

Factors Influencing Financial Management Behavior among Small and Medium Enterprise Operators in the Jaffna District, Sri Lanka

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Abstract

Effective financial management is important for the sustainability of small and medium sized enterprises (SMEs). This study examines whether financial knowledge, financial attitudes and locus of control influence the financial management behaviour of SMEs business operators in Jaffna, Sri Lanka. A stratified random sample of 150 registered SME owners and managers was surveyed using a structured questionnaire. Descriptive statistics, correlation analysis and multiple regression were employed to analyse relationships between variables. The results show that financial knowledge and financial attitudes both have positive and statistically significant effects on SMEs' financial management behaviour. Operators with greater financial literacy and more favorable financial attitudes tend to engage in more prudent financial practices. In contrast, locus of control, the degree to which individuals feel in control of financial outcomes, was not a significant factor of financial behaviour in this context. These findings highlight the importance of enhancing financial literacy and improving positive financial attitudes among SME operators, while also suggesting that broader external factors may moderate the role of personal control. The study integrates these results with contemporary financial behaviour theory and evidence, discusses practical interventions such as targeted financial education and attitude oriented programs and outlines implications for policy makers and future research. The insights contribute to the literature on SME financial management in emerging economies and provide guidance for improving financial practices to support the growth and sustainability of SMEs in regions like Jaffna.

Keywords: Financial attitude, financial knowledge, financial management behaviour, locus of control, SMEs, Jaffna

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Introduction

Small and medium enterprises (SMEs) are the backbone of many economies, contributing significantly to employment, innovation and income distribution. In Sri Lanka, SMEs comprise about 90% of the all businesses and contribute around 52% of national GDP and provide 45% of employment, including for women and youth (Asian Development Bank, 2025). In regions such as the Jaffna district, a post conflict area in Sri Lanka's Northern Province, SMEs play an important role in economic recovery by providing jobs, reducing poverty and stimulating growth. The success of these enterprises often depends on effective financial management by their operators. However, many SME owners in Jaffna face challenges in achieving financial stability and growth, due in part to gaps in financial literacy, suboptimal financial attitudes and perceived lack of control over financial outcomes. These behavioral and psychological factors remain underexplored in this context, representing a critical knowledge gap.

Financial management behaviour (FMB) refers to how individuals plan, control and make decisions about financial resources in their business using different methods like budgeting, record keeping, liquidity management etc. Prior research suggests that three individual level factors can influence FMB. Financial knowledge is fundamental for informed decision making. SME operators with higher financial literacy are better equipped to budget, manage cash flows and navigate financial products which can improve business performance. Systematic review reaffirms its role in cash flow management capital decisions and resilience (Abdallah et al., 2025). Financial attitude which is one's mindset and values regarding money such as attitudes towards saving, debt and risk, shape financial discipline and decision patterns (Talwar et al., 2021). Positive financial attitudes such as valuing savings, long term planning are associated with healthier financial behaviour and even mediate and amplify the translation of literacy into consistent financial actions among micro and small firms (Sorongan, 2022; She *et al.*, 2024). Locus of control, a psychological trait indicating whether an individual perceives outcomes as within their personal control or determined by the external forces, may affect financial behaviour. An internal locus of control has been linked to proactive financial actions like savings and investing. Individuals with internal locus of control are more likely to save and accumulate wealth and locus of control can moderate how financial knowledge translated into behaviour. In developing economies, feeling in control may be important as external uncertainties exist (Caliendo et al., 2024).

These three factors align well-established behavioral theories that explain personal cognition, attitudes and perceived control shape financial actions. The theory of planned behavior (Ajzen, 1991) explains that human actions are guided by behavioral intentions which are influenced by one's attitude toward the behavior, perceived social norms and perceived behavioral control. Social cognitive theory (Bandura, 1986) also highlights the role of self-efficacy, the confidence in one's ability to perform a task, together with learning and environmental feedback, determines whether knowledge translates into action. Social learning theory from which the locus of control concept originated (Rotter, 1966), highlights how past experiences and expectations influence current behaviour. In this study, financial attitude corresponds to the attitudinal component of the Theory of Planned Behavior, financial knowledge represents the cognitive and self-efficacy emphasized in social cognitive theory, and locus of control reflects

perceived behavioral control drawn from social learning theory. Hence, these theories suggest that an SME operator with strong financial knowledge, positive financial attitudes and a sense of control is likely to exhibit better financial management behaviour.

Despite global evidence, there is limited empirical research focusing on how these factors operate among SME operators in contexts like Jaffna. Cultural norms, resource constraints and economic volatility in such regions might affect these relationships. Sometimes, even a capable business owner might struggle to practice good financial management, when external factors such as lack of access to credit dominate personal control.

This study addresses the gap by examining whether financial knowledge significantly influences the financial management behaviour of SME operators in Jaffna, whether financial attitudes significantly influence their financial behaviour and whether locus of control shows a significant impact on their financial management behaviour. Consistent with these objectives, the hypotheses of this study are, financial knowledge and financial attitudes have a positive, significant effect on financial management behaviour and that locus of control shows a positive influence. By testing these, the study aims to generate evidence based insights into the behavioural interventions to improve financial practices and guide policy and educational initiatives tailored to this context.

The next section synthesizes recent literature, followed by methodology, results and discussion. Subsequently, implications, limitations, future research direction and conclusion are presented.

Literature Review

Financial Knowledge and Behaviour

Financial knowledge includes both individual's understanding of financial concepts such as compounding, inflation risk and return tradeoffs and the ability to apply skills such as budgeting, record keeping, cashflow planning, credit management and basic investment appraisal. Literature shows that higher financial literacy correlates with better personal and business financial decisions. Lusardi and Mitchell (2014) highlight that individuals with greater financial knowledge engage more in retirement planning and informed investing. In SMEs, owners' financial literacy has been tied to sound bookkeeping, effective cashflow management and overall firm success. At the household level, fundamental work shows that more financially knowledgeable individuals plan and invest more effectively, patterns reflected in owner managed firms through better book keeping, budgeting frequency and cash flow control (van Rooij et al., 2012). Recent reviews focused on SMEs reaffirmed a positive literacy and performance relationship while noting heterogeneity by context, finance access and market volatility. Also, this noted literacy leads to clearer forecasting, formalized budgets and improved liquidity management (IS et al., 2025). At the same time, meta analytic work highlighted that education alone does not reliably produce durable behaviour change, implying that literacy operates through and is often contingent on attitudinal and environmental channels (Fernandes et al., 2014). Hence, knowledge provides the informational foundation for sound decisions, its translation into consistent financial management behavior depends on psychological factors such as motivation, attitude and self-efficacy. This highlights the

importance of integrating behavioral dimensions alongside cognitive factors when examining SME financial practices.

Financial Attitude and Behavior

Financial attitude refers to a person's predisposition or mindset toward financial matters such as frugality, risk tolerance, time preference for spending and saving. According to Ajzen (1991)'s Theory of Planned Behaviour, attitude toward a behaviour is a key determinant of intention and action. Recent empirical work shows that constructive attitudes such as valuing saving, budgeting and forward planning are important predictors of prudent financial actions and increase or mediate the effect of literacy on behaviour among micro, small and medium enterprise firms (MSME) (Widjayanti et al., 2025). Evidence drawing on entrepreneur and MSME operators indicates that favorable attitudes associated with better record keeping, regular reinvestment habits and more cautions leveraging, even after accounting for knowledge levels (Adela et al., 2024). Another study similarly link positive financial orientations to stronger financial behaviour and well being, reinforcing the attitudinal channel beyond formal knowledge (Sabri et al., 2024). In an environment like Sri Lanka, marked by shocks, credit frictions among regions and policy uncertainty, attitudes can be important because they sustain budgeting routines and liquidity discipline when external volatility complicates optimization. Hence, the literature suggests that constructing financial attitudes complements literacy initiatives and is likely to produce measurable improvements in SME financial management behaviour under real world limitations (Widjayanti et al., 2025).

Locus of Control and Behaviour

Locus of Control (LC) is personality construct reflecting the extent to which people believe they have power over events in their lives. Those with an internal locus of control feel that outcomes depend on their own actions while an external locus attributes outcomes to outside forces such as luck, fate, economic conditions etc. In financial behavioural, an internal LC is usually associated with proactive management. Individuals believe they can impact their financial situation and thus are more likely to plan, save and invest with evidence from advances economies showing that households with stronger internal control accumulate more wealth, save at higher rates and hold riskier but diversified portfolios and that saving motives partially explain these patterns (Cobb-Clark et al., 2016). Seminal work in consumer finance shows that locus control conditions the use of knowledge. Individuals with internal control translate financial knowledge into responsible habits more effectively, implying a moderating role for locus of control in the literacy and behaviour pathway (Perry & Morris, 2005). Recent studies extend this mechanism, reporting that locus control mediates or moderates the effect of financial knowledge and attitudes on financial behaviour and investment intentions across varied samples, including entrepreneurs and working adults (Berwal et al., 2025). At the same time, locus of control's behavioural payoffs are context sensitive. Under high external uncertainty such as policy shifts, price instability, tight credit or weak institutions, internal control beliefs can have muted observable effects because structural frictions dominate decision outcomes. Mixed findings from emerging market settings highlight that locus of control's influence is largest where constraints are manageable (Setyawati et al., 2024). Hence,

the literature suggests treating locus of control as a psychological catalyst that strengthens the translation of literacy and attitudes into disciplined financial routines when the environment permits, while recognizing that in shock prone contexts its marginal impact may be weakened.

Drawing on these perspectives, the conceptual framework shows that financial knowledge, financial attitude and locus of control influence SME operators' financial management behaviour. The theory of planned behaviour provides a guiding structure. Financial attitude corresponds to the attitude component, and locus of control relates to perceived behavioural control in managing finances. Financial knowledge, while not an explicit theory of planned behaviour construct, can be seen as an enabling resource that affects behaviour directly and through shaping attitudes and perceived control. Social cognitive theory adds that past experiences such as prior business success or failure and observable learning can shape both attitude and one's sense of control, thereby impacting behaviour. Based on this, following hypotheses can be formulated.

H1: Financial knowledge has positive significant influence on the financial management behaviour of SME operators.

H2: Financial attitude has a positive significant influence on the financial management behaviour of SME operators.

H3: Locus of control has a significant influence on the financial management behavior of SME operators.

Conceptual Framework

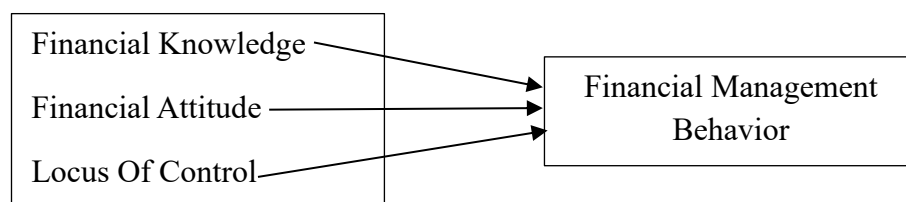


Figure 01: Conceptual Framework

Operationalization of Variables**Table 01: Operationalization**

Construct	Scale	Code	Definition & Measurement	Evidence	Question Number
Financial Knowledge	Basic Financial Literacy Test (FLT)	FK-FLT	Assesses basic understanding of financial concepts such as interest rates, inflation, and budgeting.	Lusardi and Mitchell(2011) found individuals with higher literacy are significantly more likely to plan, save and manage finance effectively.	QS-1 & QS-2
	Advanced Financial Literacy Test (AFLT)	FK-AFLT	Measures complex financial understanding, including investment and financial risk.	Huston (2010) found it reliable for assessing advanced financial literacy.	QS-3
	Financial Knowledge Scale (FKS)	FK-FKS	Evaluates financial decision-making and knowledge across different age groups.	Wagner (2019) demonstrated reliability and effectiveness in supporting financial decision-making.	QS-4 & QS-5
	Big Five Inventory on Financial Literacy (BFI-FL)	FK-BFI	Examine the influence of personality traits on financial literacy.	Mendoza et al. (2023) demonstrated its effectiveness in linking personality traits to financial literacy.	QS-6 & QS-7
Financial Attitude	Financial Attitude Scale (FAS)	FA-FAS	Measures beliefs and attitudes toward financial responsibility, savings, and financial goals.	Adiandari et al. (2022) linked FAS scores to financial responsibility showing good reliability in an Indonesian sample.	QS-8 & QS-9
	Money Attitude Scale (MAS)	FA-MAS	Assesses attitudes toward money management, spending, and saving.	Yamauchi and Templer, (1982) confirmed that these are linked with personality and behavioural outcomes	QS-10 & QS-11
	Financial Self-Efficacy Scale (FSES)	FA-FSES	Evaluates confidence in financial goal achievement and decision-making abilities.	Lown (2011) found that individuals with higher financial self efficacy are more likely to engage in positive financial management behaviours.	QS-12 & QS-13
Locus of Control	Financial Locus of Control (FLC)	LC-FLC	Measures perceived control over financial outcomes, distinguishing internal and external locus of control.	Perry and Morris (2005) found that individuals with a stronger internal financial locus of control engage in responsible financial management practices	QS-14 & QS-15
	Internal-External Financial Locus of Control Scale	LC-IE	Explores internal and external control beliefs regarding financial outcomes, particularly goal setting and budgeting.	Rotter (1966) found that internal locus of control promotes proactive behavior whereas external locus of control is linked to passive and reactive behavior	QS-16 & QS-17
	Financial Agency Scale (FAS)	LC-FAS	Assesses financial agency and proactive management behaviors.	Sarma (2008) validated FAS, linking it to	QS-18 & QS-19

Financial Behavior	proactive financial behaviors.				
	Financial Management Behavior Scale (FMBS)	FMB-FMBS	Measures proactive financial behaviors like saving, budgeting, and debt management.	Dew and Xiao (2011) found proactive financial management behaviours can be measured using FMBS	QS-20 & QS-21
	Personal Financial Behavior Scale (PFBS)	FMB-PFBS	Assesses financial planning and management practices, focusing on budgeting and savings.	Xiao et al. (2009) confirmed the value of the Personal Financial Behaviour Scale for measuring proactive financial practices	QS-22 & QS-23
	Financial Capability Scale (FCS)	FMB-FCS	Measures individuals' ability to manage budgets and debt effectively.	Xiao et al. (2009) found that positive financial attitudes and financial socialization predict responsible financial behaviours	QS-24

Methodology

Research design and Sample

This research employed a quantitative survey design to test the proposed hypotheses in the context of Jaffna's SMEs. The target population was registered SME operators in Jaffna district, totaling 1,051 enterprises based on 2023 records from the Jaffna divisional secretariat and industrial development board. A stratified random sampling approach was used to ensure representation across different business sectors. This approach produced a sample of 150 SME operators distributed across twenty plus business types. Around 23% grocery/general merchants, 17% retail, 7% food and beverage reflect the composition of local SME population. The sample size is determined using Cochran's formula for a finite population, targeting about 8% margin of error and 95% confidence level given the total SME population in the district. Data were collected via a structured questionnaire administered in person a four month period from June 2024 to September 2024. Participation was voluntary and confidentiality was assured.

Measures

The survey instrument captured the key constructs, financial management behaviour as the dependent variable and financial knowledge, financial attitude and locus of control as independent variables, along with demographic information. All construct measures were based on established likert scales from prior studies, adapted to the SME context (1 = strongly disagree, 5 = strongly agree). Financial management behaviour was measured with items assessing practices like budgeting, record keeping, saving/investment behavior and expense control. Financial knowledge covered the understanding of financial concepts such as interest rates, inflation and credit terms and ability to perform financial task. Financial attitude was measured by items evaluating the respondent's outlook on financial matters such ad attitudes toward saving vs spending, risk tolerance and the importance of financial planning Locus of

control was measured with a financial locus of control scale, distinguishing internal control beliefs from external control beliefs.

Table 02: Measurement

Construct	Numbers	Example
Financial Knowledge (FK)	Q1-Q7	I understand how inflation affects the value of money
Financial Attitude (FA)	Q8- Q13	I believe saving should be prioritized over unnecessary spending
Locus of Control	Q14 – Q19	My business's financial success mainly depends on my own decisions and effort
Financial Management Behavior (FMB)	Q20 - Q24	I regularly set aside savings from my business income

Validity and reliability

These were assessed in multiple stages. Content validity was established through expert review by local academics and practitioners to confirm item relevance and clarity for the Jaffna context. A pilot test with 15 SME operators informed minor wording refinements. Construct validity was examined via exploratory factor analysis. Eigenvalues indicated distinct factors for financial knowledge, financial attitude, locus of control and financial behaviour. The Kaiser-Meyer-Olkin measure was 0.603 (exceeding the 0.5 adequacy threshold) and Bartlett's test of sphericity was significant ($\chi^2 = 74.162, p < .001$), confirming suitability for factor analysis. The rotated component matrix supported the expected structure, with financial knowledge, financial attitude and financial management behaviour items loading on one factor and locus of control items loading on a separate factor reflecting the distinct nature of locus of control in this sample. Reliability was evaluated using Cronbach's alpha. Internal consistency was acceptable to good across scales. Overall $\alpha = .821$ for the 28-item instrument, financial knowledge $\alpha = 0.826$, financial attitude $\alpha = 0.800$, locus of control $\alpha = .821$ and financial management behaviour $\alpha = .815$, all exceeding the conventional 0.7 threshold.

Addressing Potential Biases

To reduce social desirability bias during data collection, respondents were assured of anonymity and confidentiality, and items were phrased neutrally to avoid suggesting preferred responses. Non evaluative and consistent approach was followed while interacting with participants.

Data Analysis Techniques

Data was analyzed using SPSS and the analysis included descriptive statistics to summarize respondent characteristics, Pearson correlation to examine relationships among variables and multiple regression analysis to test the proposed hypotheses. This analytical approach allowed for the examination of direct effects of financial knowledge, financial attitude and locus of control on financial management behavior.

Results and Discussion

Descriptive Statistics

The financial management behaviour of Jaffna SME operators showed moderate engagement on average. On a five point scale, the aggregate Financial Management Behaviour (FMB) score had a mean of approximately 2.2 with 5 indicating the most proactive financial management, suggesting room for improvement in practices like budgeting and financial planning. Financial knowledge (FK) level recorded a moderate mean score (3.0 on a 5-point Likert scale), indicating a basic level of financial awareness with noticeable variation across respondents. This indicates a basic understanding of financial concepts with some gaps. Financial attitude (FA) scores were relatively low around 1.9, implying that many operators did not strongly show positive financial attitudes such long term planning or aversion of debt. Locus of control (LC) scores were also low with mean of 1.8, revealing a tendency toward an external locus of control where many might have felt that outcomes were beyond their control. These lower scores should be understood in the context of Jaffna's post conflict economic environment, where limited access to finance and market uncertainty can restrict SME operators from applying proactive financial practices, even when they possess some level of knowledge.

Correlation Analysis

Financial knowledge and financial attitude show modest, positive correlations with financial management behaviour (0.290 and 0.306, respectively), indicating that more knowledgeable operators and those with constructive attitudes are somewhat more likely to practice sound financial management. Locus of control is unrelated to behaviour (-0.007). Knowledge and attitude are moderately correlated (0.496), while locus of control is weakly related to attitude (0.285) and only marginally to knowledge (0.127).

Table 03: Pearson Correlation matrix

	FMB	FK	FA	LC
FMB	1.000	0.290	0.306	-0.007
FK	0.290	1.000	0.496	0.127
FA	0.306	0.496	1.000	0.285
LC	-0.007	0.127	0.285	1.000

Multicollinearity Analysis

Before interpreting the regression results, multicollinearity was assessed using VIF. All VIF values were below 2.0, confirming that the independent variables were not excessively correlated and the regression estimates are stable.

Table 04: Variance Inflation Factor (VIF) Table

Variable	VIF	Tolerance (1/VIF)
Financial Knowledge (FK)	1.33	0.754
Financial Attitude (FA)	1.42	0.704
Locus of Control (LC)	1.09	0.919

Regression Analysis

Table 05: Regression Analysis Results

	Unstandardized Coefficients		Standardized Coefficients		sig
	B	Standard error	Beta	t	
Constant	5.839	1.767		3.305	0.001
FK	0.111	0.054	0.182	2.039	0.043
FA	0.375	0.141	0.244	2.651	0.009
LC	-0.158	0.127	-0.100	-1.242	0.216
R ²	0.458		Regression Sum of Squares (SSR)		171.853
Adjusted R ²	0.398		Mean Square (Regression)		57.284
			F-stat		7.148 (0.000)

The model was statistically significant (overall $F=7.148$, $p<0.001$), indicating that together the factors explain a significant portion of variance in FMB. However, the adjusted R^2 value is 0.398, which means only 39.8% of the variance in financial management behaviour is explained by the three factors. While factors have statistically detectable effects, a large majority of the variation in SME financial behaviour is due to other influences not captured in this model. The model's effect size (Cohen's $f^2 = 0.66$), indicating a large size effect and suggesting that the combined influence of financial knowledge and attitude has substantial practical importance.

Financial knowledge had a positive and significant effect on financial management behaviour ($B = 0.111$, $\beta = 0.182$, $p=0.043$). This confirms the hypotheses one (H1). Although the effect size is not large, this aligns with the notion that financially literate SME operators tend to make modest but tangible improvements in managing their business finances. These findings are consistent with prior findings. Lusardi and Mitchell (2014) note that even incremental gains in financial knowledge can lead to better planning and financial decision quickly. Similarly Hilgert et al. (2003), documented a positive link between financial knowledge and household financial management behaviour. In practice this suggests that efforts to improve SME owners' financial knowledge through training programs or mentorship are likely to yield improvements in how they budget, control costs and invest in their businesses. Further, Rai et al. (2019) in India found that higher financial knowledge was associated with better financial management practices among entrepreneurs. In the context of a post conflict developing region, highlighting that financial literacy remains fundamental for good financial decisions. However lower R^2 value also echoes the observation by Fernandes et al. (2014) that financial education alone often explains only a small fraction of behavioural variability, implying that other factors such as behavioural and environmental factors, are at play.

Financial Attitude had a positive, significant effect on financial management behaviour as well ($B = 0.375$, $\beta = 0.244$, $p=0.009$). This supports hypotheses two (H2). These SMEs' financial behaviour appears to be more sensitive to their mindset and outlook toward finances. This

highlights the importance of the psychological dimension, even if an owner knows the right financial practices, this may be their attitude (discipline, future orientation, risk appetite) that determines whether they implement those practices. This aligns with the theory of planned behaviour, which mentions that attitudes significantly shape behaviour. This also aligns with studies like Aydin and Akben Selcuk (2019), who found financial attitudes to be crucial in explaining variance in personal financial behaviours. Further, Madaan & Singh, (2019) found positive financial attitudes significantly influence investment decisions. In a small business context, having a constructive financial attitude likely motivates the operator to actively engage in practices such as regular bookkeeping, setting aside savings and avoiding unnecessary expenses. The strong influence of attitude found here is in line with other recent research emphasizing that improving financial behaviour often requires addressing beliefs, confidence and motivations, not just knowledge. This suggests that interventions like coaching or workshops that focus on changing mindsets such as highlighting the benefits of budgeting, instilling confidence and a positive outlook about financial control, could be highly effective in changing SME behaviour.

Locus of control, in contrast, did not have a significant effect on financial management behavior in this study ($B = -0.158$, $\beta = -0.100$, $p=0.216$). Thus, hypotheses three (H3) is not supported. This means whether an SME operator has an internal or external locus of control, there is no significant difference in their reported financial management practices. This result differs from much literature, which anticipated a positive role of the internal locus of control in financial behaviour. According to Radianto et al. (2021) internal locus of control tends enhance financial behaviour, by boosting financial attitudes and self-efficacy and this advantage persists in longitudinal data with higher saving, fewer missed payments and greater risk tolerance (Chujan et al., 2022). This finding may reflect the contextual realities of Jaffna's SMEs. It is possible that external constraints (economic, infrastructural etc.) are important that an individual's sense of personal control does not translate into better financial outcomes. As noted by Perry and Morris (2005), the perception of control can be crucial in developing economies where external factors strongly influence outcomes. In Jaffna, those external factors such as limited access to finance, unstable market conditions might reduce the practical impact of one's locus of control. Another interpretation is that there may be a restriction of range, as observed, many respondents scored low on internal locus, indicating a generally external outlook. If few people exhibit a strong internal locus in this population, it becomes harder to detect its benefits. These findings contrast with studies in developed contexts that show internal locus of control predicts behaviours like saving and investing (Cobb-Clark et al., 2016) as well as findings in other parts of Asia where internal locus of control correlated with proactive financial management among youth. This result contributes to a different insight where the role of psychological traits like locus of control in financial behaviour may be culture and context dependent. This suggests that solely boosting an individual's sense of control through motivational programs may not improve financial behaviour unless the external environment is also enabling.

Overall, the regression results highlight that financial attitudes are most influential driver of financial management behaviour among the factors studied, followed by financial knowledge while locus of control plays a negligible role in this context.

Conclusions

Evidence from Jaffna's SMEs indicates that financial knowledge and financial attitudes are the primary behavioural drivers of sound financial management, whereas locus of control is not a differentiator in this context, likely due to binding external constraints that reduce the behavioural payoffs from internal control beliefs. The pattern aligns with behavioural finance theory and international evidence. SMEs' operators who understand core concepts and hold constructive attitudes toward saving, budgeting and prudent borrowing are more likely to institutionalize disciplined routines. For practical implications, capability building should pair targeted financial skill development with attitude focused coaching to convert know how into durable habits. For policy implications, enabling conditions, predictable rules, easier credit access and low-cost digital bookkeeping are essential for translating intention into action. Future research should strengthen causal identification, test interactions among knowledge, attitudes and control beliefs and incorporate contextual moderators such as interest rates, inflation etc. Overall, advancing SME financial behaviour in Jaffna and similar environments required a dual strategy, to empower operators with skills and mindsets while easing structural frictions so informed intentions become consistent financial practice.

Implications of the Study

Practical Implications

The findings yield several actionable implications for SME operators, support organizations and educators. The positive relationship between financial knowledge and financial management behaviour highlights the need for targeted financial literacy interventions. Training programs or workshops tailored for SME owners in Jaffna should be developed, focusing on fundamental skills such as bookkeeping, budgeting and understanding financial statements. Given that knowledge levels among many operators are moderate, these programs can bridge specific gaps such as how to calculate and interpret profit margins or manage loan repayments. Such capacity building efforts can be delivered in local languages and incorporate examples relevant to the Jaffna context such as managing seasonal cash flow in agriculture based businesses. By improving financial literacy, SME operators will be better equipped to make informed decisions, supporting the evidence that education can reduce financial mismanagement and business failures.

The strong influence of financial attitudes suggests that imparting knowledge is not enough; interventions must also seek to shape positive financial mindsets. Awareness campaigns and mentoring could emphasize the long-term benefits of prudent financial behaviour for instance, successful local entrepreneurs can be engaged to share their experiences, highlighting how disciplined saving and reinvestment led to their growth. Workshops can include behavioural components that encourage participants to set financial goals and develop action plans, thereby instilling a proactive attitude. Techniques from behavioural economics like commitment

devices and reminders might be employed to reinforce habits such as regular saving. Importantly, since many operators in the sample exhibited weak financial attitudes such as low inclination to plan, initiatives should focus on building confidence and motivation. For example, demonstrating quick wins such as how small savings accumulate or how budgeting prevents cash shortages. Practically, NGOs or business associations in the Northern Province could integrate financial coaching into their SME support programs, pairing financial training with ongoing attitude-oriented coaching to ensure that knowledge translates into sustained behaviour change.

While locus control was not a significant factor in this study, this can be interpreted as a call to address the external barriers and enabling environment for SMEs. Many operators felt outcomes were governed by external forces, which is unsurprising given the challenges they face such as difficulties in accessing finance and navigating bureaucracy. Policy measures can be implemented to create an environment where SMEs gain more tangible control over their finances. For example, simplifying loan procedures and improving access to credit for small businesses would allow operators who take initiative (internal locus of control) to reap rewards. Financial institutions can develop SME friendly loan products or micro finance schemes that do not require heavy collateral, thus empowering diligent operators to secure funding for expansion. Additionally, providing greater business development services such as accounting support and market linkages can help SMEs mitigate external uncertainties. Community based financing models such as cooperative savings groups or credit unions could also be expanded in Jaffna. These can increase a sense of financial agency among members as they collectively manage funds and buffer against external shocks.

Technological solutions present a practical avenue to enhance financial management. The digital transformation in finance offers tools that can compensate for limited expertise or time. Promoting the adoption of digital financial tools such as mobile banking apps, digital ledgers and expense tracking software, can make financial management more efficient and transparent for SME operators. Training SMEs to use simple accounting apps or even excel could help automate their record keeping and provide clearer insights into their cash flows. Such tools also often instill discipline such as prompting users to record their transactions regularly. Government agencies or NGOs might subsidize or introduce low-cost digital bookkeeping solutions in local markets. Over time, increased digital literacy and usage of fintech tools among SME operators could improve accuracy in financial management and free up time to focus on strategic decisions. In regions like Jaffna, where traditional financial infrastructure might be less accessible, mobile based financial services can be particularly empowering.

Further, the study's demographic insights call for inclusive approaches. With women making up only around 29% of our sample, there appears to be an underrepresentation of female SME operators in Jaffna in the registered businesses surveyed. Female entrepreneurs may face additional hurdles such as cultural norms limiting their financial decision making or lower access to capital. Hence, interventions should include gender sensitive initiatives. For example, dedicated training programs for woman entrepreneurs, mentorship by successful female business owners and networking forums could encourage more women to strengthen their financial skills and confidence. Addressing specific challenges like balancing household and

business finances or overcoming potential discrimination in loans) can help improve their financial management behaviours. Empowering female SME operators not only improves their individual businesses but can have broader community benefits, promoting gender equity in entrepreneurship.

Theoretical Implications

This research also carries implications for theory and the broader understanding of financial behaviour in SMEs. These findings lend support to the theory of planned behaviour in a new context by showing that attitude is an important driver of actual financial behaviour. The strong effect of financial attitude on FMB observed here confirms that attitudes are highly relevant for economic behaviours among entrepreneurs. This reinforces the idea that interventions to change behaviour should pay close attention to altering attitudes and norms, not just providing information.

Further, this study contributes to filling a geographical and contextual gap in literature. Much of the behavioural finance theory is built on studies in Western or urban settings. By examining a post conflict and developing region, this study expands the empirical base of these theories. It suggests that core constructions are indeed relevant in such contexts, but their magnitudes and inter relations can differ. The findings encourage theories to incorporate cultural and socio-economic context into models of SME behaviour. For instance, future conceptual frameworks might integrate the role of community norms or post conflict trauma which could affect risk attitudes and trust in financial systems when predicting financial behaviour.

Policy Implications

A primary policy implication is the importance of financial education policy at the regional or national level. Government agencies should integrate SME specific financial literacy programs into their initiatives. This means subsidizing training workshops, developing easy to understand financial guides in Tami or partnering with local universities to offer extension courses for business owners. According to the results of this study, both knowledge and attitudes drive behaviour, policy makers might design programs that are not just informational, but also experiential. For example, schemes that encourage SMEs to practice budgeting with real case simulations or competitions that reward good financial planning. Successful implementation of these programs can improve overall SME performance, which in turn supports economic development and tax revenues.

Another policy area is improving access to finance and support service. The fact that locus of control did not significantly influence outcomes suggests many operators feel constrained by external factors, notably the difficulty of obtaining funds for their business needs. Policymakers should work on reducing these structural barriers. This could involve working with banks to expand collateral free lending or credit guarantee schemes for SMEs. Microfinance and cooperative financing can be promoted in rural areas to reach entrepreneurs who lack formal banking access. Streamlining regulatory procedures like business registration, licensing and tax filing would also help as complex bureaucracy currently limits and may discourage formal financial planning. By creating more SME friendly business climate, policy can indirectly

increase the efficacy of entrepreneurs' own financial management efforts. When the external environment is supportive, the personal financial skills and positive attitudes of operators can translate into tangible growth outcomes.

Policy can also encourage the adoption of digital financial services among SMEs. Given the increasing digitalization of finance, programs that subsidize point of sale devices, promote mobile money or provide training on e-banking for small businesses could modernize how SMEs manage funds. The government's support for digital infrastructure in the region by improving internet connectivity, for example, will facilitate this. As noted in the practical implications, digital tools can enhance record keeping and transparency. Policy makers might consider incentives for SMEs to maintain digital accounts such as preferential interest rates for those who use digital accounting, or tax benefits for those who undergo financial training and demonstrate improved practices. This encourages SMEs to better manage and bring into the formal financial system.

Policymakers could implement measures to empower women entrepreneurs financially. For example, allocating a portion of SME credit lines specifically to women led businesses, offering mentorship programs pairing female entrepreneurs with experienced advisors or providing childcare support for women attending training programs. Ensuring that financial literacy initiatives reach women through women's associations or local community groups, will improve inclusively. Such policy efforts can unlock a large potential of entrepreneurial talent and improve household welfare, as women's financial empowerment often has positive impact on families.

Limitations and future research directions

The cross-sectional design captures behaviour and its correlations at a single point, limiting causal inference; stronger claims require tracking changes over time. The sample is restricted to registered SMEs in Jaffna, which narrows generalizability with different cultural and market conditions.

Priority avenues include longitudinal or experimental designs to establish causality and persistence of behavior change. Interaction tests such as (knowledge into attitude), (knowledge into locus of control), (attitude into locus of control), can reveal complementarities and sector specific analyses can identify whether attitudes or knowledge matter most (Example—manufacturing vs retail). These designs would clarify mechanisms, boundary conditions and scalable interventions for strengthening SME financial management.

References

- Abdallah, W., Harraf, A., Ghura, H., & Abrar, M. (2025). Financial literacy and small and medium enterprises performance: the moderating role of financial access. *Journal of Financial Reporting and Accounting*, 23(4), 1345–1364. <https://doi.org/10.1108/JFRA-06-2024-0337>
- Ade M. Adiandari, Bambang Sumintono, & Yuliani. (2022). Developing A Scale Of Financial Attitudes In Emergency Fund Ownership Decision Making. *Jurnal Manajemen*, 25(1 SE-Articles), 141–159. <https://doi.org/10.24912/jm.v25i1.708>

- Adela, V., Agyei, S. K., Frimpong, S., Awisome, D. B., Bossman, A., Abosompim, R. O., Benchie, J. K. O., & Ahmed, A. M. A. (2024). Bookkeeping practices and SME performance: The intervening role of owners' accounting skills. *Heliyon*, 10(1), e23911. <https://doi.org/10.1016/j.heliyon.2023.e23911>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Asian Development Bank. (2025). *Sri Lanka: Enhancing Small and Medium-Sized Enterprises Finance Project—Audited project financial statements (APFS)*. <https://www.adb.org/projects/documents/sri-50349-002-apfs>
- Aydin, A. E., & Akben Selcuk, E. (2019). An investigation of financial literacy, money ethics and time preferences among college students. *International Journal of Bank Marketing*, 37(3), 880–900. <https://doi.org/10.1108/IJBM-05-2018-0120>
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. In *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.
- Berwal, K., Bhall, R., Dalal, S., & Ahmed, H. (2025). Exploring the role of locus of control in linking financial knowledge and attitude to saving behavior of working women in Haryana. *Investment Management and Financial Innovations*, 22(3), 414–425. [https://doi.org/10.21511/imfi.22\(3\).2025.31](https://doi.org/10.21511/imfi.22(3).2025.31)
- Caliendo, M., Cobb-Clark, D. A., Silva-Goncalves, J., & Uhlenhorff, A. (2024). Locus of control and the preference for agency. *European Economic Review*, 165, 104737. <https://doi.org/10.1016/j.eurocorev.2024.104737>
- Chujan, W., Ngoc, N. L. B., & Faizi, A. S. (2022). Locus of Control on Financial Behavior and Financial Risk Attitude. *Annals of Economics and Finance*, 23(2), 289–313.
- Cobb-Clark, D. A., Kassenboehmer, S. C., & Sinning, M. G. (2016). Locus of control and savings. *Journal of Banking & Finance*, 73, 113–130. <https://doi.org/10.1016/j.jbankfin.2016.06.013>
- Dew, J., & Xiao, J. J. (2011). The Financial Management Behavior Scale: Development and validation. In *Journal of Financial Counseling and Planning* (Vol. 22, Issue 1, pp. 43–59). Association for Financial Counseling and Planning Education.
- Fernandes, D., Lynch, J. G., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8), 1861–1883. <https://doi.org/10.1287/mnsc.2013.1849>
- Hilgert, M. A., Beverly, S. G., & Hogarth, J. M. (2003). Household financial management: the connection between knowledge and behavior. *Federal Reserve Bulletin, Board of Governors of the Federal Reserve System (U.S.)*, 309–322.
- Huston, S. J. (2010). Measuring Financial Literacy. *Journal of Consumer Affairs*, 44(2), 296–316. <https://doi.org/10.1111/j.1745-6606.2010.01170.x>
- IS, R., KV, S., & Hungund, S. (2025). MSME/SME Financial Literacy: A Systematic Literature Review and Bibliometric Analysis. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-024-02472-0>
- Lown, J. M. (2011). 2011 Outstanding AFCPE ® Conference Paper : Development and Validation of a Financial Self-Efficacy Scale. *Journal of Financial Counseling and Planning*, 22(2), 54–63.
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United

- States. *Journal of Pension Economics and Finance*, 10(4), 509–525. <https://doi.org/DOI:10.1017/S147474721100045X>
- Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>
- Madaan, G., & Singh, S. (2019). An analysis of behavioral biases in investment decision-making. *International Journal of Financial Research*, 10(4), 55–67. <https://doi.org/10.5430/ijfr.v10n4p55>
- Mendoza, D. M., Padernal, A. M. G., & Magbata, E. V. S. (2023). Big Five Personality Traits and Financial Literacy: Effect on Risk Tolerance of Filipino Investors from Higher Education Institutions in Metro Manila. *Review of Integrative Business and Economics Research*, 12(2), 235–251.
- Perry, V. G., & Morris, M. D. (2005). Who is in control? the role of self-perception, knowledge, and income in explaining consumer financial behavior. *Journal of Consumer Affairs*, 39(2), 299–313. <https://doi.org/10.1111/j.1745-6606.2005.00016.x>
- Radianto, W. E., Kristama, B. Y., & Salim, I. R. (2021). Exploring the Relationship Between Locus of Control and Financial Behavior of Accounting Student from The Social Construction Theory Approach. *Academic Journal of Interdisciplinary Studies*, 10(2), 118. <https://doi.org/10.36941/ajis-2021-0043>
- Rai, K., Dua, S., & Yadav, M. (2019). Association of Financial Attitude, Financial Behaviour and Financial Knowledge Towards Financial Literacy: A Structural Equation Modeling Approach. *FIIIB Business Review*, 8(1), 51–60. <https://doi.org/10.1177/2319714519826651>
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1). <https://doi.org/https://doi.org/10.1037/h0092976>
- Sabri, M. F., Anthony, M., Law, S. H., Rahim, H. A., Burhan, N. A. S., & Ithnin, M. (2024). Impact of financial behaviour on financial well-being: evidence among young adults in Malaysia. *Journal of Financial Services Marketing*, 29(3), 788–807. <https://doi.org/10.1057/s41264-023-00234-8>
- Sarma, M. (2008). Index of Financial Inclusion. In *Indian Council for Research on International Economic Relations (ICRIER)*.
- Setyawati, A., Sugangga, R., Sulistyowati, R., Narmaditya, B. S., Maula, F. I., Wibowo, N. A., & Prasetya, Y. (2024). Locus of control, environment, and small-medium business performance in pilgrimage tourism: The mediating role of product innovation. *Heliyon*, 10(9), e29891. <https://doi.org/10.1016/j.heliyon.2024.e29891>
- She, L., Rasiah, R., Weissmann, M. A., & Kaur, H. (2024). Using the Theory of Planned Behaviour to Explore Predictors of Financial Behaviour Among Working Adults in Malaysia. *FIIIB Business Review*, 13(1), 118–135. <https://doi.org/10.1177/23197145231169336>
- Sorongan, F. A. (2022). The Influence of Behavior Financial and Financial Attitude on Investment Decisions With Financial Literature as Moderating Variable. *European Journal of Business and Management Research*, 7(1), 265–268. <https://doi.org/10.24018/ejbmr.2022.7.1.1291>

- Talwar, M., Talwar, S., Kaur, P., Tripathy, N., & Dhir, A. (2021). Has financial attitude impacted the trading activity of retail investors during the COVID-19 pandemic? *Journal of Retailing and Consumer Services*, 58, 102341. <https://doi.org/10.1016/j.jretconser.2020.102341>
- van Rooij, M. C. J., Lusardi, A., & Alessie, R. J. M. (2012). Financial Literacy, Retirement Planning and Household Wealth. *Economic Journal*, 122(560), 449–478. <https://doi.org/10.1111/j.1468-0297.2012.02501.x>
- Wagner, J. (2019). Financial Education and Financial Literacy by Income and Education Groups. *Journal of Financial Counseling and Planning*, 30(1), 132–141. <https://doi.org/10.1891/1052-3073.30.1.132>
- Widjayanti, C. E., Adawiyah, W. R., & Sudarto. (2025). Financial literacy innovation is mediated by financial attitudes and lifestyles on financial behavior in MSME players. *Journal of Innovation and Entrepreneurship*, 14(1), 57. <https://doi.org/10.1186/s13731-025-00525-5>
- Xiao, J. J., Tang, C., & Shim, S. (2009). Acting for happiness: Financial behavior and life satisfaction of college students. *Social Indicators Research*, 92, 53–68. <https://doi.org/http://dx.doi.org/10.1007/s11205-008-9288-6>
- Yamauchi, K. T., & Templer, D. J. (1982). The Development of a Money Attitude Scale. *Journal of Personality Assessment*, 46(5), 522–528. https://doi.org/10.1207/s15327752jpa4605_14