Indigenous Apprenticeship Systems as Mechanisms for Reducing Financial Inequality in Women-Owned SMEs in West Africa: A Systematic Literature Review

Oluwakemi O. Onayemi; oluwakemi.onayemi@covenantuniversity.edu.ng
Rose O. Michael; rose.michaelpgs@stu.cu.edu.ng (Corresponding Author)
Chinyere G. Adeniji; chinyere.adeniji@covenantuniversity.edu.ng
Oluwatoyin D. Adesanya; oluwatoyin.adesanya@covenantuniversity.edu.ng
Adebola T. Amoo; adebola.amoopgs@stu.cu.edu.ng
Business, Entrepreneurship and Innovation Cluster, Department of Business Management, Covenant University, Ota, Ogun State, Nigeria.

https://doi.org/10.70118/ajbam-03-2026-052

Abstract

This systematic literature review develops an integrative framework that synthesises Gender Empowerment Theory, the Resource-Based View (RBV), and Entrepreneurial Ecosystem perspectives to explain how indigenous apprenticeship systems in West Africa serve as mechanisms to reduce financial inequality in women-owned small and medium-sized enterprises (SMEs). Following a PRISMA-compliant protocol that combines bibliometric and qualitative thematic analyses, the review synthesises 42 peer-reviewed articles retrieved from Scopus (2010–2026). Indigenous apprenticeship delivers a tripartite resource endowment—competency transfer, start-up capital, and network inscription—that formal financial and vocational institutions cannot replicate at equivalent cost, cultural legitimacy, or relational depth. However, patrilineal norms structurally bar most women from completing the full apprenticeship sequence, compounding discrimination in formal finance to produce a dual exclusion that single-domain interventions cannot resolve. Financial literacy emerges as the critical mediator between apprenticeship engagement and formal credit access, transmitted mainly through indigenous trade networks rather than formal schooling. Digital tools amplify rather than replace indigenous network capital, with the strongest empowerment effects among women who already have robust pre-existing networks. The review proposes a four-part policy architecture—gender-targeted post-apprenticeship capital grants, embedded financial-literacy modules, female master-mentorship programmes, and mobile-money linkage of graduation capital—that reforms rather than displaces indigenous institutions, advancing organisation studies by theorising informal institutions as simultaneous producers and gendered distributors of financial-inclusion outcomes.

Keywords: indigenous apprenticeship; women-owned SMEs; financial inclusion; gender empowerment; West Africa; entrepreneurial ecosystems

INTRODUCTION

Despite operating some of the most durable, locally grounded enterprise frameworks in West Africa, indigenous apprenticeship models remain under-researched as mechanisms for promoting equitable financial inclusion in women-owned SMEs. Across Nigeria, Ghana, and Benin, millions undergo informal apprenticeships to enter the economy and establish businesses in sectors otherwise dominated by informal labour (Chikere, 2023; Iwara, 2020). From the Igbo Imu Ahia to Ghana's kente-weaving incubators and Beninese artisanal trades, this legacy has had its economic contribution empirically recognised but has rarely been examined for its impact on equitable development policy (Ifeanyichukwu et al., 2023). The question generalises across the Global South, where rotating savings associations and craft guilds both substitute for formal credit and reproduce gendered exclusion (Dana et al., 2023): under what conditions might informal institutions yield gender-equitable financial-inclusion outcomes?

The starting point is that such institutions need not be replaced but reformed. Women constitute the majority of Sub-Saharan Africa's informal labour force yet borrow formally at far lower rates than men, widening the regional financing gap by an estimated USD 42 billion annually through discriminatory screening and collateral requirements that overlook the assets women control (Asah & Hove-Sibanda, 2025; Irene et al., 2025; Nghargbu & Jumare, 2024). Indigenous apprenticeship straddles this contradiction. On completing the practicum, masters ceremonially provide the apprentice with start-up capital, a transfer formal microfinance has not reproduced at comparable cost or social legitimacy (Asitik et al., 2025; Ude, 2024) alongside managerial capacities that convert that capital into productive investment (Chikere, 2023; Tumba et al., 2022). Yet women are routinely denied access to certain trades or masters, truncating the very sequence that produces these benefits for men (Mohammed et al., 2024; Sidi et al., 2025). Informal financial inclusion is thus predicated on socioeconomic relationships that are themselves gendered.

Digitalisation complicates the picture. Mobile money and fintech are widely promoted as solutions to women's exclusion, yet adoption among West African women trails East Africa, and rural women who depend most on indigenous services see the smallest returns (Akeju, 2024; Faton et al., 2025). Digital tools empower most when they build upon, rather than replace, the trust and accountability of apprentice circles (Agyemang & Bokpin, 2025; Daniel & Ojobi, 2020). Indigenous apprenticeship is therefore better understood not as an analogue system displaced by fintech but as the grassroots infrastructure on which fintech operates, where digital literacy and coverage remain low.

Three bodies of literature address this problem but remain disconnected. Work on apprenticeship documents, organisational characteristics, and enterprise outcomes without sufficient gender disaggregation (Eneh et al., 2023; Iwara & Adeola, 2021); work on women's financial exclusion details systemic causes but overlooks indigenous saving behaviours (Asah & Hove-Sibanda, 2025; Irene et al., 2025); and work on digital-finance barriers does not position indigenous institutions as a root cause or accelerant of uptake (Ba & Dieng, 2025; Nghargbu & Jumare, 2024). No unified framework centres women within indigenous apprenticeship.

This review bridges that gap. It is organised around four research questions: (RQ1) How do indigenous apprenticeships' organisational characteristics relate to financial-inclusion outcomes? (RQ2) How do their cultural and structural features perpetuate financial inequality for women-owned SMEs? (RQ3) How does financial literacy relate to apprentices' access to formal financial products? and (RQ4) through what ecosystem frameworks can apprenticeship best be situated to reach women? In doing so, the review not only positions itself at the intersection of indigenous knowledge, women's entrepreneurship, and financial inclusion but also advances new approaches to treating them together.

LITERATURE REVIEW AND CONCEPTUAL BACKGROUND

Three overlapping bodies of literature frame the review. The first, an institution-development stream, profiles indigenous apprenticeship among the Igbo, incubation among kente weavers, and family succession, but typically assesses overall business success rather than disaggregating by gender (Ifeanyichukwu et al., 2023; Iwara, 2020; Majeed & Kosiba, 2023). The second documents the scale of gendered financial exclusion and identifies exclusionary provider behaviour in the formal sector, yet seldom grounds its conclusions in the indigenous saving mechanisms, terminal gifts, susu, and alumni loan pools that constitute women's de facto inclusion channels (Asah & Hove-Sibanda, 2025; Irene et al., 2025; Adah et al., 2025). The third shows persistent gaps in digital-tool adoption among West African women and finds that digital tools are most impactful when they leverage existing social relationships (Agyemang & Bokpin, 2025; Akeju, 2024; Ba & Dieng, 2025). Each stream captures two of the three dimensions, gender, financial inclusion, and indigenous apprenticeship, but none addresses all three simultaneously. This review synthesises how apprenticeship reproduces financial-inclusion resources, how it allocates them within and across genders, and how formal and digital finance intersect with these dynamics.

Theoretical Foundation

The review advances an integrative framework that deploys three theories concurrently rather than as competing explanations. Gender Empowerment Theory holds that economic empowerment depends on the concurrent availability of enabling factors, such as skills, capital, and productive networks, and that the denial of any one of these factors limits overall empowerment (Shaaban, 2022). It explains how women's restricted access to capital endowments and network inscriptions produces gender-stratified outcomes even in the absence of a human capital gap. The Resource-Based View clarifies why apprenticeships bundle valuable, rare, inimitable, and non-substitutable resources: master-certified skill, start-up capital, and commercial networks that formal programmes cannot replicate (Meng et al., 2021). Entrepreneurial Ecosystem theory broadens the unit of analysis to encompass the actors, institutions, networks, and resources surrounding the enterprise, recasting apprenticeship as a legitimate ecosystem actor rather than an informal afterthought and revealing how women experience inequity across multiple ecosystem levels (Isenberg, 2010). Integrating the three lenses shows that apprenticeships' capacity to produce financial inclusion and their tendency to reproduce gender stratification are not separate problems but are systemically linked and addressable only through multi-level reform.

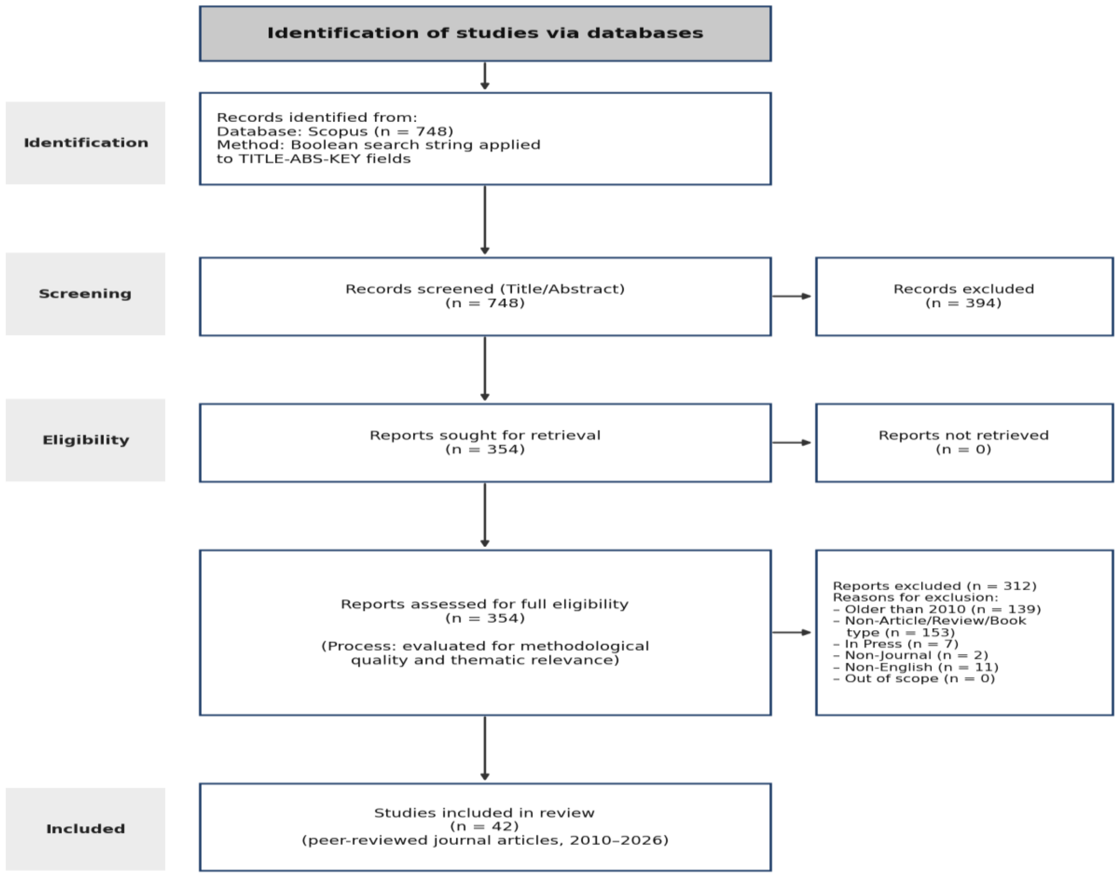
METHODOLOGY

A systematic literature review was adopted because it permits comprehensive, replicable, and transparent synthesis across an interdisciplinary corpus spanning indigenous knowledge systems, gender studies, entrepreneurship, development finance, and digital economics (Mallett et al., 2024; Raman et al., 2022). Given the fragmentation of the evidence, systematic integration offers the cross-domain insight that a narrative review could not achieve with comparable rigour (Crane, 2021; Setyaningrum et al., 2023).

PRISMA Protocol and Data Collection

The review was planned and reported in accordance with the PRISMA 2020 checklist (Page et al., 2021), following four phases: identification, screening, eligibility, and inclusion, summarised in Figure 1. Scopus was selected as the sole bibliographic source for its broad, rigorously indexed coverage of social science, management, and development literature and its comprehensive metadata, which support reliable bibliometric analysis. Inclusion and exclusion criteria (Table 1) were specified before searching: eligible studies were English-language, peer-reviewed articles published between 2010 and 2026 that addressed at least one review dimension and reported a transparent design. The Boolean search, executed on 15 March 2026, returned 748 records; after title/abstract screening and full-text eligibility assessment, 42 studies were retained (Figure 1; full string in Appendix B). The review was not prospectively registered because its scope evolved iteratively and registries such as PROSPERO primarily accommodate health-related reviews; to preserve transparency, the protocol, search string, and completed checklist accompany the manuscript.

Figure 1. *PRISMA 2020 flow diagram for study selection*



Note. Compiled by the authors using the PRISMA 2020 template (Page et al., 2021).

Table 1

Inclusion and exclusion criteria

Criterion	Inclusion	Exclusion
Language	English only	Non-English publications
Document type	Peer-reviewed journal articles (empirical and theoretical)	Conference papers, chapters, editorials, commentaries, dissertations
Publication stage	Final published articles	In-press, preprint, or under-review manuscripts
Time frame	2010–2026; seminal theory from 2010	Pre-2010 (except foundational theory)
Geographic scope	West Africa (primary); comparable Sub-Saharan contexts (secondary)	No relevance to West African contexts
Thematic relevance	Indigenous apprenticeship; women's entrepreneurship; financial inclusion; SME development; gender inequality; digital finance	Addressing none of the review's dimensions
Methodological quality	Robust quantitative, qualitative, mixed-method, or conceptual designs	No transparent research-design reporting

Data Analysis

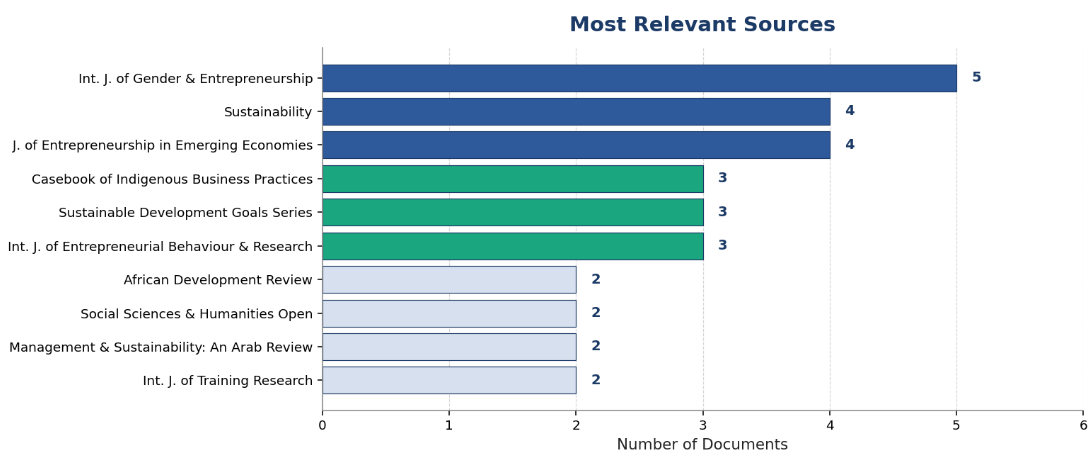
Two methods were applied concurrently. Bibliometric analysis (VOSviewer and the R package Bibliometrix) characterised the intellectual structure, seminal works, and publication trends of the corpus (Gregory et al., 2020; Qader et al., 2022). Thematic synthesis of the 42 studies used open, axial, and selective coding, grounding themes in the data rather than imposing them (Mallett et al., 2024). Five clusters emerged, mapping onto the research questions: (1) apprenticeship as a financial-inclusion mechanism; (2) gendered exclusion and the reproduction of marginalisation; (3) financial literacy as a bridging mechanism; (4) digital inclusion as a complement to apprenticeship capital; and (5) ecosystem-level institutional integration.

RESULTS

Descriptive and Bibliometric Analysis

Annual output grew steadily from 2010 and accelerated after 2020 as research on gender, digital finance, and indigenous institutions converged, signalling a field maturing from isolated case studies toward integrative, cross-domain inquiry (Deng et al., 2020; Raman et al., 2022). Nigeria and Ghana together account for roughly 62 per cent of included studies, with smaller but analytically salient contributions from Benin, Senegal, and Sierra Leone, and an increasingly common ECOWAS-level comparison since 2022 (Dana et al., 2023; Wedajo et al., 2023). Source analysis (Figure 2) concentrates on gender-, entrepreneurship-, and development-focused outlets, led by the International Journal of Gender and Entrepreneurship and the Journal of Entrepreneurship in Emerging Economies, with Sustainability reflecting growing SDG integration. Thematic mapping locates social-capital formation and knowledge transfer as well-developed motor themes, while financial inclusion and gender empowerment remain central but under-theorised (Meng et al., 2021; Shaaban, 2022).

Figure 2. *Most relevant sources*



Note. Compiled by the authors from the Bibliometrix output.

Indigenous Apprenticeship as an Embedded Financial-Inclusion Mechanism (RQ1)

The literature uniformly positions indigenous apprenticeship as both a direct and an indirect route to financial inclusion. Directly, masters provide trade-capital endowments, start-up stock, and introductory customers through the starter-kit conferred at contract termination, small but meaningful infusions in contexts where banks cannot or will not lend (Iwara, 2020; Mohammed et al., 2024). Indirectly, apprenticeship inducts members into networks that function as informal insurance and loan circles, with susu and esusu clubs frequently organised around apprenticeship alumni who supply exiting members with investable lump sums (Majeed & Kosiba, 2023). Finally, apprenticeship transmits tacit productive knowledge and market and product intelligence that the RBV treats as intangible competitive assets (Shaaban, 2022). This specialisation, paired with gifted capital, helps explain why enterprises founded by apprenticed women survive at higher rates than those of the untrained or externally schooled; in Ghana, Mohammed et al. (2024) attribute the wage gap between trained and untrained women weavers to precisely this rare, difficult-to-replicate bundle. The structure recurs across West African ecosystems, differing in formalisation and industry concentration rather than mechanism, and where gender-exclusion norms are weaker, and women traverse the full chain, participation approaches parity (Ifeanyichukwu et al., 2023; Quagrainie, 2024).

Gendered Exclusion and the Reproduction of Financial Inequality (RQ2)

Structural processes grounded in local culture, rather than emergent ones, consistently prevent women from fully participating and benefiting financially, regardless of aspiration or ability (Mohammed et al., 2024; Sidi et al., 2025). Analysis of a nationally representative Ghanaian data set shows that although apprenticeship raises overall self-employment, women gain far less than men, with post-completion constraints, smaller start-up transfers, and the absence of master-sponsored introductions and limited access to shops proving decisive (Mohammed et al., 2024). In Gender Empowerment terms, insufficient capital at graduation, and especially zero transfer, denies women the material means and legitimising credentials of programme completion (Shaaban, 2022). Among the Igbo, traditions surrounding inheritance, men-only guilds, and women's domestic roles are reproduced within apprenticeship and bar full access to mastership and its capital tribute (Sidi et al., 2025). Because these biases mirror those women face in formal finance (Asah & Hove-Sibanda, 2025), they create a double exclusion that cannot be resolved by targeting either indigenous institutions or formal-sector access alone. Comparative cases confirm the pattern is malleable: institutionalised discrimination depresses women's completion in male-dominated trades (Alla-Mensah & McGrath, 2025) and stereotypes channel women into low-capital trades (Padi et al., 2025), yet near gender-balanced participation in some textile communities shows the divide is socially constructed and amenable to reform (Dagoudo et al., 2024; Majeed & Kosiba, 2023).

Financial Literacy as a Bridge to Formal Financial Access (RQ3)

Financial literacy is the mechanism through which apprenticeship status shapes women-owned SMEs' ability to access and use formal financial services. Structural-equation evidence identifies it as the primary determinant of Nigerian women micro-entrepreneurs' access to formal credit, with informal trade networks and apprenticeships, not formal schooling, serving as the main source of financial knowledge (Tumba et al., 2022). This implies both that apprenticeship networks already act as an informal financial-literacy channel and that the channel is not yet sufficient to secure full access, so strengthening it should yield outsized returns. Financial literacy also dampens the effect of risk-aversion bias on women's investment decisions (Iram et al., 2023), and networked women maintained better financial management practices during the pandemic through information from network partners (Gumbo et al., 2023). The policy lesson is integration rather than substitution: appending formal financial-literacy training to the apprenticeship framework, ideally delivered by trusted community members, secures the highest uptake among women and aligns with Gender Empowerment Theory (Aripin & Zuhriyah, 2025; Kurniasari et al., 2026; Lestari et al., 2025; Shaaban, 2022).

Sustainability as a Cross-Cutting Emergent Theme

Beyond the four questions, sustainability surfaced inductively during coding because it conditions the durability of the inclusion mechanisms above. Economic sustainability is strongest in the intergenerational transmission of business knowledge and the intra-community recycling of capital; social sustainability appears in the transmission of cultural identity and networks of trust, with value-driven succession building institutional forms absent from formal vocational training (Iwara, 2020; Shaaban, 2022;

Sidi et al., 2025). Environmental dimensions remain the least studied, and the scarcity of evidence from West Africa means stewardship-linked findings are best treated as a research frontier rather than an established result.

Digital Financial Inclusion as a Complement to Apprenticeship Capital (RQ3–RQ4)

Digital inclusion interacts with apprenticeship capital in environment-dependent ways, reinforcing inclusion only where literacy and connectivity allow. The regional shortfall is large: rural women's mobile-money ownership across ECOWAS is well below that of urban men, owing to device, coverage, literacy, and normative constraints (Akeju, 2024), so female-owned informal microenterprises rely disproportionately on apprenticeship capital (Nghargbu & Jumare, 2024). Although digital inclusion correlates with lower gender disparity in microenterprise ownership across African states, informal-sector women, most dependent on indigenous frameworks, benefit the least (Faton et al., 2025). Crucially, social-network membership is among the strongest predictors of adoption after education and device access (Ba & Dieng, 2025), and digital tools have their greatest empowerment effects for women who already have robust networks (Agyemang & Bokpin, 2025). These findings justify a hybrid model in which apprenticeship networks serve as both a financial-literacy base and a technology-distribution channel, with mobile-money-enabled savings groups offering a working blueprint (Asitik et al., 2025; Kiraka, 2022). Technology adoption, specifically among former apprentices, remains unstudied and is a priority for future panel research.

Entrepreneurial-Ecosystem Perspectives on Institutional Integration (RQ4)

The ecosystem framework is the most generative context for situating apprenticeship within the institutions that shape women-owned SMEs. Treating enterprise outcomes as products of dynamic relationships among actors, institutions, networks, and resources pinpoints apprenticeship as a key actor whose invisibility to policy forecloses opportunities to build on established institutional capital (Ikpo et al., 2025; Isenberg, 2010; Daniel & Ojobi, 2020). Programmes that incorporate indigenous institutions as equal delivery partners achieve greater outreach, uptake, and durability than top-down models, and ventures bundling apprenticeship-style learning with finance outperform finance-only offerings (Bvochor & Galavotti, 2026; Jabbouri et al., 2024). TVET and apprenticeship are complementary rather than competitive: hybrid pathways combining certification with indigenous-network access yield the strongest enterprise-formation outcomes, since TVET cannot supply apprenticeship's market intelligence and capital while apprenticeship lacks the credentials needed to reach higher market tiers or formal finance (Nunyonameh et al., 2024; Quagrainie, 2024; Wignall et al., 2023). Redress, therefore, requires a multi-pronged ecosystem change that recalibrates indigenous norms, formal-sector practices, and support programmes at once (Irene et al., 2025; Kiraka, 2022).

Table 2

Synthesis of thematic findings mapped to the research questions

Cluster (RQ)	Core finding	Key evidence
Apprenticeship as an inclusion mechanism (RQ1)	Delivers a tripartite endowment—capital transfer, network inscription, and tacit market knowledge—that formal institutions cannot replicate at equivalent cost or legitimacy.	Iwara (2020); Mohammed et al. (2024); Majeed & Kosiba (2023); Ifeanyichukwu et al. (2023); Quagrainie (2024)
Gendered exclusion (RQ2)	Patrilineal norms truncate women's completion of the sequence; reduced graduation capital plus formal-	Mohammed et al. (2024); Sidi et al. (2025); Asah & Hove-Sibanda (2025); Alla-Mensah & McGrath (2025); Padi et al. (2025)

	sector bias creates a double exclusion.	
Financial literacy as bridge (RQ3)	Literacy mediates apprenticeship and formal credit access and is transmitted mainly through trade networks; best delivered embedded in apprenticeship.	Tumba et al. (2022); Iram et al. (2023); Gumbo et al. (2023); Lestari et al. (2025); Kurniasari et al. (2026)
Digital complementarity (RQ3–RQ4)	Digital tools amplify rather than replace network capital; strongest effects accrue to women with robust pre-existing networks.	Akeju (2024); Faton et al. (2025); Ba & Dieng (2025); Agyemang & Bokpin (2025); Asitik et al. (2025)
Ecosystem integration (RQ4)	Apprenticeship is a legitimate ecosystem actor; hybrid TVET–apprenticeship and indigenous-partner models outperform top-down or finance-only schemes.	Isenberg (2010); Ikpo et al. (2025); Bvochor & Galavotti (2026); Jabbouri et al. (2024); Wignall et al. (2023)

DISCUSSION

The five clusters converge on a single tension: indigenous apprenticeship has the organisational architecture to function as a gender-balanced financial-inclusion model, yet endemic gender inequality funnels its highest-impact advantages toward men. The integrative framework identifies the source of this tension and the levers to relieve it. The Gender Empowerment lens shows that empowerment is produced by skills, capital, and networks acting in concert; excluding women from the completing sequence, therefore, constitutes a concerted denial of empowerment compounded by formal-finance bias, so durable solutions must reform indigenous systems, formal finance, and digital infrastructure together (Asah & Hove-Sibanda, 2025; Shaaban, 2022). The Resource-Based View explains why apprenticeship outperforms formal equivalents. Its VRIN bundle of certified skills, capital, networks, and legitimacy cannot be matched by substitution (Adekunle & Okuwhere, 2025; Meng et al., 2021), while the Ecosystem lens shifts attention to the conditions under which resources convert into performance, conditions under which women are doubly disadvantaged by exclusion from both apprenticeship and the digital economy (Bvochor & Galavotti, 2026; Isenberg, 2010).

THEORETICAL CONTRIBUTIONS

The review makes four contributions. First, it introduces an integrative framework in which Gender Empowerment Theory, the RBV, and the Entrepreneurial Ecosystem perspective serve as mutually reinforcing lenses, showing how a single informal institution simultaneously endows resources, stratifies them by gender, and acts as an ecosystem participant. Second, it theorises apprenticeship as a gendered channel that distributes, rather than merely produces, financial inclusion outcomes (Eneh et al., 2023; Iwara & Adeola, 2021; Adah et al., 2025). Third, it establishes that digital instruments generate amplification rather than substitution effects, recasting apprenticeship networks as enabling social infrastructure for digital inclusion (Agyemang & Bokpin, 2025; Ba & Dieng, 2025). Fourth, it demonstrates the primacy of institution reform over institution replacement, with the use of apprenticeship as an implementing partner outperforming externally designed circumvention across multiple countries (Bvochor & Galavotti, 2026; Wignall et al., 2023).

Global Transferability

Although grounded in West African evidence, the dynamics identified gendered distribution of informal capital, financial literacy as mediator, digital–network complementarity, and ecosystem-level reform have structural parallels across the Global South, from South Asian artisanal systems to Latin American rotating-savings and craft cooperatives and MENA guild-based training (Aripin & Zuhriyah, 2025; Dana et al., 2023; Jabbouri et al., 2024; Lestari et al., 2025). The recurring insight is that reforming the gender-access architecture of informal capital-transfer institutions is more cost-effective and culturally sustainable than replacing them. The framework is thus offered as an analytic template requiring context-specific calibration, not a West African model generalised beyond its evidence base.

Implications

In response to RQ4, the evidence supports a four-part policy design that leverages indigenous apprenticeship to advance women's financial inclusion (Table 3). Gender-specific post-apprenticeship seed funds offset the gendered moderation of master-bestowed endowments; financial-literacy training delivered through apprenticeship exploits the master–apprentice bond to convert completion into creditworthiness; female master-mentorship and registration initiatives open locally legitimate pathways through the full sequence; and graduation capital linked to mobile-money accounts builds the financial records that banks and microfinance institutions require. Because these measures reform rather than replace indigenous institutions, they promise sustainable, locally valid impact at a fraction of the cost of externally imposed programmes. Priority research needs include gender-disaggregated data on the magnitude of master-to-apprentice transfers, longitudinal tracking of women graduates and their digital engagement, and comparative legal study of how indigenous property norms intersect with modern collateral demands (Eneh et al., 2023; Mohammed et al., 2024).

Table 3
A four-part policy architecture for reforming indigenous apprenticeship

Intervention	Mechanism	Barrier addressed
Gender-targeted post-apprenticeship seed grants	Replace gendered moderation of terminal capital transfers with guaranteed graduation capital.	Reduced or zero start-up capital for women graduates.
Embedded financial-literacy modules	Deliver training through trusted master–apprentice and trade-network ties.	Low formal financial literacy limiting credit access.
Female master-mentorship and registration	Create locally legitimate pathways for women to complete the full sequence and attain mastership.	Exclusion from trades, masters, and credentialing.
Mobile-money linkage of graduation capital	Channel transfers through digital accounts that generate verifiable financial records.	Absence of records required by formal lenders.

CONCLUSION

A review of 42 articles examined how and to what extent informal apprenticeship contracts reduce financial inequality. The evidence shows that indigenous apprenticeship can equip women owners of SMEs with inequality-reducing assets, competency transfer, capital endowment, and network inscription that formal programmes do not currently provide, yet gender inequality persists because cultural factors prevent women from completing apprenticeships and accessing the rewards available to male graduates. Across Nigeria, Ghana, and Benin, women face similar inequality-producing structures (RQ1) driven mainly by cultural norms, trade segregation, restricted mastership, and constrained training environments that leave them more financially disadvantaged than men after training (RQ2). Financial literacy improves post-training access to formal finance and is acquired more through trade-network ties than formal schooling (RQ3), and the most effective policies integrate indigenous institutions through hybrid TVET–apprenticeship models and NGO–government partnership (RQ4). Integrating Gender Empowerment Theory, the RBV, and Entrepreneurial Ecosystem theory yields a framework that accounts for both inclusion and gender stratification in financial access, repositioning vocational networks as critical social infrastructure for financial inclusion in West Africa.

LIMITATIONS AND FUTURE RESEARCH

Several limitations qualify these conclusions. Scopus was the sole database, potentially omitting grey literature and non-indexed African journals, and restricting eligibility to English-language work likely under-represents Francophone scholarship from Benin and Senegal, so findings for those countries warrant caution; future reviews should add French-language sources and databases such as Web of Science, CAIRN, and African Journals Online. The evidence is also largely qualitative and cross-sectional, and the concentration of research in Nigeria and Ghana limits generalisation across the region. Future work should pursue gender-disaggregated quantitative data on capital transfers and graduation-to-account conversion, conduct longitudinal panel studies of women apprentices and graduates, experimentally test hybrid interventions that combine financial literacy training with completion subsidies, and partner with ground-level NGOs to clarify institutional and legal causes.

REFERENCES

Adah, O., Daniel, D., & Abdullahi, N. (2025). Impact of financial technology on small and medium enterprises financial inclusion in Abuja, Nigeria. *Abuja Journal of Business and Management*, 3(1),

Adekunle, S. A., & Okuwhere, M. P. (2025). The Igbo apprenticeship model: Promoting innovation in SMEs through clustering. In The Palgrave handbook of decolonising entrepreneurship (pp. 347–377). Palgrave Macmillan. https://doi.org/10.1007/978-3-031-92310-4_14

Agyemang, E. F., & Bokpin, G. A. (2025). Women economic empowerment through digitalization: Analyzing social networks, risk and time preferences. International Journal of Economic Policy Studies, 19(1), 209–230. https://doi.org/10.1007/s42495-024-00148-w

Akeju, K. F. (2024). Gender and digital financial inclusion: Assessment of rural/urban dichotomy in microfinance and table banking operations in ECOWAS. In Sustainable development goals series (pp. 123–133). Springer. https://doi.org/10.1007/978-3-031-53337-2_11

Alla-Mensah, J., & McGrath, S. (2025). Barriers to the participation of women in non-traditional skilled trades: The perspectives of women in the automotive trade in Ghana. International Journal of Training Research. Advance online publication. https://doi.org/10.1080/14480220.2025.2483198

Aripin, & Zuhriyah, N. A. (2025). Empowering women through financial literacy and business management skill: Empirical evidence from Indonesia. Social Sciences and Humanities Open, 12, Article 101976. https://doi.org/10.1016/j.ssaho.2025.101976

Asah, F. T., & Hove-Sibanda, P. (2025). Formal financial institutions' financing of women-owned small and medium enterprises in South Africa: A supply-side perspective. Qualitative Research in Financial Markets, 17(1), 210–228. https://doi.org/10.1108/QRFM-02-2023-0031

Asitik, A. J., Nunfam, V. F., Kodom, M., & Afrifa-Yamoah, E. (2025). The nexus of VSLA participation and financial inclusion among rural women entrepreneurs in Ghana. International Journal of Social Economics. Advance online publication. https://doi.org/10.1108/IJSE-10-2024-0834

Ba, K., & Dieng, S. A. (2025). Digital financial inclusion: Socioeconomic and demographic factors of access and usage in Senegal. African Development Review, 37(2), Article e70015. https://doi.org/10.1111/1467-8268.70015

Bvochor, S. M. D., & Galavotti, I. (2026). Partnering for SDGs: Multi-stakeholder partnerships and women entrepreneurship in Africa. In The sustainable development goals and the business sector (pp. 15–52). Emerald Publishing. https://doi.org/10.1108/978-1-83608-134-020261002

Chikere, N. A. (2023). Apprentice training, mastership and managerial development of the Igbo entrepreneurs in Nigeria. In Casebook of indigenous business practices in Africa: Apprenticeship, craft, and healthcare (Vol. 1, pp. 45–59). Emerald Publishing. https://doi.org/10.1108/978-1-80262-251-520231006

Crane, S. R. (2021). Entrepreneurship and economic growth: Does gender matter? International Journal of Gender and Entrepreneurship, 14(1), 3–25. https://doi.org/10.1108/IJGE-04-2021-0056

Dagoudo, B. A., Vershinina, N., & Murithi, W. K. (2024). Women, polygamy and family entrepreneuring in southwest Benin: The role of endogenous knowledge. International Journal of Entrepreneurial Behaviour and Research, 30(9), 2304–2331. https://doi.org/10.1108/IJEBR-04-2021-0237

Dana, L., Chhabra, M., & Agarwal, M. (2023). A two-decade history of women's entrepreneurship research trajectories in developing economies context: Perspectives from India. Journal of Management History, 30(1), 6–28. https://doi.org/10.1108/JMH-11-2022-0064

Daniel, D. J., & Ojobi, M. O. (2020). Implications of sources of finance on the growth of small and medium scale enterprises (SMEs) in Nigeria: An evaluation of selected agricultural SMEs in Nigeria's Nassarawa State. *Lapai Journal of Economics*, 4 (2), 240–252.

Deng, W., Liang, Q., Li, J., & Wang, W. (2020). Science mapping: A bibliometric analysis of female entrepreneurship studies. Gender in Management: An International Journal, 36(1), 61–86. https://doi.org/10.1108/GM-12-2019-0240

Eneh, S., Effiong, C., Olufemi, A., Okongo, J., & Omosebi, M. (2023). Apprenticeships and sustainable growth of family businesses: A regional assessment. Problems and Perspectives in Management, 21(4), 415–429. https://doi.org/10.21511/ppm.21(4).2023.32

Faton, C. Y., Nonvide, G. M. A., & Chabossou, A. F. (2025). Digital financial inclusion and the reduction of gender inequalities in Africa. Discover Global Society, 3(1), Article 25. https://doi.org/10.1007/s44282-025-00146-z

Gregory, R. B., Canto, L. E. L., Fons, M. V. S., & Quintana, V. M. (2020). Agroecological entrepreneurship, public support, and sustainable development: The case of rural Yucatan (Mexico). Land, 9(11), Article 401. https://doi.org/10.3390/land9110401

Gumbo, L., Marimuthu, F., & Vengesai, E. (2023). Financial literacy competencies of women in agribusiness and their financial experiences during a pandemic. Southern African Journal of Entrepreneurship and Small Business Management, 15(1), Article a612.

https://doi.org/10.4102/sajesbm.v15i1.612

Ifeanyichukwu, C., Duho, K. C. T., & Bonou, C. C. S. (2023). Exploration of apprenticeship and business succession models in Nigeria, Ghana and the Benin Republic: A cross-case analysis. In Casebook of indigenous business practices in Africa (Vol. 1, pp. 17–44). Emerald Publishing. https://doi.org/10.1108/978-1-80262-251-520231004

Ikpo, C. V., Akowuah, E. K., Boateng, K. O., Kponyo, J. J., Nunoo-Mensah, H., & Appiah, Y. S. (2025). Ancient cultural models from informal learning structures that can transform developments in Africa: The Ndigbo discourse. Journal of Entrepreneurship and Innovation in Emerging Economies, 11(1), 49–67. https://doi.org/10.1177/23939575241277709

Iram, T., Bilal, A. R., & Ahmad, Z. (2023). Investigating the mediating role of financial literacy on the relationship between women entrepreneurs' behavioral biases and investment decision making. Gadjah Mada International Journal of Business, 25(1), 93–118. https://doi.org/10.22146/gamaijb.65457

Irene, B., Ndlovu, E., Felix-Faure, P. C., Dlabatshana, Z., & Ogunmokun, O. (2025). The role of financial institutions in bridging the financing gap for women entrepreneurs in Sub-Saharan Africa. Administrative Sciences, 15(8), Article 323. https://doi.org/10.3390/admsci15080323

Isenberg, D. J. (2010). How to start an entrepreneurial revolution. Harvard Business Review, 88(6), 40–50. https://hbr.org/2010/06/how-to-start-an-entrepreneurial-revolution

Iwara, I. O. (2020). The Igbo traditional business school (I-TBS): A SWOT review synthesis. In Advanced series in management (Vol. 26, pp. 39–55). Emerald Publishing. https://doi.org/10.1108/S1877-636120200000026004

Iwara, I. O., & Adeola, O. (2021). Success indicators of enterprises anchored on an [African] indigenous apprenticeship model of entrepreneurship. African Journal of Business and Economic Research, 16(4), 243–264. https://doi.org/10.31920/1750-4562/2021/v16n4a12

Jabbouri, R., Truong, Y., & Issa, H. (2024). The impact of local entrepreneurial initiatives on women entrepreneur empowerment: The case of cooperative social ventures in Morocco. International Journal of Entrepreneurial Behaviour and Research, 30(7), 1838–1866. https://doi.org/10.1108/IJEBR-04-2023-0427

Kiraka, R. N. (2022). The role of African entrepreneurship in promoting gender equality and increasing resilience and agility in uncertain times. In Gendered perspectives on Covid-19 recovery in Africa (pp. 157–180). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-88152-8_9

Kurniasari, F., Lestari, E. D., Muslim, N. A., & Mohd Ali, M. A. (2026). From knowledge to prosperity: Financial literacy driving women entrepreneur-led SMEs through technology innovation. Social Sciences and Humanities Open, 13, Article 102443. https://doi.org/10.1016/j.ssaho.2026.102443

Lestari, E. D., Kurniasari, F., Pratiwi, P. Y., Thilaga, S., & Ooi, B. W. (2025). Empowering women entrepreneurs: The role of financial literacy, inclusion, and access in enhancing MSE performance and sustainability. Cogent Business and Management, 12(1), Article 2593078. https://doi.org/10.1080/23311975.2025.2593078

Majeed, M., & Kosiba, J. P. B. (2023). An examination of indigenous business incubators: A case of kente weaving industry in Ghana. In Casebook of indigenous business practices in Africa (Vol. 1, pp. 121–141). Emerald Publishing. https://doi.org/10.1108/978-1-80262-251-520231015

Mallett, O., Wapshott, R., & Wilson, N. (2024). Institutional pluralism and the implementation of women's enterprise policy. International Journal of Entrepreneurial Behaviour and Research, 30(7), 1950–1968. https://doi.org/10.1108/IJEBR-04-2023-0431

Meng, L., Qamruzzaman, M., & Adow, A. H. (2021). Technological adaption and open innovation in SMEs: A strategic assessment for women-owned SMEs sustainability in Bangladesh. Sustainability, 13(5), Article 2942. https://doi.org/10.3390/su13052942

Mohammed, I., Abdul Rahaman, W., Darku, A. B., & Baah-Boateng, W. (2024). The moderating effect of gender on the relationship between apprenticeship and self-employment: Evidence from a developing country. Journal of Entrepreneurship in Emerging Economies, 16(5), 1431–1451. https://doi.org/10.1108/JEEE-10-2022-0321

Nghargbu, R., & Jumare, F. (2024). Digital financial inclusion for women in Africa: Prospects and challenges. In Sustainable development goals series (pp. 115–122). Springer. https://doi.org/10.1007/978-3-031-53337-2_10

Nunyonameh, C. R., Obinnim, E., & Adzivor, E. K. (2024). Apprenticeship reforms in West Africa: An outcome-process evaluation of a pilot dual training model-based apprenticeship reform scheme in Ghana. International Journal for Research in Vocational Education and Training, 11(2), 223–249. https://doi.org/10.13152/IJRVET.11.2.4

Padi, A., Keelson, S. A., Musah, A., & Addo, J. O. (2025). Empowering women in non-traditional trades: Strategies for overcoming stereotypes and biases. African Journal of Applied Research, 11(7), 299–323. https://doi.org/10.26437/vy2gfb31

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., … Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. BMJ, 372, Article n71. https://doi.org/10.1136/bmj.n71

Qader, A. A., Zhang, J., Ashraf, S. F., Syed, N., Omhand, K., & Nazir, M. (2022). Capabilities and opportunities: Linking knowledge management practices of textile-based SMEs on sustainable entrepreneurship. Sustainability, 14(4), Article 2219. https://doi.org/10.3390/su14042219

Quagrainie, F. A. (2024). Entrepreneurial competencies of successful indigenous women entrepreneurs and their impact on poverty alleviation. In Women entrepreneurship policy (pp. 201–215). Springer. https://doi.org/10.1007/978-981-97-3607-2_11

Raman, R., Subramaniam, N., Nair, V. K., Shivdas, A., Achuthan, K., & Nedungadi, P. (2022). Women entrepreneurship and sustainable development: Bibliometric analysis and emerging research trends. Sustainability, 14(15), Article 9160. https://doi.org/10.3390/su14159160

Setyaningrum, R. P., Norisanti, N., Fahlevi, M., Aljuaid, M., & Grabowska, S. (2023). Women and entrepreneurship for economic growth in Indonesia. Frontiers in Psychology, 13, Article 975709. https://doi.org/10.3389/fpsyg.2022.975709

Shaaban, S. (2022). The impact of women as human capital on perceiving sustainable development in Egyptian industry. Management & Sustainability: An Arab Review, 1(2), 139–154. https://doi.org/10.1108/MSAR-06-2022-0026

Sidi, C. B. A., Nwosu, B. U., Ojong-Ejoh, M. U., & Isife, C. T. (2025). Evaluating cultural values and women's participation in the Igbo apprenticeship system in Nigeria. African Journal of Religion, Philosophy and Culture, 6(2), 7–21. https://doi.org/10.31920/2634-7644/2025/v6n2a1

Tumba, N. J., Onodugo, V. A., Akpan, E. E., & Babarinde, G. F. (2022). Financial literacy and business performance among female micro-entrepreneurs. Investment Management and Financial Innovations, 19(1), 156–167. https://doi.org/10.21511/imfi.19(1).2022.12

Ude, D. K. (2024). Microfinance as a vehicle for zero poverty and gender equality in Nigeria. In Sustainable development goals series (pp. 309–332). Springer. https://doi.org/10.1007/978-3-031-46293-1_12

Wedajo, A. D., Khan, S. T., Bhat, M. A., & Al Balushi, Y. M. Z. (2023). Mapping the landscape of female entrepreneurship in Africa: Trends, networks and hot topics through text mining techniques. Management & Sustainability: An Arab Review, 4(1), 24–46. https://doi.org/10.1108/MSAR-07-2023-0038

Wignall, R., Piquard, B., Joel, E., Mengue, M.-T., Ibrahim, Y., Sam-Kpakra, R., Obah, I. H., Ayissi, E. N., & Negou, N. (2023). Imagining the future through skills: TVET, gender and transitions towards decent employability for young women in Cameroon and Sierra Leone. Journal of the British Academy, 11(s3), 121–151. https://doi.org/10.5871/jba/011s3.121