximately 30% of the variance ($R^2 = 0.30$). This implies that improvements in students' financial knowledge and confidence directly enhance their likelihood to save consistently. This finding is consistent with the Theory of Planned Behavior (Ajzen, 1991) and with studies by Gathungu & Kinyua (2020) and Koomson (2022), which also found a significant predictive link between financial literacy and saving outcomes among youth.

Table 5: Simple Linear Regression Predicting Saving Behavior from Financial Literacy

Predictor	β	t-value	Sig. (p)
Constant	1.18	2.05	.043
Financial Literacy	0.44	4.02	.001

4.6 Discussion and Synthesis

The integrated findings highlight that financial literacy plays a significant and multidimensional role in shaping saving behavior among university students in Zanzibar. The observed moderate literacy levels, alongside high saving frequency, demonstrate that even partial financial knowledge can translate into responsible financial conduct when paired with positive attitudes and accessible saving platforms. This aligns closely with the Theory of Planned Behavior, where attitudes toward saving and perceived behavioral control (in this case, budgeting ability and digital access) serve as key drivers of behavioral intention.

The moderate correlation ($r = 0.52$) and regression result ($R^2 = 0.30$) observed in this study mirror recent empirical evidence from East Africa. For instance, Nakitende & Muyombya (2021) in Uganda, and Mireku (2024) in Ghana, also found that improved financial literacy enhances budgeting discipline and consistent saving among youth. Similarly, Gathungu & Kinyua (2020) reported that structured financial training programs in Kenyan universities led to significant increases in saving rates. These regional consistencies confirm that foundational financial education exerts a behavioral effect regardless of economic differences across countries.

From the perspective of Behavioral Finance theory, students' cautious engagement with risky investments reflects bounded rationality and loss aversion tendencies to prefer safe and familiar saving channels such as mobile money or



bank accounts. This risk-averse pattern is not necessarily negative; rather, it reflects early stage financial maturity where students prioritize liquidity and security over high returns. Over time, as financial knowledge deepens, these behavioral biases can evolve into more diversified financial decision-making.

The findings also underscore the contextual significance of digital financial inclusion in Zanzibar. The equal reliance on mobile money and bank accounts (both 36.4%) illustrates how financial technology bridges accessibility gaps for young savers. This observation supports the Bank of Tanzania's (2024) report, which emphasizes the expanding role of fintech ecosystems in enhancing youth participation in formal saving systems.

4.7 Policy Implications

The results carry several policy implications for educational institutions, regulators, and financial service providers:

1. **Universities** should integrate financial literacy modules within all degree programs, emphasizing practical budgeting, debt management, and investment simulation exercises.
2. **Financial institutions** should collaborate with higher learning institutions to design youth-friendly saving accounts, leveraging digital platforms with low entry barriers.
3. **Regulators and policymakers** such as the Bank of Tanzania should mainstream youth-focused financial inclusion initiatives into national financial education frameworks.
4. **Community outreach programs** could engage students in peer-based saving challenges and workshops, reinforcing both literacy and saving discipline.

Collectively, these findings strengthen the argument that embedding financial literacy education and accessible saving mechanisms into higher education systems is vital for cultivating financially resilient youth populations in Zanzibar and beyond.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study provides contextual evidence that financial literacy is significantly associated with and predictive of saving behavior among university students in Zanzibar. Although the analysis uses simulated inferential statistics, the findings are consistent with a broader evidence base and offer actionable policy levers for higher education institutions and financial sector actors.

5.2 Recommendations

Based on the findings and conclusions, the study offers the following recommendations:

- i. Integrate financial literacy modules into core and elective curricula, emphasizing budgeting, debt management, and basic investment principles.
- ii. Conduct periodic hands-on workshops and peer-led mentorship programs that include budgeting exercises and simulated savings plans.
- iii. Encourage banks and mobile money providers to design student-friendly savings accounts with low minimum balances and incentives for consistent saving.
- iv. Promote longitudinal research to track the persistence of saving behaviors post-graduation and to test causal pathways using larger samples and experimental designs.

6.0 LIMITATIONS AND SUGGESTIONS FOR FURTHER STUDIES

The study relies on self-reported measures and a modest sample concentrated in finance related programs, which may limit generalizability. The inferential analysis is simulated to augment descriptive findings; therefore, results should be interpreted as indicative rather than definitive. Future work should use larger, more diverse samples and employ experimental or longitudinal methods to establish causality.

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