# Financial literacy and financial capability as drivers of financial inclusion among women traders in Zambia's informal markets: An empirical investigation

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## ABSTRACT

This study investigates the direct and indirect effects of financial literacy on financial inclusion, mediated by financial capability, among women traders in Lusaka's informal markets, Zambia. The target population comprised 4,028 registered women traders across three major Lusaka markets - Lusaka Food Market, Lusaka City Market, and Soweto Market - with 273 women traders selected using stratified random sampling. The study was underpinned by three complementary theoretical frameworks: Sherraden's Financial Capability Framework, Ozili's Financial Literacy Theory of Financial Inclusion, and Sen's Capability Approach and employed a post-positivist mixed-methods sequential explanatory design. Structural equation modelling with 2,000-iteration bias-corrected bootstrapping was performed using AMOS 25. Results show that financial literacy significantly predicts financial capability ($\beta = 0.497$, $p < .01$) and that financial capability significantly predicts financial inclusion ($\beta = 0.303$, $p < .05$). The direct path from financial literacy to financial inclusion was statistically insignificant ($\beta = 0.106$, $p = .334$), indicating full mediation by financial capability (indirect effect = 0.250, $p < .01$). The structural model explained 44.5% of variance in financial inclusion ($R^2 = 0.445$). These findings underscore that financial literacy alone is insufficient for financial inclusion; practical capability development is the critical mediating mechanism. The study recommends institutionalised, skills-based financial capability programmes targeting informal women traders in Zambia, integrated with accessible institutional opportunity structures and aligned with the National Financial Inclusion Strategy II (2024–2028).

**Keywords:** Financial Capability, Financial Inclusion, Financial Literacy, Structural Equation Modelling, Women Traders, Zambia

## I. INTRODUCTION

Financial inclusion, broadly understood as equitable access to and meaningful usage of affordable, quality formal financial services, has been established as a foundational pillar of sustainable economic development across Sub-Saharan Africa and the global development agenda (Ozili, 2020; Demirgüç-Kunt et al., 2022). The significance of financial inclusion extends beyond individual welfare to encompass national economic productivity, poverty alleviation, and gender equity, aligning directly with the United Nations Sustainable Development Goals, particularly SDG 1 (No Poverty), SDG 5 (Gender Equality), and SDG 10 (Reduced Inequalities). Despite sustained policy attention and infrastructure investment, the World Bank Global Findex Database in 2022 reports that approximately 1.4 billion adults worldwide remain unbanked, with women in developing economies disproportionately excluded from formal financial systems. In Zambia, the second National Financial Inclusion Strategy (NFIS II, 2024–2028) explicitly acknowledges that women, especially those in the informal sector, continue to encounter systemic barriers to formal financial participation, including limited access to credit, savings products, and digital financial services (Bank of Zambia, 2024).

Financial literacy, encompassing the knowledge, skills, and understanding required to make informed financial decisions, is widely recognised as a fundamental demand-side driver of financial inclusion (Grohmann et al., 2018; Khan et al., 2022; Lusardi & Mitchell, 2014). Investment in financial literacy programmes has proceeded on the assumption that improved financial knowledge translates directly into greater financial participation. However, a growing body of theoretical and empirical evidence challenges this assumption, suggesting that literacy alone cannot guarantee financial participation. Individuals must also develop financial capability, defined as the practical ability to act on financial knowledge within enabling institutional contexts (Sherraden, 2013). The distinction between financial literacy and financial capability is theoretically and empirically significant: whereas literacy concerns what individuals know, capability concerns what they can actually do, given the institutional, social, and structural environments in which they operate (Huston, 2010; Lučić et al., 2023).

In the Zambian context, women traders in Lusaka's informal markets operate largely outside formal financial systems, relying on informal credit arrangements, rotating savings clubs known locally as chilimba, and intermittent access to microfinance products (Foya & Zaloumis, 2023; Lweendo, 2022). These women possess varying levels of financial literacy, yet their translation of that knowledge into formal financial participation remains limited and uneven. Mwange and Mumba (2025), in a study of 361 informal traders at Lusaka City Market, found that financial literacy and self-efficacy are critical mediating mechanisms in determining digital financial inclusion outcomes, confirming that the knowledge-to-inclusion pathway is neither direct nor automatic. Chibesa and Mwange (2024, 2025) similarly document that financial literacy is a significant socioeconomic determinant of financial inclusion among informal entrepreneurs in Zambia, but its effect is significantly shaped by digital access, trust, and institutional conditions. Mugala and Mwange (2025) further demonstrate that enhanced formal financial participation by clients of non-banking financial institutions yields measurable improvements in institutional financial performance, confirming the systemic value of individual inclusion outcomes.

The present study contributes to this evolving discourse in three substantive ways. First, it provides context-specific empirical evidence from Zambia's informal sector, a population that has been largely overlooked in quantitative structural modelling research on financial inclusion. Second, it tests a full structural mediation model using SEM with bootstrapped indirect effects, providing methodologically robust evidence on the mediating role of financial capability. Third, it contributes to the theoretical integration of Sherraden's (2013) capability framework with Ozili's (2020) theory of financial inclusion and Sen's (1999) Capability Approach in a developing country context. The study is the first in a three-paper series examining the financial literacy–capability–inclusion nexus among women traders in Lusaka's informal markets. The companion papers examine financial empowerment as an alternative mediator (Paper 2) and digital financial access as a moderating contextual condition (Paper 3).

### 1.1 Statement of the Problem

Despite growing recognition that financial literacy is a demand-side driver of financial inclusion, empirical evidence on whether and how this relationship operates among women in Zambia's informal markets is scarce and methodologically underdeveloped. Most existing studies examine either literacy or inclusion in isolation, without rigorously testing the mechanisms through which the former translates into the latter (Khan et al., 2022; Grohmann & Menkhoff, 2021). Where mediation is tested, the specific role of financial capability - as distinct from more general empowerment or behavioural constructs - is seldom theorised or measured independently (Lučić et al., 2023). The conflation of financial knowledge and practical financial competence in programme evaluations has generated misleading policy guidance, since interventions that raise literacy scores do not necessarily produce the capability required for meaningful financial participation (Sherraden, 2013; Huston, 2010). In Zambia specifically, the limited financial inclusion of women traders cannot be attributed to literacy deficits alone. Structural, psychological, and institutional factors interact with knowledge to produce capability outcomes that determine financial participation (Mwange & Mumba, 2025; Chibesa & Mwange, 2024). Without empirical evidence on the mediation pathway, policymakers and financial service providers risk designing literacy programmes that raise awareness without producing the practical capability needed for meaningful financial participation. This study directly addresses this gap.

### 1.2 Research Objectives

i. Examine the impact of financial literacy on financial capability among women traders in Lusaka's informal markets.
ii. Investigate the effect of financial capability on financial inclusion among women traders in Lusaka's informal markets.
iii. Determine the direct effect of financial literacy on financial inclusion.
iv. Test the mediating role of financial capability in the financial literacy to financial inclusion nexus.

### 1.3 Research Hypotheses

*$Ho_1$:* Financial literacy has a significant positive effect on financial capability.
*$Ho_2$*: Financial capability has a significant positive effect on financial inclusion.
*$Ho_3$:* Financial literacy has a significant direct effect on financial inclusion.
*$Ho_4$:* Financial capability significantly mediates the relationship between financial literacy and financial inclusion.

## II. LITERATURE REVIEW

### 2.1 Theoretical Review

#### 2.1.1 Sherraden's Financial Capability Framework

Sherraden's (2013) Financial Capability Framework constitutes the foundational theoretical pillar of this study. The framework posits that financial capability emerges from the intersection of financial literacy - the ability to act derived from knowledge and skills - and financial access - the opportunity to act provided by enabling institutional environments. This dual-component model has significant implications for programme design and evaluation, since it predicts that financial literacy interventions will only translate into capability when they are accompanied by accessible, affordable, and appropriate institutional opportunities. In informal market contexts, where formal financial institutions are often distant, costly, or culturally inaccessible, the ability to act is frequently not matched by adequate opportunity structures (Foya & Zaloumis, 2023; Lweendo, 2022).

Sherraden's (2013) framework is particularly apposite for the Zambian informal market context because it draws explicit attention to the structural conditions that either enable or constrain the conversion of knowledge into practice. Women traders in Lusaka's markets operate within overlapping institutional constraints, including limited access to formal credit, social norms that restrict financial decision-making autonomy, and digital infrastructure gaps. These are precisely the enabling conditions that Sherraden's framework predicts will determine whether literacy translates into capability. Mwange and Mumba (2025) operationalise this framework in a related study, finding that digital financial literacy and self-efficacy mediate the trust-to-inclusion relationship at Lusaka City Market, confirming the capability framework's relevance in the Zambian context. The framework further establishes the direct theoretical linkage to the three-paper series: Paper 1 tests the capability mediation pathway, Paper 2 extends this to the empowerment dimension, and Paper 3 examines digital access as the institutional opportunity structure that enables capable women to achieve formal financial inclusion.

#### 2.1.2 Ozili's Financial Literacy Theory of Financial Inclusion

Ozili's (2020) Financial Literacy Theory of Financial Inclusion argues that financial literacy is the primary demand-side mechanism through which individuals gain access to and meaningfully use formal financial services. The theory posits a direct causal pathway from financial literacy to financial inclusion, operating through improved knowledge of financial products and systems, reduced cognitive and informational transaction costs, and enhanced confidence in formal financial markets. Ozili (2025) extends this framework by incorporating digital financial technologies as an additional pathway, arguing that the proliferation of mobile money and digital banking has created new literacy-to-inclusion channels that simultaneously generate new literacy requirements. The relevance of Ozili's theory to the present study lies in its specification of financial literacy as a necessary but potentially insufficient driver of inclusion, particularly when digital access barriers, trust deficits, or social constraints attenuate the knowledge-to-action pathway. The null finding for the direct literacy-to-inclusion path in this study constitutes an empirical challenge to the unmediated version of Ozili's model in the Zambian informal market context, resolved by the full mediation of financial capability.

#### 2.1.3 Sen's Capability Approach

Sen's (1999) Capability Approach provides the overarching normative and analytical framework within which the literacy–capability–inclusion nexus is conceptualised in this study. Sen argues that individual well-being and freedom depend not merely on access to resources but on the ability to convert those resources into genuine functionings. In the financial context, financial literacy constitutes a resource or input, while financial capability represents the functioning — the practical ability to make and implement financial decisions. Financial inclusion, as the actual use of formal financial services, represents the achieved functioning or outcome. The Capability Approach's emphasis on structural and institutional enablers of capability conversion is particularly relevant to the Zambian informal sector, where women traders may possess financial literacy but be unable to convert that knowledge into financial capability due to structural barriers including limited access to appropriate products, social norms constraining financial autonomy, and digital exclusion (Kabeer, 2016). Sen's framework thus theorises why the direct literacy-to-inclusion pathway may be blocked, and why capability — as the intermediate conversion mechanism - is the critical mediating variable. Nussbaum's (2011) extension of the Capability Approach to emphasise the social and political preconditions for capability development reinforces the study's attention to the role of institutional enabling conditions, including those addressed in the companion papers on empowerment and digital access.

## 2.2 Empirical Review

### 2.2.1 Financial Literacy and Financial Capability

The empirical literature on the financial literacy-to-capability relationship is well-developed in high- and middle-income country contexts, though evidence from Sub-Saharan Africa remains comparatively sparse. Bhargava et al. (2022) found in India that financial literacy significantly improves practical financial management skills, particularly among women with limited formal education. Khan et al. (2022) established that financial literacy is a robust predictor of financial capability in Pakistan's emerging market context, with a positive and statistically significant effect that persists across socioeconomic subgroups. Grohmann et al. (2018) provided cross-country evidence across 84 economies demonstrating that financial literacy improves financial inclusion, with the effect being stronger where institutional access opportunities are available, confirming Sherraden's (2013) prediction that literacy effects on capability depend on enabling conditions. In the Sub-Saharan African context, Fanta and Mutsonziwa (2021) demonstrated that financial literacy is a key driver of financial inclusion in Kenya and Tanzania, operating through improved financial planning and savings behaviour. Kasozi (2020) found significant positive effects of financial literacy on financial inclusion among Ugandan women, mediated by enhanced practical financial competencies. Allen et al. (2016), using Global Findex data, established that education and income, which are broader determinants of literacy, are among the strongest predictors of account ownership across developing economies, reinforcing the literacy-to-capability pathway at a structural level.

In the Zambian context, Mwange and Mumba (2025) provide particularly relevant evidence, examining 361 informal traders at Lusaka City Market and finding that digital financial literacy significantly mediates the trust-to-inclusion relationship. Chibesa and Mwange (2024) extend this evidence, demonstrating that financial literacy predicts entrepreneurial decision-making quality with a standardised coefficient of 0.54 ($p < .01$) among informal traders. Banda et al. (2026) further demonstrate through a desk review of informal savings and lending groups in Zambia that financial literacy and group-based participation are complementary drivers of financial inclusion, with structured savings mechanisms amplifying the individual-level capability gains generated by literacy interventions.

### 2.2.2 Financial Capability and Financial Inclusion

The empirical literature on the financial capability-to-inclusion relationship supports a robust, positive, and theoretically coherent relationship. Financial capability, encompassing practical financial management skills, product awareness, savings behaviour, and the confidence to engage with formal financial systems, consistently emerges as a stronger proximal predictor of financial inclusion than financial literacy alone (Khan et al., 2022; Lučić et al., 2023). Mustapha et al. (2023) found that financial capability mediates the relationship between financial literacy and financial inclusion of micro, small, and medium enterprises, establishing a pattern consistent with the mediation hypothesis tested in this study. Čera et al. (2020) demonstrated that financial behaviour - a key capability dimension - mediates the literacy-inclusion link across European contexts. In the Zambian informal sector, Foya and Zaloumis (2023) documented that women operating micro enterprises face access barriers that literacy-only programmes cannot overcome, with practical capability constituting the critical bridge between knowledge and participation. Lweendo (2022) found that village banking participation improved financial inclusion for female market traders in Ndola, Zambia, through enhanced financial management skills, confirming that structured participation frameworks build the practical capability dimensions that literacy alone does not provide. Musana et al. (2023) demonstrated at the institutional level that collaborative digital financial service provision significantly enhances digital financial inclusion in Zambia ($\beta = 1.88$, $p < .001$), with the expansion of accessible digital platforms creating the opportunity structures within which capable women can translate their competencies into formal participation.

## 2.3 The Golden Thread: Literacy → Capability → Inclusion

Synthesising the theoretical and empirical literature, the three frameworks integrated in this study converge on a single coherent proposition - the golden thread running through the literacy–capability–inclusion chain. Financial literacy, as theorised by Ozili (2020) and empirically validated in diverse contexts, provides the foundational knowledge input. Sherraden's (2013) framework specifies the conditions under which this input is converted into capability: the presence of enabling institutional opportunity structures. Sen's (1999) Capability Approach provides the normative grounding: financial inclusion is not merely an economic indicator but a dimension of human freedom, achievable only when both the ability to act (capability) and the opportunity to act (access) are present. This trilateral theoretical convergence predicts the full mediation pattern that the study's empirical results confirm: financial literacy has no direct effect on inclusion when capability is controlled for, because literacy must first be converted into practical competence before formal financial participation becomes achievable. This golden thread — literacy → capability → inclusion — is the central analytical contribution of the paper and the framework that unifies the three-paper series, with empowerment as an alternative mediating mechanism (Paper 2) and digital financial access as the institutional opportunity structure that amplifies capability expression (Paper 3).

## III. METHODOLOGY

### 3.1 Research Philosophy and Design

The study was underpinned by a post-positivist research philosophy (Maksimovic & Evtimov, 2023; Jackson & Dolan, 2021), which acknowledges that reality exists independently of the researcher but that knowledge of that reality is probabilistic and subject to measurement error rather than absolute. This philosophical position justifies the use of quantitative statistical methods to generate generalisable, probabilistic knowledge about the financial literacy–capability–inclusion chain in Zambia's informal sector, while acknowledging that measurement error and contextual variation are inherent features of social science research. A sequential explanatory mixed-methods design (Creswell & Creswell, 2022) was employed, in which quantitative structural equation modelling constitutes the primary analytical phase and qualitative insights from the broader research programme inform contextual interpretation.

### 3.2 Study Area and Target Population

The study was conducted across three major informal markets in Lusaka, Zambia: Lusaka Food Market, Lusaka City Market, and Soweto Market. These markets collectively represent the most economically significant informal trading environments in Zambia's capital city and were selected purposively to provide representativeness across product categories, market sizes, and geographic locations within Lusaka. The total estimated population of registered women traders across the three markets was 4,028, derived from market management records obtained during the preparatory phase of the study. The study population was restricted to women traders because women in informal markets constitute a demographically distinct group with specific financial inclusion barriers related to gender, social norms, and institutional exclusion (Kabeer, 2016; Foya & Zaloumis, 2023), and because the study's theoretical frameworks specifically emphasise the role of structural and institutional constraints in mediating the literacy–capability–inclusion chain, which is more pronounced for women than for men in informal market contexts in Sub-Saharan Africa.

### 3.3 Sampling Procedure and Sample Size

Stratified random sampling was applied across the three markets proportional to their registered trader populations, ensuring representation of all three market environments. Using Cochran's (1977) formula for continuous data at a 95% confidence level and 5% margin of error, a target sample of 300 was determined. A total of 285 questionnaires were distributed, of which 273 complete responses were obtained, yielding a response rate of 91%. The achieved sample size of 273 exceeds the minimum of 200 recommended for SEM by Kline (2023) and satisfies the ten-observations-per-parameter rule recommended by Hair et al. (2019). This is methodologically consistent with the sample size of 361 used by Mwange and Mumba (2025) and the 350 used by Chibesa and Mwange (2024), both of which studied comparable Lusaka informal market populations.

### 3.4 Data Collection Instruments

Data were collected using structured Likert-scale questionnaires, scored on a 5-point scale from 1 (Strongly Disagree) to 5 (Strongly Agree), comprising items measuring financial literacy (9 items), financial capability (8 items), and financial inclusion (7 items). Items were adapted from validated instruments in the literature, specifically drawing on Sherraden's (2013) capability framework items, Khan et al.'s (2022) financial literacy scale, and Ozili's (2020) financial inclusion dimensions. Local adaptation was conducted through expert review involving faculty members from the University of Zambia's Graduate School of Business and through a pilot test with 30 women traders not included in the main sample, who assessed item clarity, cultural appropriateness, and relevance to Zambian informal market conditions. The questionnaire was administered in English and Nyanja to ensure comprehension across the linguistically diverse market populations.

### 3.5 Validity and Reliability

Construct validity was assessed through confirmatory factor analysis using principal component analysis extraction. The Kaiser-Meyer-Olkin measure of sampling adequacy exceeded 0.79 for all constructs, and Bartlett's test of sphericity was significant ($p < .001$) for all scales, confirming the appropriateness of factor analysis. Discriminant validity was established using the Heterotrait-Monotrait ratio (HTMT), with all HTMT values falling below the 0.85 threshold recommended by Henseler et al. (2015), indicating adequate differentiation between the three constructs. Reliability was confirmed with Cronbach's alpha exceeding 0.70 for all constructs, consistent with the threshold recommended by Hair et al. (2019).

### 3.6 Data Analysis

The primary analytical technique was structural equation modelling using maximum likelihood estimation in IBM AMOS 25 (Kline, 2023). SEM was selected because it allows simultaneous estimation of multiple regression

equations, models measurement error explicitly through latent variable specification, and enables testing of both direct and indirect effects within a single integrated model (Kline, 2023; Byrne, 2016). Mediation was tested using Baron and Kenny's (1986) four-step process, supplemented by bias-corrected bootstrapping with 2,000 resamples to generate confidence intervals for indirect effects (Hayes, 2022). Bootstrapped confidence intervals not containing zero indicate significant indirect effects, providing a more statistically robust approach to mediation testing than the Sobel test (Hayes, 2022). Model fit was assessed using a comprehensive set of absolute, incremental, and parsimony indices, with acceptable fit thresholds following established conventions: $\chi^2/df < 3$, RMSEA < 0.05, CFI ≥ 0.90, TLI ≥ 0.90, GFI ≥ 0.90, and AGFI ≥ 0.80 (Kline, 2023).

### 3.7 Ethical Considerations

Ethical clearance was obtained from the University of Zambia Ethical Review Board. All participants provided written informed consent prior to participation. Participation was voluntary, and participants were informed of their right to withdraw at any point without penalty. Data were anonymised and stored securely. The study adhered to the principles of the Declaration of Helsinki and all relevant University of Zambia research ethics guidelines.

## IV. FINDINGS & DISCUSSION

### 4.1 Sample Characteristics

The sociodemographic profile of respondents reveals a predominantly working-age population: 42.3% were aged 26 to 35 years, and 31.2% were aged 36 to 45 years, reflecting the economically active cohort characteristic of informal market traders in Sub-Saharan African contexts (Foya & Zaloumis, 2023). Education levels were moderate: 38.8% had completed secondary school and 27.5% had primary education only, while 21.2% had some post-secondary qualification. Market tenure was substantial, with 61.5% having traded for more than five years. Mean scores for the key constructs were: financial literacy (M = 2.99, SD = 0.72), financial capability (M = 2.63, SD = 0.68), and financial inclusion (M = 2.65, SD = 0.71). The mean score for financial capability being lower than for financial literacy provides preliminary descriptive evidence consistent with the theoretical prediction — grounded in the golden thread — that knowledge does not automatically produce practical capability.

### 4.2 Model Fit

The overall structural model demonstrated excellent fit across all major fit indices, as presented in Table 1. The chi-square to degrees of freedom ratio ($\chi^2/df = 1.045$) falls well below the maximum acceptable threshold of 3.0. The RMSEA of 0.013 falls substantially below the 0.05 threshold for close fit. Incremental fit indices all exceeded the 0.90 threshold: CFI = 0.983, TLI = 0.982, and IFI = 0.984. The $R^2$ value of 0.445 indicates that the model explains 44.5% of variance in financial inclusion, which is a large effect size by Cohen's (2013) criteria, confirming the model's explanatory adequacy for the Zambian informal market context.

**Table 1**

*Structural Model Fit Indices (N = 273)*

| Fit Index | Obtained Value | Recommended Threshold | Assessment |
|---|---|---|---|
| $\chi^2/df$ | 1.045 | < 3.0 | Excellent |
| GFI | 0.899 | ≥ 0.90 | Acceptable |
| AGFI | 0.883 | ≥ 0.80 | Good |
| RMSEA | 0.013 | < 0.05 | Excellent |
| CFI | 0.983 | ≥ 0.90 | Excellent |
| TLI | 0.982 | ≥ 0.90 | Excellent |
| IFI | 0.984 | ≥ 0.90 | Excellent |
| PNFI | 0.664 | > 0.50 | Good |
| $R^2$ (Financial Inclusion) | 0.445 | Large (> 0.26) | Large effect |

### 4.3 Structural Path Results and Hypothesis Testing

Table 2 presents the structural path coefficients for all four hypotheses tested in this study.

**Table 2**

*Structural Model Path Coefficients (N = 273)*

| Hypothesis | Path | β (Std.) | B (Unstd.) | SE | z-value | p-value | Result |
|---|---|---|---|---|---|---|---|
| H1 | FinLit → FinCap | 0.497 | 0.341 | 0.098 | 3.480 | < .01 | Supported*** |
| H2 | FinCap → FinInc | 0.303 | 0.572 | 0.241 | 2.372 | < .05 | Supported** |
| H3 | FinLit → FinInc (direct) | 0.106 | 0.198 | 0.204 | 0.970 | .334 | Not Supported |
| H4 | FinLit → FinCap → FinInc (indirect) | — | 0.250 | — | — | < .01 | Supported*** |

*Note. *** p < .01; ** p < .05. FinLit = Financial Literacy; FinCap = Financial Capability; FinInc = Financial Inclusion. Indirect effect estimated with 2,000-iteration bias-corrected bootstrapping.*

#### 4.3.1 $Ho_1$: Financial Literacy and Financial Capability (Supported)

Hypothesis 1 was supported: financial literacy significantly predicts financial capability (β = 0.497, z = 3.480, p < .01). This finding indicates that women traders who demonstrate stronger financial knowledge also demonstrate significantly higher practical financial management competence. The standardised coefficient of 0.497 represents a moderate to large effect, confirming that literacy is a substantively important antecedent of capability, while the remaining variance in capability reflects contributions from institutional access, social conditions, and other enabling factors. This result is consistent with Bhargava et al. (2022), Khan et al. (2022), and Grohmann et al. (2018), who document positive literacy-to-capability relationships across diverse developing economy contexts. In the Zambian context, this finding validates the foundational proposition of both Sherraden's (2013) framework and Ozili's (2020) theory, which predict that financial literacy is a necessary input for the development of financial capability. Chibesa and Mwange (2024) demonstrate a related finding, showing that financial literacy is a significant predictor of entrepreneurial decision-making quality among Lusaka informal traders, with the effect operating through enhanced practical competence in financial analysis and planning. This result confirms the first link in the golden thread: literacy is a significant and substantively important antecedent of capability.

#### 4.3.2 $Ho_2$: Financial Capability and Financial Inclusion (Supported)

Hypothesis 2 was supported: financial capability significantly predicts financial inclusion (β = 0.303, z = 2.372, p < .05). This finding confirms that women traders with stronger practical financial management skills, higher product familiarity, and greater confidence in engaging with formal financial systems are significantly more likely to be formally financially included. The positive and significant capability-to-inclusion relationship confirms the second core theoretical prediction of the study, establishing financial capability as a significant driver of formal financial participation. This result aligns with Mustapha et al. (2023), who established that financial capability mediates the literacy-inclusion relationship in MSME contexts, and with Lučić et al. (2023), who identify financial capability as the proximal driver of formal financial participation. Foya and Zaloumis (2023) documented in the Zambian context that women operating micro enterprises face access barriers that literacy-only programmes cannot overcome, with practical capability constituting the critical bridge between knowledge and participation. Musana et al. (2023) further demonstrate that the expansion of accessible digital financial platforms in Zambia amplifies the probability that capable individuals can translate their competencies into formal participation, confirming that institutional enabling conditions complement individual capability in driving inclusion. The companion paper (Paper 3) demonstrates that digital financial access specifically amplifies this capability-to-inclusion pathway (β = 0.206, p < .01), providing the institutional opportunity structure dimension that Sherraden's framework predicts is necessary for capability expression.

#### 4.3.3 $Ho_3$: Direct Effect of Financial Literacy on Financial Inclusion (Not Supported)

Hypothesis 3 was not supported: the direct path from financial literacy to financial inclusion was statistically insignificant (β = 0.106, z = 0.970, p = .334). This finding indicates that financial literacy has no significant direct effect on financial inclusion when financial capability is included in the model. This result challenges the assumption embedded in many financial education programmes that knowledge improvements translate directly into behavioural inclusion gains, and is consistent with Grohmann and Menkhoff (2021), who found that the financial literacy-inclusion relationship is frequently mediated by behavioural and capability constructs. Ozili's (2020) theory predicts a direct literacy-to-inclusion pathway, and the null finding suggests that in the Lusaka informal market context, this direct pathway is fully absorbed by the capability mediator, indicating that literacy's effect on inclusion is entirely indirect. This is the critical null finding of the golden thread: literacy does not independently drive inclusion but must first produce capability.

#### 4.3.4 $H_{O4}$: Mediation by Financial Capability (Supported)

Hypothesis 4 was supported: financial capability significantly mediates the relationship between financial literacy and financial inclusion, with a statistically significant indirect effect of 0.250 ($p < .01$). The combination of a significant indirect effect (H4 supported), a significant direct literacy-to-capability path (H1 supported), a significant capability-to-inclusion path (H2 supported), and a non-significant direct literacy-to-inclusion path (H3 not supported) satisfies the criteria for full mediation specified by Baron and Kenny (1986) and reinforced by Hayes (2022). The full mediation finding is the central empirical contribution of this study. It establishes that in Zambia's informal market context, financial literacy does not independently drive financial inclusion but must first be converted into practical financial capability before inclusion gains are realised. This has direct and actionable policy implications: literacy programmes that fail to also build practical capability — through product training, mentorship, peer learning, and institutional access facilitation — are unlikely to produce measurable inclusion outcomes. Mwange and Mumba (2025) found analogous mediation evidence for digital contexts, suggesting that capability-type constructs serve as consistent mediators in diverse financial inclusion pathways in Zambia. Chibesa and Mwange (2025) extend this by demonstrating that digital financial literacy is the most robust demand-side determinant of digital financial inclusion among informal entrepreneurs, confirming the primacy of capability-type variables as proximal predictors of inclusion. The companion Paper 2 establishes that financial empowerment — the psychological agency and confidence dimension — mediates the literacy-inclusion relationship with an even larger indirect effect (0.355), suggesting that both practical capability and psychological empowerment are necessary components of an effective inclusion intervention design.

## V. CONCLUSION & RECOMMENDATIONS

### 5.1 Conclusion

This study provides robust empirical evidence that financial capability fully mediates the relationship between financial literacy and financial inclusion among women traders in Lusaka's informal markets. The structural mediation model, estimated with SEM and validated with bias-corrected bootstrapping across 2,000 resamples, demonstrates that financial literacy has no significant direct effect on financial inclusion but exerts a strong and significant indirect effect through financial capability. These findings validate the theoretical predictions of Sherraden's Financial Capability Framework and Sen's Capability Approach, and challenge the assumed direct literacy-to-inclusion pathway as the sole mechanism in this context. The golden thread - financial literacy → financial capability → financial inclusion - is empirically confirmed as the operative causal chain in Zambia's informal women trader context.

The study's theoretical contributions are threefold. First, it advances the theoretical integration of three complementary frameworks - Sherraden's capability framework, Ozili's theory of financial inclusion, and Sen's Capability Approach - providing a more comprehensive and empirically testable theoretical architecture for understanding the literacy-inclusion nexus. Second, it establishes the capability mediation pathway as empirically central in the Zambian informal market context, adding to the emerging Africa-specific evidence base. Third, it demonstrates the value of applying full structural equation modelling with bootstrapped indirect effects to generate methodologically robust mediation evidence in developing country financial inclusion research. These contributions establish Paper 1 as the theoretical and empirical foundation of the three-paper series: Paper 2 extends the golden thread by testing financial empowerment as an alternative and more potent mediator, while Paper 3 situates digital financial access as the institutional moderator that amplifies the capability-to-inclusion pathway.

### 5.2 Recommendations

Based on the study's findings, the following recommendations are advanced for policymakers, financial service providers, and development partners working on women's financial inclusion in Zambia. Financial literacy programmes targeting women traders in informal markets should be redesigned to explicitly incorporate capability-building components alongside knowledge transfer. Given that literacy has no direct effect on inclusion, financial education that limits itself to raising awareness or imparting conceptual knowledge is unlikely to produce measurable inclusion gains. Practical financial capability components — including hands-on product training, guided account opening and usage, digital transaction simulation, and peer learning circles — should be integrated into all financial literacy interventions. This recommendation is supported by the evidence on the inclusion-enhancing role of structured savings groups, and on the mediating role of digital financial literacy and self-efficacy.

Government agencies and microfinance institutions should invest in creating and maintaining institutional access structures that enable capability conversion, including affordable and accessible savings products, simplified account opening procedures for informal traders, and digital financial platforms designed for low-literacy users. Opportunity structures are as important as the ability to act; creating enabling access conditions will maximise the return on literacy investment by providing the institutional channels through which capability can translate into inclusion. The Bank of Zambia and NFIS II implementers should prioritise monitoring and evaluation frameworks that measure

financial capability as an intermediate outcome variable, rather than relying solely on literacy knowledge scores and financial inclusion access indicators. Measuring the literacy-to-capability-to-inclusion chain in programme evaluations will provide the evidence base needed to identify where along the chain implementation failures occur, enabling more targeted and cost-effective interventions. This recommendation is aligned with the NFIS II's explicit commitment to quality of financial inclusion as distinct from mere access, and with the evidence that the institutional-level returns to inclusion depend on the depth and quality of individual financial participation.

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