

The role of financial literacy in shaping financial management, financing and investment decisions in spaza shop businesses: Evidence from Gamalakhe Township, South Africa



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Dates:

Received: 20 Aug. 2025
Accepted: 06 Mar. 2026
Published: 23 Sept. 2026

How to cite this article:

Mkhize, M.B., Mugova, S. & Mashizha, M., 2026, 'The role of financial literacy in shaping financial management, financing and investment decisions in spaza shop businesses: Evidence from Gamalakhe Township, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 18(1), a1241. <https://doi.org/10.4102/sajesbm.v18i1.1241>

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Background: Financial literacy (FL) is increasingly recognised as a key determinant of financial decision-making and business sustainability among informal micro-enterprises. Despite the importance of spaza shops in South African townships, limited evidence exists on how FL influences their financial management, financing and investment decisions.

Aim: This study examines the role of FL in shaping financial management practices, financing choices and investment decisions among spaza shop owners.

Setting: The study focused on spaza shop businesses in Gamalakhe Township, South Africa.

Methods: A quantitative design used survey data from 100 spaza shop owners. Financial literacy and financial decision-making variables were measured using validated Likert-scale items. Descriptive statistics and ordinal logistic regression assessed the influence of FL on budgeting, record-keeping, financing behaviour, investment decisions and financial risk management.

Results: Financial literacy had a statistically significant positive effect on key financial decisions. It significantly predicted the likelihood of selecting more favourable financing options ($\beta = 1.636, p \leq 0.001$) and higher-level investment decisions ($\beta = 1.942, p \leq 0.001$). Financial literacy was also positively associated with budgeting, record-keeping and risk mitigation.

Conclusion: Financial literacy functions as both a strategic resource and behavioural enabler, shaping financial decisions central to the sustainability of informal enterprises.

Contribution: The study provides empirical evidence from an under-researched township context and integrates resource-based and behavioural perspectives to explain financial decision-making among spaza shop businesses.

Keywords: financial literacy; spaza shops; township entrepreneurship; financing decisions; investment behaviour; informal economy; South Africa.

Introduction

Small, medium and micro-enterprises (SMMEs) are widely recognised as critical drivers of employment creation, poverty alleviation and local economic development, particularly in emerging economies (Atkinson & Messy 2012; Fatoki 2021). In South Africa, informal enterprises play a particularly important role in township economies, where they provide essential goods and services while absorbing labour excluded from the formal sector (Lamb et al. 2019; Mukwarami 2017). Among these enterprises, spaza shops—small, owner-managed retail outlets operating largely informally—constitute a dominant form of township entrepreneurship and contribute significantly to household livelihoods and community resilience.

Despite their economic importance, spaza shop businesses operate in highly constrained environments characterised by limited access to formal finance, weak institutional support, crime and intense competition from formal retailers (Lamb et al. 2019; Mukwarami 2017). Research

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consistently shows that under such conditions, enterprise sustainability depends not only on external structural factors, but also on the quality of owner-manager decision-making, particularly with respect to financial choices (Fatoki 2012; Molosiwa & Holland 2025). This has renewed scholarly interest in financial literacy (FL) as a key determinant of micro-enterprise survival and growth.

Financial literacy refers to the knowledge, skills and confidence required to make informed and effective financial decisions (Organisation for Economic Co-operation and Development [OECD] 2015). Early scholarship conceptualised FL primarily as an understanding of basic financial concepts such as interest rates, inflation and risk diversification (Atkinson & Messy 2012; Lusardi & Mitchell 2014). Subsequent research has extended this view by emphasising the application of financial knowledge in budgeting, record-keeping, credit management and investment planning, particularly within small business contexts (Eniola & Entebang 2016; Eresia-Eke & Raath 2013).

More recent high-impact studies have demonstrated that FL is especially consequential for micro- and informal enterprises, where owners rely heavily on personal competencies rather than professional financial advisers or formal governance mechanisms (Daskalakis 2025; Ibitomi et al. 2024). In such contexts, FL shapes how entrepreneurs manage cash flows, evaluate credit options, reinvest profits and respond to financial risk. Empirical evidence from developing and emerging economies shows that financially literate entrepreneurs are more likely to use formal financing channels, avoid high-cost informal debt and make forward-looking investment decisions that enhance long-term business sustainability (Kurniasari, Abd Hamid & Lestari 2025; Molosiwa & Holland 2025; Ye & Kulathunga 2019).

Limited FL among micro- and informal entrepreneurs has been widely associated with weak financial management practices, including inadequate record-keeping, poor cash flow management and suboptimal borrowing decisions. Empirical evidence indicates that entrepreneurs with low FL are more vulnerable to financial distress because they are unable to assess credit costs accurately, manage debt obligations and plan for business risk (Anshika, Singla & Mallik 2021; Drexler, Fischer & Schoar 2014). In informal enterprise settings, where access to formal training and advisory services is limited, these challenges are often intensified, increasing the likelihood of business stagnation or failure (Abdallah et al. 2025).

Research shows that although FL improves small and medium-sized enterprise (SME) decision-making and competitiveness, further empirical investigation is still required, indicating remaining gaps in the literature (Molosiwa & Holland 2025). Much of the existing research focuses on formal SMEs or household-level financial behaviour, with relatively limited empirical attention to informal micro-enterprises operating in township contexts (Fatoki 2021; Molosiwa & Holland 2025). Furthermore, many

studies examine FL in isolation without sufficiently integrating strategic and behavioural perspectives that explain how financial knowledge translates into actual decision-making behaviour among entrepreneurs (Basha, Bennis & Goaid 2025; Daskalakis 2025). As a result, there is still limited empirical understanding of how FL shapes financial management, financing and investment decisions among spaza shop owners in South African townships.

From a theoretical perspective, recent scholarship calls for integrative frameworks that link FL to both strategic resource allocation and behavioural decision-making. Resource-based theory (RBT) conceptualises FL as an intangible, firm-specific capability that enhances competitive advantage and resilience, particularly in resource-constrained environments (Barney 1991; Kurniasari et al. 2025; Peteraf 1993). Moreover, behavioural perspectives such as the theory of planned behaviour (TPB) emphasise the role of attitudes, subjective norms and perceived behavioural control in translating financial knowledge into action (Ajzen 2005; Basha et al. 2025). Integrating these perspectives provides a more comprehensive explanation of financial behaviour in informal enterprises.

Despite the economic importance of spaza shop businesses in South African townships, there is limited knowledge on how FL influences financial management practices, financing choices and investment decisions among informal entrepreneurs. This lack of context-specific evidence constrains the design of effective policy interventions and targeted financial education programmes aimed at improving the sustainability of township enterprises.

Guided by this contextual background, the study assesses the role of FL in informing financial management practices as well as financing and investment decisions among spaza shop owners in Gamalakhe Township, South Africa. Using survey data from 100 spaza shop operators and applying ordinal logistic regression, this study examines how FL influences budgeting and record-keeping practices, financing choices, investment behaviour and financial risk management. By investigating an underexplored informal business context and integrating strategic and behavioural theoretical perspectives, this study offers new empirical evidence highlighting FL as both a strategic resource and a behavioural enabler shaping financial decision-making in township enterprises (Lusardi & Mitchell 2014; OECD 2020).

The study makes three principal contributions to the existing literature. Firstly, it broadens FL research by examining the informal micro-enterprise sector, addressing a significant empirical gap in the South African context. Secondly, it integrates resource-based and behavioural theories to offer a more nuanced explanation of financial decision-making among informal entrepreneurs. Thirdly, it provides policy-relevant insights for the design of targeted FL interventions aimed at improving the sustainability of township businesses and promoting inclusive economic development.

Literature review

Recent scholarship increasingly emphasises that enterprise survival and growth in informal and resource-constrained environments depend less on firm size and more on the quality of owner-manager decision-making. In such contexts, FL has emerged as a central determinant of budgeting, financing, investment and risk management practices among micro- and small enterprises (Ibitomi et al. 2024; Molosiwa & Holland 2025). These insights extend earlier SME finance research by highlighting that FL is particularly consequential in informal enterprises, where entrepreneurs rely primarily on personal competencies rather than institutional support mechanisms.

In township economies, informal businesses such as spaza shops operate under conditions of limited access to formal training, financial advisory services and structured governance. As a result, financial decision-making is largely driven by knowledge, attitudes and behavioural dispositions of owner-managers. Understanding how FL influences financial management, financing and investment decisions in this context therefore requires a theoretical framework that integrates strategic, behavioural and knowledge-based perspectives. This study draws on three complementary frameworks: RBT, the theory of FL and the TPB.

Resource-based theory and financial literacy

Resource-based theory, which originated from the work of Penrose (1959) and was later formalised by Barney (1991) and Peteraf (1993), posits that firms achieve sustainable competitive advantage through the effective deployment of internal resources that are valuable, rare, inimitable and non-substitutable. Within this framework, intangible resources such as knowledge, skills and managerial capabilities are particularly important, as they are difficult for competitors to replicate. In small and micro-enterprise contexts, where access to external resources is constrained, internal capabilities often determine firm survival.

Recent empirical research has strengthened the applicability of RBT to informal enterprises by demonstrating that FL functions as a strategic resource enhancing sustainability and resilience. Evidence from developing country contexts shows that financially literate entrepreneurs are better able to allocate scarce resources efficiently, evaluate trade-offs between financing options and translate access to finance into productive investment rather than short-term consumption (Kurniasari et al. 2025). In informal enterprises, where professional financial advisory services and formal governance structures are largely absent, FL becomes a particularly valuable internal capability that directly shapes competitive outcomes.

Furthermore, recent sustainability-oriented studies indicate FL as a relationship mediator between financial access and long-term enterprise viability. Small and medium-sized enterprises with higher levels of FL are better positioned to use external financing strategically to enhance productivity

and resilience, rather than increasing vulnerability through unsustainable debt accumulation (Basha et al. 2025; Lusardi & Tufano 2015). These findings reinforce the relevance of RBT in explaining why FL can serve as a core strategic asset for spaza shop businesses operating in township economies.

Theory of financial literacy and entrepreneurial capability

Financial literacy theory provides a theoretical foundation for understanding how financial knowledge and capabilities are translated into sound financial behaviours and informed financial decisions (Huston 2010; OECD 2020). Traditionally, FL has been defined as the ability to understand financial concepts, products and risks and to apply this knowledge to make informed financial decisions (Lusardi & Mitchell 2014). Within the SME context, FL has been associated with improved budgeting, record-keeping, credit management and investment planning. Recent literature, however, advances this theory by emphasising the applied and behavioural dimensions of FL rather than viewing it solely as conceptual knowledge. Contemporary studies argue that FL encompasses not only awareness of financial products, but also the capacity to consistently apply financial knowledge in day-to-day business decisions (Molosiwa & Holland 2025). This distinction is particularly important in informal enterprises, where financial decisions are embedded in daily operational practices rather than formal strategic planning processes.

Cross-country evidence further suggests that functional FL is a stronger predictor of business decision quality than is formal education alone. Using data from micro- and small entrepreneurs across multiple countries, Daskalakis (2025) finds that entrepreneurs with higher functional FL demonstrate superior financing and investment decision-making regardless of their formal educational attainment. This implies that FL operates as a practical entrepreneurial capability that directly influences behaviour rather than merely reflecting academic knowledge. In township economies, where many entrepreneurs lack formal business training, FL therefore represents a critical mechanism through which entrepreneurs can improve financial management practices and reduce vulnerability to financial distress. This perspective provides a strong theoretical foundation for examining FL as a determinant of financing and investment decisions among spaza shop owners.

Theory of planned behaviour and financial decision-making

While RBT and FL theory emphasise capabilities and knowledge, TPB introduces a behavioural dimension to entrepreneurial decision-making. According to the TPB, individual behaviour is driven by behavioural intentions, which are shaped by attitudes towards the behaviour, subjective norms and perceived behavioural control (Ajzen 2005). In the context of financial decision-making, TPB helps explain why entrepreneurs with similar levels of knowledge may exhibit different financial behaviours.

Recent FL research supports the relevance of the TPB by demonstrating that financial knowledge influences entrepreneurial behaviour through changes in confidence, attitudes towards financial risk and perceived control over financial outcomes. Empirical studies show that financially literate entrepreneurs exhibit greater confidence in engaging with formal financing institutions, adopting structured record-keeping systems and committing to long-term investment strategies (Basha et al. 2025; Daskalakis 2025). These behavioural effects are particularly important in informal business environments, where social norms often favour informal borrowing and cash-based practices.

Moreover, recent evidence suggests that FL can mitigate the influence of adverse subjective norms by enabling entrepreneurs to question informal practices that may be financially harmful. Financial literacy functions not only as a cognitive capability, but also as a behavioural mechanism that enhances perceived behavioural control over financial actions. Integrating the TPB with FL theory therefore provides a comprehensive framework for explaining how financial knowledge translates into observable financing, investment and risk management behaviours among spaza shop owners (Chooan et al. 2025; Patel & Nayak 2024; Yeo et al. 2024).

Financial literacy, financing decisions and investment behaviour

Recent studies by Daskalakis (2025) and Kurniasari et al. (2025) emphasise that FL is particularly consequential in informal and resource-constrained enterprise environments, where owner-managers rely primarily on personal financial competencies rather than formal advisory support. In informal and resource-constrained environments, FL plays a disproportionately important role because owner-managers rely heavily on personal competencies rather than institutional support mechanisms (Molosiwa & Holland 2025). Evidence from emerging economies further suggests that targeted FL interventions can improve financial decision-making and enterprise performance, even in the absence of broader structural reforms (Kurniasari et al. 2025). A growing body of recent empirical research provides strong evidence that FL significantly influences financing and investment decisions in micro- and small enterprises. Studies conducted in developing and emerging economies show that entrepreneurs with higher levels of FL are more likely to utilise formal financing channels, accurately assess credit costs and avoid high-interest informal debt (Ibitomi et al. 2024; Kurniasari et al. 2025). This relationship is particularly salient in informal enterprises, where limited access to financial advisory services increases reliance on owner judgement.

Investment behaviour is similarly shaped by FL. Contemporary studies demonstrate that financially literate entrepreneurs are more inclined to reinvest profits, acquire productivity-enhancing assets and pursue growth-oriented strategies rather than short-term survivalist investments

(Daskalakis 2025; Molosiwa & Holland 2025). Findings from this study suggest that FL not only improves decision quality but also encourages a longer-term orientation towards business sustainability. Recent studies by Daskalakis (2025) and Kurniasari et al. (2025) highlight that FL plays a significant role in shaping entrepreneurs' financing and investment decisions by improving their ability to evaluate credit options, assess risk and adopt longer-term growth-oriented strategies. In informal township settings, where financial exclusion and institutional voids are prevalent, FL plays a disproportionately large role in shaping outcomes. This underscores the importance of examining FL within spaza shop businesses, where financing and investment decisions directly affect enterprise continuity and resilience.

Research gap and contribution

Although the body of recent research on FL and SME performance has expanded considerably, notable gaps remain in the literature. Existing studies largely emphasise formal enterprises or analyses based on national datasets, with relatively limited scholarly attention devoted to informal micro-enterprises operating within township economies (Fatoki 2021; Lusardi & Mitchell 2014; OECD 2020). In addition, few studies integrate resource-based and behavioural perspectives to explain how FL simultaneously functions as a strategic resource and a behavioural driver of financial decision-making. In response to the identified research gaps, the study explores the role of FL in informing financial management, financing and investment practices among spaza shop owners in Gamalakhe Township, South Africa. By integrating RBT, the theory of FL and the TPB, this study extends recent FL scholarship into an under-researched informal context and provides empirical evidence on how FL influences entrepreneurial outcomes in township economies. Considering the identified research gap and the need to better understand the role of FL in informal township enterprises, this study is guided by the following research questions, which link the theoretical framework to empirical analysis.

Research questions

- *How does FL influence financial management practices among spaza shop owners in South African townships?*
- *To what extent does FL affect financing decisions among spaza shop businesses?*
- *How does FL shape investment decision-making in informal township enterprises?*

Research methods and design

Study design

This study adopted a quantitative research design to examine the influence of FL on financial management practices, financing decisions and investment behaviour among informal spaza shop businesses. A quantitative research approach was deemed suitable because it allows for the systematic

assessment of relationships between variables and supports the statistical testing of hypotheses using regression-based methods. This design enabled the collection of standardised data from a relatively large sample within a limited timeframe, thereby promoting consistency and reliability in the analysis.

Population and sampling

The targeted population for the study comprises spaza shop businesses operating in Gamalakhe Township, South Africa. Gamalakhe Township has an estimated population exceeding 15000 residents and is served by a substantial number of informal retail enterprises. Based on municipal and field estimates, approximately 300 spaza shops operate within the township. Given the absence of a formal or comprehensive database containing the count of spaza shop businesses, a purposive sampling technique was employed to identify eligible respondents who met the study criteria. Purposive sampling was deemed suitable because it enabled the selection of information-rich cases and facilitated access to informal entrepreneurs, who are often difficult to reach through probability sampling methods. While purposive sampling was appropriate given the absence of a formal spaza shop database, this approach limits the generalisability of the findings beyond the study context. A total of 169 questionnaires were distributed to eligible spaza shop owners. Of these, 100 completed questionnaires were returned and used in the final analysis, representing a response rate of approximately 59.2%. The final sample of 100 respondents was considered adequate for the statistical techniques employed, including ordinal logistic regression.

Data collection instrument

Data were collected via a structured questionnaire administered directly to spaza shop owners. The questionnaire consisted of closed-ended questions measured on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The instrument captured information on respondents' demographic characteristics, FL, financial management practices (including budgeting and record-keeping), financing behaviour, investment decisions and financial risk management practices. In this study, financial management practices are conceptualised as a multidimensional construct encompassing financial planning and budgeting (FPB), financial control (FC) and financial risk management, which together address the first research question relating to how FL influences day-to-day financial management among spaza shop owners. The measurement items were adapted from validated instruments used in prior studies on FL and small business financial management, with modifications made to ensure contextual relevance to informal township enterprises. This approach enhances both content validity and contextual appropriateness.

Reliability and validity

To ascertain the reliability of the research instrument, internal consistency was evaluated using Cronbach's alpha

coefficients, with all multi-item constructs yielding values above the generally accepted threshold of 0.70, indicating satisfactory coherence among the items (Taber 2018). In addition, a pilot study was conducted prior to the main data collection to evaluate the clarity, relevance and comprehensibility of the questionnaire items, in accordance with established survey-validation practices that emphasise pre-testing to enhance measurement quality (Cooper & Schindler 2014; Hanif & Alwi 2023). Feedback from the pilot study informed minor revisions to wording and structure. Construct validity was supported using established measurement scales and by aligning questionnaire items with the theoretical constructs underpinning the study. Content validity was further enhanced through expert review and alignment with the existing FL and SME finance literature.

Data analysis techniques

The collected data were analysed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics were initially used to summarise the demographic profiles of respondents and to characterise the distributions of FL and financial decision-making variables. While financial management practices and financial risk management are examined descriptively and discussed to address the first research question, the ordinal logistic regression models focus primarily on financing and investment decisions, which constitute the main empirical outcomes of the study. To examine the relationships between FL and financial management, financing and investment decisions, ordinal logistic regression was employed as the primary analytical technique. Ordinal logistic regression is appropriate when the dependent variables are measured on ordinal scales, as is the case with Likert-type responses. The proportional odds model was selected because it assumes a consistent relationship between the independent variables and the cumulative probabilities of the ordered outcome categories.

Financial literacy was operationalised as a composite index derived from multiple items capturing both financial knowledge and applied financial behaviour. Financing decisions and investment behaviour were treated as the primary dependent variables in the ordinal regression models, while financial management practices and financial risk management were analysed descriptively to provide contextual insight aligned with the first research question. Model diagnostics, including goodness-of-fit measures and tests of the proportional odds assumption, were conducted to assess the robustness and suitability of the regression models. Given the minor violations of the proportional odds assumption in some models, the results are interpreted cautiously, with a focus on direction and statistical significance rather than uniform effect sizes across thresholds.

Ethical considerations

Ethical clearance to conduct this study was obtained from the Durban University of Technology Research Ethics Committee. The ethical clearance number is IREC 052/23. Participation was entirely voluntary, with informed consent obtained from each respondent before data collection commenced. Participants were guaranteed confidentiality and anonymity, and no personally identifiable information was gathered. The study adhered to current ethical standards governing research with human subjects (World Medical Association 2013).

Results

Descriptive statistics

Table 1 presents descriptive statistics for the key study variables, including FL, FPB, financing decisions (F), managing financial risk (MFR), FC and investment decisions (I). The statistical measures reported include the mean, standard deviation and standard error.

These descriptive statistics indicate that spaza shop owners exhibit moderate levels of FL and financial management practices, with noticeable variation across financing and financial risk management variables. This suggests uneven financial capability among informal entrepreneurs, highlighting the importance of examining how FL influences financing and investment decisions. The mean FL score of 3.04 suggests a moderate level of financial knowledge and application among respondents. Financial planning and budgeting practices also show moderate engagement, whereas financing and risk management exhibit greater variability. Overall, the descriptive results provide an initial indication that FL and related financial practices differ across spaza shop owners.

Financial literacy and financing decisions

To examine the effect of FL on financing decisions, an ordinal logistic regression model was estimated. The results are presented in Table 2, Table 3, Table 4, Table 5 and Table 6.

TABLE 1: Descriptive statistics.

Variable	Measure	Statistic	SE
FL	Mean	3.04	0.038
	s.d.	0.379	-
FPB	Mean	3.11	0.057
	s.d.	0.569	-
F	Mean	2.60	0.063
	s.d.	0.626	-
MFR	Mean	2.76	0.071
	s.d.	0.709	-
FC	Mean	3.33	0.038
	s.d.	0.383	-
I	Mean	2.86	0.045
	s.d.	0.453	-

Source: Mkhize, M.B. & Mugova, S., 2025, 'Assessing the role of education and financial literacy in shaping the success of spaza shops: Case study of Gamalakhe Township, KwaZulu-Natal, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 17(1), a1083. <https://doi.org/10.4102/sajesbm.v17i1.1083>

s.d., standard deviation; SE, standard error; FL, financial literacy; FPB, financial planning and budgeting; F, financing decisions; MFR, managing financial risk; FC, financial control; I, investment decisions.

The significant improvement in model fit after including FL indicates that FL meaningfully enhances the model's ability to predict financing decisions. This confirms that FL is a relevant explanatory variable in understanding financing behaviour among spaza shop owners.

The goodness-of-fit results suggest that the ordinal logistic regression model provides an acceptable representation of the observed data. This finding indicates that the model is suitable for analysing the relationship between FL and financing decisions.

While the pseudo- R^2 values are relatively moderate, they align with typical findings in behavioural and social science research. The results suggest that FL accounts for a significant portion of the variation in financing decisions, although other contextual and behavioural factors are also influential.

The results indicate that higher levels of FL significantly increase the likelihood of selecting more favourable and advanced financing options. This finding confirms the hypothesis of a positive relationship between FL and financing decisions among spaza shop businesses. The positive and statistically significant coefficient for FL demonstrates that financially literate entrepreneurs are more likely to engage with better financing options, including formal sources of credit.

The significance test of parallel lines in Table 6 suggests that the effect of FL on financing decisions may vary across different financing levels. While this does not invalidate the

TABLE 2: Model 1: Model fitting information (financing).

Model fitting information				
Model	-2 Log likelihood	Chi-square	df	Sig.
Intercept only	269.714	-	-	-
Final	257.755	11.960	1	< 0.001
Link function: Logit.	-	-	-	-

Source: Mkhize, M.B. & Mugova, S., 2025, 'Assessing the role of education and financial literacy in shaping the success of spaza shops: Case study of Gamalakhe Township, KwaZulu-Natal, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 17(1), a1083. <https://doi.org/10.4102/sajesbm.v17i1.1083>

TABLE 3: Model 2: Goodness-of-fit.

Goodness-of-fit			
Test	Chi-square	df	Sig.
Pearson	215.811	155	< 0.001
Deviance	172.853	155	0.155
Link function: Logit.	-	-	-

Source: Mkhize, M.B. & Mugova, S., 2025, 'Assessing the role of education and financial literacy in shaping the success of spaza shops: Case study of Gamalakhe Township, KwaZulu-Natal, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 17(1), a1083. <https://doi.org/10.4102/sajesbm.v17i1.1083>

TABLE 4: Model 3: Pseudo R -square.

Pseudo R -square	
Cox and Snell	0.113
Nagelkerke	0.114
McFadden	0.026
Link function: Logit.	-

Source: Mkhize, M.B. & Mugova, S., 2025, 'Assessing the role of education and financial literacy in shaping the success of spaza shops: Case study of Gamalakhe Township, KwaZulu-Natal, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 17(1), a1083. <https://doi.org/10.4102/sajesbm.v17i1.1083>

TABLE 5: Parameter estimates.

Parameter estimates								
Parameter type	Parameter	Estimate	SE	Wald	df	Sig.	95% Confidence interval	
							Lower bound	Upper bound
Threshold	[$F = 1,60$]	0.252	1.722	0.021	1	0.883	-3.122	3.627
	[$F = 1,80$]	2.525	1.464	2.974	1	0.085	-0.345	5.395
	[$F = 2,00$]	3.812	1.462	6.802	1	0.009	0.947	6.677
	[$F = 2,20$]	4.336	1.472	8.680	1	0.003	1.452	7.221
	[$F = 2,40$]	5.109	1.495	11.675	1	< 0.001	2.178	8.040
	[$F = 2,60$]	5.466	1.508	13.140	1	< 0.001	2.510	8.421
	[$F = 2,80$]	5.852	1.522	14.783	1	< 0.001	2.869	8.835
	[$F = 3,00$]	6.210	1.535	16.360	1	< 0.001	3.201	9.219
	[$F = 3,20$]	7.004	1.566	20.008	1	< 0.001	3.935	10.072
	[$F = 3,40$]	7.105	1.570	20.487	1	< 0.001	4.028	10.182
	[$F = 3,60$]	7.454	1.584	22.129	1	< 0.001	4.348	10.559
	[$F = 3,80$]	8.113	1.620	25.072	1	< 0.001	4.937	11.288
Location	FL	1.636	0.486	11.332	1	< 0.001	0.684	2.589
Link function: Logit.								

Source: Mkhize, M.B. & Mugova, S., 2025, 'Assessing the role of education and financial literacy in shaping the success of spaza shops: Case study of Gamalakhe Township, KwaZulu-Natal, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 17(1), a1083. <https://doi.org/10.4102/sajesbm.v17i1.1083>

SE, standard error; FL, financial literacy.

TABLE 6: Model 4: Test of parallel lines (financing).

Test of parallel lines				
Model	-2 Log likelihood	Chi-square	df	Sig.
Null hypothesis	257.755	-	-	-
General	211.850 [†]	45.905 [‡]	11	< 0.001

Source: Mkhize, M.B. & Mugova, S., 2025, 'Assessing the role of education and financial literacy in shaping the success of spaza shops: Case study of Gamalakhe Township, KwaZulu-Natal, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 17(1), a1083. <https://doi.org/10.4102/sajesbm.v17i1.1083>

Note: The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

SPSS, Statistical Package for the Social Sciences.

† and ‡, refer to SPSS-generated test statistics for the comparison of constrained and unconstrained models in the test of parallel lines.

findings, it indicates that the influence of FL is not uniform across all categories of financing decisions.

Financial literacy and investment decision-making

To assess the influence of FL on investment decisions, a second ordinal logistic regression model was estimated. The results are presented in Table 7, Table 8, Table 9, Table 10 and Table 11.

The significant improvement in model fit demonstrates that FL substantially enhances the model's ability to predict investment decision-making. This highlights the importance of FL in shaping investment behaviour among spaza shop owners.

The goodness-of-fit statistics indicate that the model adequately represents the observed investment decision data. This finding supports the suitability of ordinal logistic regression for analysing investment behaviour in this context.

The pseudo- R -square values suggest that FL explains a modest but meaningful proportion of the variation in investment choices. This reflects the multifaceted nature of investment decision-making in informal enterprises, where multiple factors influence outcomes.

TABLE 7: Model 5: Model fitting information (investing).

Model fitting information				
Model	-2 Log likelihood	Chi-square	df	Sig.
Intercept only	200.178	-	-	-
Final	184.110	16.068	1	< 0.001
Link function: Logit.				

Source: Mkhize, M.B. & Mugova, S., 2025, 'Assessing the role of education and financial literacy in shaping the success of spaza shops: Case study of Gamalakhe Township, KwaZulu-Natal, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 17(1), a1083. <https://doi.org/10.4102/sajesbm.v17i1.1083>

TABLE 8: Model 6: Goodness-of-fit.

Goodness-of-fit			
Test	Chi-square	df	Sig.
Pearson	111.564	103	0.265
Deviance	112.687	103	0.242
Link function: Logit.			

Source: Mkhize, M.B. & Mugova, S., 2025, 'Assessing the role of education and financial literacy in shaping the success of spaza shops: Case study of Gamalakhe Township, KwaZulu-Natal, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 17(1), a1083. <https://doi.org/10.4102/sajesbm.v17i1.1083>

These findings indicate that higher levels of FL significantly increase the likelihood of selecting higher-level and longer-term investment options. This finding supports the hypothesis that financially literate entrepreneurs are more inclined towards growth-oriented investment behaviour. The positive coefficient for FL confirms its role in promoting reinvestment and productive asset acquisition among spaza shop businesses.

The marginal violation of the proportional odds assumption suggests that the influence of FL on investment decisions may differ across investment levels. This finding warrants cautious interpretation and highlights the complexity of investment behaviour in informal township enterprises.

Discussion

The purpose of this study is to examine how FL influences financial management practices, financing decisions and investment behaviour among spaza shop owners operating

in a South African township context. The findings provide compelling empirical support for the proposition that FL significantly influences financial decision-making in informal micro-enterprises. Overall, the results confirm that higher levels of FL are associated with more effective financial management, greater use of favourable financing options, increased investment activity and improved financial risk management.

Financial literacy and financial management practices

The results indicate that FL is positively associated with financial management practices such as budgeting, record-keeping and FC. Spaza shop owners with higher levels of FL were more likely to maintain structured financial records and engage in systematic budgeting practices. Although financial management practices were not modelled using ordinal regression, the descriptive results and theoretical interpretation provide meaningful insight into how FL shapes budgeting, record-keeping and FC among spaza shop owners. These findings are consistent with prior studies that emphasise the importance of FL in strengthening internal financial management capabilities among SMEs and micro-enterprises (Eniola & Entebang 2016). From a theoretical perspective, these results support the resource-based view, which conceptualises FL as an intangible, firm-specific capability that enhances operational efficiency and resilience. In informal enterprises, where access to professional accounting services is limited, FL functions as a substitute for external expertise, enabling owner-managers to exercise greater control over business finances. This finding aligns with more recent evidence suggesting that FL is particularly

consequential in informal and resource-constrained environments (Molosiwa & Holland 2025).

Financial literacy and financing decisions

The results provide strong evidence that FL significantly influences financing decisions among spaza shop owners. Financially literate entrepreneurs were more likely to select favourable financing options and less likely to rely on informal and potentially costly borrowing mechanisms. This result confirms the hypothesised relationship between FL and financing behaviour and is consistent with earlier research demonstrating that FL improves entrepreneurs' ability to evaluate credit terms and manage debt effectively (Drexler et al. 2014; Lusardi & Tufano 2015). Importantly, the results extend the literature by providing empirical evidence from an informal township context, where financing decisions are often shaped by limited access to formal financial institutions. The observed variation in the effect of FL across different financing levels, as indicated by the test of parallel lines, suggests that FL does not influence all financing choices uniformly. This highlights the complexity of financing behaviour in informal enterprises and suggests that FL may play a stronger role in facilitating the transition from informal to more formal financing options.

Financial literacy and investment behaviour

The findings further demonstrate that FL has a statistically significant and positive effect on investment decision-making. Spaza shop owners with higher levels of FL were more likely to reinvest profits and engage in longer-term capital investments. This finding supports existing evidence that FL enhances entrepreneurs' capacity to evaluate investment opportunities and adopt growth-oriented strategies (Lusardi & Mitchell 2014; Wise 2013). In the context of township enterprises, this result is particularly significant. Informal businesses are often characterised by short-term survival strategies and limited reinvestment. The findings suggest that FL can shift entrepreneurial behaviour from subsistence-oriented practices towards more strategic investment decisions that support business sustainability. Recent studies by

TABLE 9: Model 7: Pseudo-*R*-square.

Pseudo <i>R</i> -square	
Cox and Snell	0.148
Nagelkerke	0.152
McFadden	0.042
Link function: Logit.	-

Source: Mkhize, M.B. & Mugova, S., 2025, 'Assessing the role of education and financial literacy in shaping the success of spaza shops: Case study of Gamalakhe Township, KwaZulu-Natal, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 17(1), a1083. <https://doi.org/10.4102/sajesbm.v17i1.1083>

TABLE 10: Parameter estimates.

Parameter estimates								
Parameter type	Parameter	Estimate	Std. error	Wald	df	Sig.	95% Confidence interval	
							Lower bound	Upper bound
Threshold <i>d</i>	[<i>I</i> = 1.50]	1.056	1.769	0.357	1	0.550	-2.411	4.523
	[<i>I</i> = 2.00]	2.901	1.518	3.651	1	0.056	-0.075	5.876
	[<i>I</i> = 2.25]	3.780	1.497	6.374	1	0.012	0.846	6.714
	[<i>I</i> = 2.50]	4.672	1.503	9.664	1	0.002	1.726	7.618
	[<i>I</i> = 2.75]	6.019	1.545	15.168	1	< 0.001	2.990	9.048
	[<i>I</i> = 3.00]	7.186	1.597	20.258	1	< 0.001	4.057	10.315
	[<i>I</i> = 3.25]	8.278	1.644	25.357	1	< 0.001	5.056	11.500
	[<i>I</i> = 3.50]	9.292	1.701	29.848	1	< 0.001	5.958	12.625
Location	FL	1.942	0.503	14.901	1	< 0.001	0.956	2.927
Link function: Logit.	-	-	-	-	-	-	-	-

Source: Mkhize, M.B. & Mugova, S., 2025, 'Assessing the role of education and financial literacy in shaping the success of spaza shops: Case study of Gamalakhe Township, KwaZulu-Natal, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 17(1), a1083. <https://doi.org/10.4102/sajesbm.v17i1.1083>

FL, financial literacy.

TABLE 11: Model 8: Test of parallel lines (investing).

Test of parallel lines				
Model	-2 Log likelihood	Chi-square	df	Sig.
Null hypothesis	184.110	-	-	-
General	169.782 [†]	14.328 [‡]	7	0.046

Source: Mkhize, M.B. & Mugova, S., 2025, 'Assessing the role of education and financial literacy in shaping the success of spaza shops: Case study of Gamalakhe Township, KwaZulu-Natal, South Africa', *Southern African Journal of Entrepreneurship and Small Business Management* 17(1), a1083. <https://doi.org/10.4102/sajesbm.v17i1.1083>

Note: The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

[†], The log-likelihood value cannot be further increased after the maximum number of step-halving; [‡], The chi-square statistic is computed based on the log-likelihood value of the last iteration of the general model; therefore, the validity of the test is uncertain.

Daskalakis (2025) and Kurniasari et al. (2025) demonstrate that higher levels of FL are associated with more informed financial decision-making and improved performance outcomes among micro- and small enterprises in emerging economy contexts.

Financial literacy and risk management

Financial risk management was examined descriptively rather than through regression modelling; however, the observed patterns offer important insight into the role of FL in mitigating financial vulnerability in informal enterprises. The evidence also indicates that FL positively influences financial risk management practices. Financially literate spaza shop owners were more likely to implement strategies aimed at mitigating risks such as cash flow disruptions, stock losses and financial shocks. This finding is consistent with research showing that FL reduces vulnerability to financial distress and improves entrepreneurs' ability to anticipate and manage risk (Atkinson & Messy 2012; Drexler et al. 2014). From a behavioural perspective, this result supports the relevance of the TPB. Financial literacy appears to enhance perceived behavioural control, enabling entrepreneurs to act more confidently in MFR. This behavioural mechanism is particularly important in informal environments, where uncertainty and exposure to shocks are high.

Theoretical and practical implications

Collectively, the findings contribute to theory by demonstrating that FL operates simultaneously as a strategic resource and a behavioural enabler in informal micro-enterprises. Integrating the resource-based perspective with the TPB, this study provides a nuanced framework for explaining the translation of financial knowledge into observable financial behaviour. This integrative approach responds to recent calls in the literature for frameworks that move beyond isolated analyses of FL and account for both capability and behavioural dimensions (Basha et al. 2025; Molosiwa & Holland 2025). From a practical perspective, the findings have important implications for policymakers, financial institutions and development organisations. Targeted FL programmes that focus on budgeting, credit evaluation, investment planning and risk awareness can improve the quality of financial decision-making among spaza shop owners.

Such interventions are likely to enhance business sustainability, reduce reliance on informal debt and promote inclusive economic development in township economies. Financial institutions may also benefit from incorporating FL considerations into the design of microfinance products, thereby reducing default risk and improving financial inclusion outcomes.

Conclusion

This research examined the role of FL in shaping financial management practices, financing choices and investment decisions among spaza shop owners in Gamalakhe Township, South Africa. The results demonstrate that FL has a significant and positive influence on key financial decisions in informal micro-enterprises. Spaza shop owners with higher levels of FL were more likely to engage in structured budgeting and record-keeping, select more favourable financing options, reinvest profits and adopt longer-term investment strategies.

The results underscore the significance of FL as a critical capability for business sustainability in township economies. By improving entrepreneurs' ability to evaluate credit options, manage financial risk and make informed investment decisions, FL enhances the resilience and growth potential of informal enterprises. These results contribute to the growing body of evidence that FL is particularly consequential in informal and resource-constrained contexts, where owner-manager decisions largely determine business outcomes.

This research has important implications for policy and practice. Policymakers and development agencies should prioritise targeted FL programmes that focus on practical skills such as budgeting, credit management, investment planning and risk assessment. Such interventions can strengthen the sustainability of spaza shop businesses and support inclusive economic development in township communities. Financial institutions may also benefit from tailoring microfinance products and support services to entrepreneurs who demonstrate improved financial capability, thereby enhancing financial inclusion while managing credit risk.

Notable limitations should be acknowledged. The study focused on a single township and employed a purposive sampling approach, which limits the generalisability of the findings beyond the study context. The cross-sectional design restricts the ability to draw causal inferences regarding the relationship between FL and financial decision-making. These limitations suggest that the findings should be interpreted with appropriate caution. Future research should extend this analysis to multiple townships and provinces to enhance generalizability and explore regional variations. Longitudinal studies could provide deeper insights into how changes in FL influence business performance over time. Further research may also examine the role of digital FL, behavioural biases and gender differences in shaping financial decision-making among informal entrepreneurs.

Such extensions would contribute to a more comprehensive understanding of FL as a driver of enterprise sustainability in emerging economies.

Acknowledgements

This article is partially based on Mondli B. Mkhize's master's dissertation entitled 'Financial literacy challenges and financial management of selected spaza shops in KwaZulu-Natal: A case study of Gamalakhe', towards the degree of Master of Science in Management in Business Administration, Department of Entrepreneurial Studies and Management, Durban University of Technology, South Africa, on 21 May 2025, with supervisor Shame Mugova. It can be found here: <https://doi.org/10.51415/10321/6141>

A related article focusing on whether the level of education is a significant factor in determining the FL skills needed to run spaza shop businesses has been published in *The Southern African Journal of Entrepreneurship and Small Business Management* Vol. 17, No. 1, a1083. The present article addresses a distinct research question, focusing on the role of FL in shaping financial management practices, financing choices and investment decisions among spaza shop owners.

Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

CRedit authorship contribution

Mondli B. Mkhize: Conceptualisation, Formal analysis, Investigation, Methodology. Shame Mugova: Formal analysis, Supervision, Writing – original draft, Writing – review & editing. Margaret Mashizha: Formal analysis, Project administration, Visualisation, Writing – review & editing.

Funding information

The authors received no financial support for the research, authorship and/or publication of this article.

Data availability

The data that support the findings of this study are available on reasonable request from the corresponding author, Shame Mugova. The data are not publicly available due to restrictions, e.g. their containing information that could compromise the privacy of research participants.

Disclaimer

The views and opinions expressed in this article are those of the authors and are the product of professional research. They do not necessarily reflect the official policy or position of any affiliated institution, funder, agency or that of the publisher. The authors are responsible for this article's results, findings and content.

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