

Women's Cooperatives and Financial Literacy Development: A Scoping Review of Barriers and Empowerment Outcomes

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Abstract

Financial literacy is increasingly recognised as a critical capability shaping women's economic participation, household decision-making, and involvement in cooperatives. Yet evidence remains dispersed, limiting understanding of how financial literacy supports empowerment and what factors constrain its effects. This scoping review synthesises empirical studies published between 2014 and 2025 to clarify the contribution of financial literacy to women's empowerment and the barriers that moderate its impact.

Following PRISMA-ScR guidelines, a systematic search of Scopus and Web of Science identified peer-reviewed empirical studies examining women's financial literacy in cooperative, microfinance, and microenterprise settings. Studies were selected based on predefined empowerment-related criteria. Extracted data covered study context, financial literacy conceptualisation, empowerment measures, and reported constraints. A thematic synthesis classified barriers into structural-economic, capability-related, socio-cultural, institutional, programmatic, and digital categories.

Eighteen studies from Africa, Asia, and Latin America show that financial literacy functions as a multidimensional capability enabling women to interpret financial information, manage resources, and participate in financial and cooperative decisions. Survey-based assessments dominate. Higher literacy is associated with stronger planning, savings discipline, credit confidence, and psychological agency. Its effects, however, are consistently moderated by structural limitations, low baseline skills, gender norms, institutional biases, program design weaknesses, and digital divides. Financial literacy fosters agency only when embedded in supportive institutional and socio-economic environments.

Financial literacy enhances women's economic participation, decision-making power, and cooperative engagement, but its transformative potential is constrained by structural inequalities and gendered institutional barriers. Sustainable empowerment therefore requires integrating financial capability development with gender-responsive cooperative governance and supportive institutional conditions.

Keywords: Financial literacy; Women's empowerment; Women's cooperatives; Scoping review.

JEL Classification: J16; G53; D14

Type of paper: Scoping Review

1. Introduction

During the last decades, achieving inclusive and sustainable economic growth has become a central priority in global development discourse (Mirzoev et al., 2022). However, persistent gendered financial exclusion continues to undermine these objectives by restricting women's access to formal financial systems (Atta, 2023). Despite the expansion of financial institutions worldwide, low-income and marginalized women remain disproportionately excluded due to institutional, social, and structural barriers that limit their economic participation (Canelas et al., 2024a). In response, women's cooperatives have emerged as vital grassroots mechanisms for promoting economic empowerment and collective resilience. Research shows that these cooperatives foster income generation, financial literacy, and leadership opportunities, contributing significantly to social inclusion and gender equality (Khatri Basnet, 2023) (Pokharel, 2023) (Waheed et al., 2023). Through access to credit, savings schemes, and shared enterprises, cooperatives enable women to overcome systemic constraints and gain greater financial and social agency (Eseza et al., 2025). Numerous studies have documented the positive impacts of women's cooperatives on social capital formation, community governance, and gender-equitable development outcomes (Rawat, 2024) (Acharya & Kumar, 2025) (Dhakal, 2018). As these cooperatives evolve, their effectiveness increasingly hinges not only on solidarity and participation but also on institutional capabilities, particularly those related to financial management. Financial literacy, broadly defined as the ability to understand and apply financial information in decision-making, has been linked to both individual financial inclusion and the organizational sustainability of cooperatives. At the individual level, it fosters informed financial behavior and entrepreneurship (Kanth et al., 2025) (Mawad et al., 2025) at the institutional level, it supports budgeting, credit assessment, and governance practices that enhance transparency and resilience (Cheng et al., 2024).

Despite its importance, the literature on this subject remains fragmented and conceptually siloed. Financial literacy is often treated as an individual competency, with limited attention to its collective dimensions within cooperative systems (Arini, 2018). Conversely, research on women's cooperatives has tended to emphasize participation and empowerment while neglecting the technical and institutional capacities required for effective financial governance (Pokharel, 2023). Recent studies demonstrate the critical role of financial literacy and management skills in enhancing cooperative sustainability and women's decision-making power, showing that financially literate members contribute more effectively to collective governance and transparency (D.A.T. et al., 2020) (Eseza et al., 2025). Yet, how financial literacy is cultivated, institutionalized, and leveraged within women's cooperatives remains underexplored. To address this gap, the present scoping review synthesizes existing peer-reviewed research to examine the intersections between women's cooperatives and financial literacy, emphasizing their mutual role in fostering sustainable and gender-equitable economic development.

This scoping review aims to (1) map the existing literature at the intersection of women's cooperatives and financial literacy or financial inclusion in low- and middle-income countries; (2) identify the key conceptual frameworks that inform understandings of financial literacy within cooperative contexts; (3) examine how financial literacy is developed, institutionalized, and applied within women's cooperatives; and (4) assess its contribution to cooperative governance, financial performance, and women's empowerment outcomes. In addition, it seeks to (5) highlight methodological trends and gaps in the current research landscape to inform future interdisciplinary inquiry, and (6) contribute to evidence-based policymaking by synthesizing findings that support gender-responsive and financially sustainable cooperative development strategies.

This study makes three main contributions. First, it connects gender, finance, and cooperative research to show how these areas intersect in shaping inclusive and equitable access to financial systems. Second, it highlights important gaps in existing studies, particularly in how different dimensions of financial literacy, such as knowledge, confidence, and behavior, are understood and applied within cooperative systems. Third, it offers clear guidance for future research and policymaking by supporting the creation of cooperative models that are more inclusive, financially informed, and resilient in promoting community welfare.

The remainder of this paper is structured as follows. Section 2 outlines the methodological framework guiding the scoping review. Section 3 presents the main findings, organized thematically to highlight conceptual approaches, empirical trends, and key intersections between financial literacy and women's cooperative development. Section 4 discusses the implications of these results for theory, practice, and policy. Finally, Section 5 concludes the review by summarizing key insights, identifying research gaps, and proposing directions for future interdisciplinary inquiry.

2. Methods

2.1. Study Design

This study adopted a scoping review design to systematically map and synthesize the existing body of literature on women's financial literacy and cooperative-based empowerment. The review followed the methodological framework developed by Arksey and O'Malley (2005) and subsequently enhanced by Levac et al. (2010) and the Joanna Briggs Institute (JBI, 2020) to ensure methodological rigor. Reporting procedures conformed to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines. Consistent with JBI recommendations, the Population–Concept–Context (PCC) framework guided the study's scope and inclusion criteria. The population of interest comprised women, including members of cooperatives, micro-entrepreneurs, and participants in microfinance or digital financial systems. The central concept focused on financial literacy and financial inclusion as mechanisms that facilitate women's economic empowerment, strengthen institutional governance, and enhance cooperative performance. The context encompassed both developing and emerging economies where cooperative structures and financial education initiatives intersect to address gendered barriers to economic participation.

2.2. Search Strategy

A literature search was conducted in the Scopus AND Web of Science database, chosen for its extensive coverage of peer-reviewed journals across economics, social sciences, and gender studies. The search strategy was refined through an iterative process that included the analysis of key terms and indexing patterns in highly cited studies. The final search string was applied to the TITLE-ABS-KEY fields as follows:

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( TITLE-ABS-KEY ( "cooperative" OR "co-operativ*" OR "cooperative society*" OR "cooperative enterprise*" OR "producer cooperative*" OR "agricultural cooperative*" OR "rural cooperative*" OR "credit cooperative*" OR "savings cooperative*" OR "savings and credit cooperative*" OR "SACCO*" OR "self-help group*" OR "mutual organization*" OR "worker cooperative*" OR "employee-owned enterprise*" OR "social enterprise*" OR "collective enterprise*" ) AND TITLE-ABS-KEY ( "financial capability" OR "financial competence" OR "financial knowledge" OR "financial education" OR "financial awareness" OR "financial empowerment" OR "digital financial literacy" OR "FinTech literacy" ) AND TITLE-ABS-KEY ( women OR woman ) )
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2.3. Selection Criteria

Studies were included if they examined women's participation in cooperatives, financial literacy, and addressed at least one of the following dimensions: financial literacy, financial inclusion, women's cooperative. Eligible studies focused paper published as peer-reviewed empirical research using quantitative, qualitative, or mixed-methods designs. Also, studies were excluded if they lacked a gender-specific or gender-disaggregated perspective, focused solely on macro-finance or monetary economics, or did not include a financial inclusion component.

2.4. Study Selection

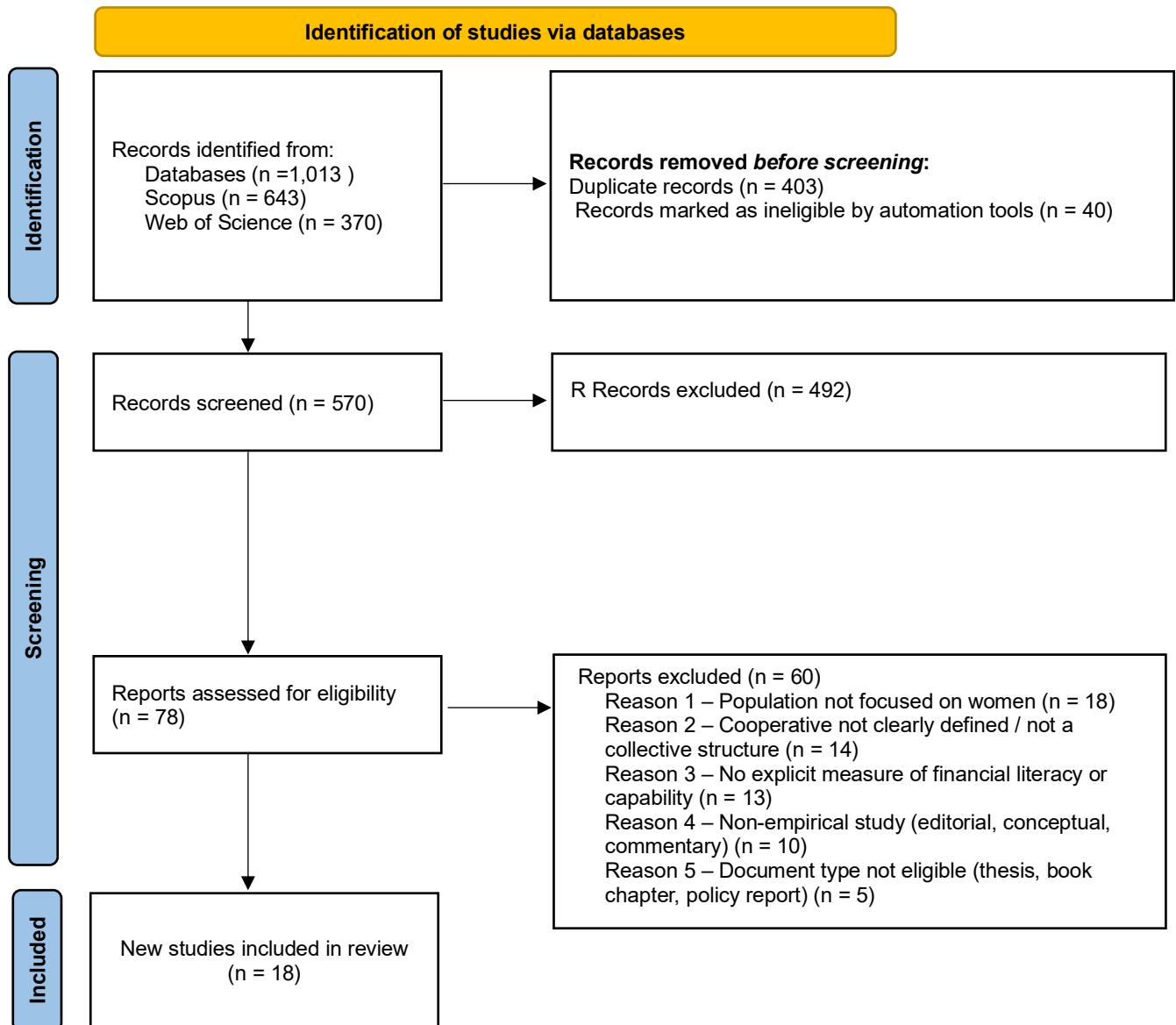
All references retrieved from Scopus and Web Of Science were exported to Mendely. The selection process was conducted in two stages. During the first stage, Title and abstracts were screened by two independent reviewers to assess their preliminary relevance to the inclusion criteria. Ambiguous cases were carried forward to full-text review. In the second stage, full texts were independently reviewed by two authors for conceptual alignment and methodological quality. Any discrepancies in judgment were discussed and resolved through consensus, and when necessary, a third reviewer was consulted to reach a final decision. Reasons for exclusion, such as lack of gender focus or inapplicability to low-income contexts, were systematically recorded. The study selection process was summarized in a PRISMA-ScR flow diagram.

2.5. Data Extraction

Data from eligible studies were extracted using a structured data charting form developed for this review. Two reviewers independently conducted data extraction to ensure consistency and reliability. The extracted information included bibliographic details such as author, year, and country, along with study objectives, conceptual focus, research design, and type of population. Details regarding the financial mechanisms examined, whether cooperatives, microfinance, or digital financial services, were also recorded. Key outcomes were identified in relation to financial inclusion, empowerment dimensions, and institutional performance. In addition, data concerning the mechanisms of empowerment and the barriers affecting women's participation were extracted to facilitate thematic analysis. All extracted data were organized in Microsoft Excel and cross-checked for accuracy.

The PRISMA flow diagram, as shown in figure 1, outlines the process used to identify, screen, and select studies for inclusion in this scoping review. A total of 1,013 records were retrieved across databases, including 643 from Scopus and 370 from Web of Science. After removing 403 duplicate entries and 40 records automatically marked as ineligible, 570 unique studies proceeded to title and abstract screening. During this stage, 492 records were excluded due to irrelevance to the review's scope. The remaining 78 studies were assessed in full text, with none excluded for lack of access. Following detailed eligibility evaluation, 60 studies were excluded for several reasons, including a population not focused on women, an unclear or non-collective cooperative structure, the absence of an explicit measure of financial literacy or capability, a non-empirical study design, or an ineligible document type such as a thesis or policy report. Ultimately, 18 studies met all inclusion criteria and were incorporated into the final evidence synthesis.

Figure 1 Flow Diagram Showing Identification, Screening, and Inclusion of Studies



Source: Authors

2.6. Data Analysis

Given the heterogeneity of study designs, data were analyzed using an inductive thematic synthesis approach based on the abstract. This allowed for both descriptive mapping and interpretive integration across diverse research contexts. The analysis proceeded in four stages. First, a descriptive mapping of the literature was conducted to identify trends by region, study design, and conceptual orientation. Second, findings were thematically coded to identify recurring themes related to financial literacy, women's cooperative. Finally, the analysis identified empirical and conceptual gaps, such as under-researched populations and overlooked mechanisms, to inform future inquiry.

3. Results

3.1. Most theoretical framework mobilized

Women's financial inclusion and empowerment through cooperatives can be understood as multidimensional processes that integrate individual capabilities, collective organization, and

opportunity. To frame this complexity, the present review draws upon three complementary theoretical traditions: Capability Theory, Social Capital and Collective Action Theory, and Institutional Theory. Together, these frameworks explain how women acquire, apply, and institutionalize financial literacy within cooperative systems and how these processes translate into empowerment and sustainable inclusion.

3.1.1. Capability theory

The analysis draws on the Capability Approach (Nussbaum, 2011; Sen, 1999), which conceptualizes financial literacy not merely as a technical competence but as a substantive capability enabling women to make informed decisions regarding savings, credit, and investment. Within cooperative settings, this capability acquires a collective dimension: shared learning, peer exchange, and democratic governance transform individual financial skills into organizational assets that strengthen transparency, accountability, and participatory decision-making. Empirical evidence confirms this interpretation. Studies show that financially knowledgeable women evaluate risks more effectively, manage household and enterprise resources with greater confidence, and exert stronger influence over financial decisions at both household and community levels (Ekasari et al., 2024; Kodmalwar et al., 2025). Cooperative-based research further demonstrates how individual financial competencies aggregate into institutional strength, as women's participation and leadership enhance the social performance and governance quality of cooperatives (Ibourk & Hninou, 2025; Périlleux & Szafarz, 2015)

3.1.2. Social capital and collective action theory

A second theoretical strand draws on Social Capital Theory (Putnam et al., 1994) and Collective Action Theory (Ostrom, 1990). These perspectives help explain how women's cooperatives function as socially embedded networks that facilitate resource exchange, trust-building, and mutual accountability.

Social capital is particularly relevant in contexts where formal financial institutions are weak or exclusionary. Cooperatives provide a socially legitimate and trust-based environment where financial literacy circulates through peer interaction, mentorship, and shared governance. This collective dimension reinforces participation and reduces the transaction costs associated with information asymmetry and risk. (Canelas et al., 2024a)

Collective Action Theory further explains how cooperatives enable women to overcome structural barriers by pooling resources and negotiating collectively for credit and market access. However, effective collective action depends on internal governance quality, inclusiveness of leadership, and equitable participation, factors directly linked to the level of financial understanding among members (Périlleux & Szafarz, 2015) (Ibourk & Hninou, 2025).

3.1.3. Institutional theory

The third conceptual foundation derives from Institutional Theory (North, 1990), which highlights the influence of formal and informal rules, norms, and organizational structures on economic behavior. Women's access to financial services and participation in cooperatives are shaped by institutional environments that define eligibility, credibility, and authority. Institutional Theory helps interpret why similar cooperative or microfinance models yield different empowerment outcomes across contexts. Factors such as legal recognition of cooperatives, gender-sensitive governance frameworks, and regulatory support influence how financial literacy and inclusion are institutionalized (Kamara & Rabie, 2021). It also accounts for the socio-cultural constraints, such as patriarchal norms, household hierarchies, and gendered divisions of labor, that limit women's ability to exercise financial autonomy (Canelas et al., 2024b; Nwakile & Onah, 2020).

3.2. Main research area

3.2.1. Distribution of studies by country

Across the studies reviewed, the empirical contributions reveal differentiated national trajectories, yet converge in demonstrating the foundational role of cooperatives, microcredit schemes, and digital financial services in shaping women's financial inclusion and empowerment. In Morocco, for example, Ibourk and Hninou (Ibourk & Hninou, 2025) show that agricultural cooperatives enhance women's economic autonomy despite persistent structural constraints related to market access and limited financial resources. In West Africa, studies from Ghana (Sannou et al., 2025), Nigeria (Nwakile & Onah, 2020), and Burkina Faso (Ky et al., 2018) demonstrate that cooperative finance, microcredit, and mobile money significantly strengthen investment capacity, productivity, and access to formal financial services, though their effects remain conditioned by local socio-economic environments (Ky et al., 2018). In East Africa, evidence from Uganda (Canelas et al., 2024b), Ethiopia (Hillesland et al., 2022), and Tanzania (Dutt et al., 2016) indicates that cooperative participation and microfinance-plus initiatives improve savings, decision-making power, and intrinsic agency, while being moderated by patriarchal norms, household power dynamics, and gendered domestic workloads. In South and Southeast Asia, contributions from India (Kodmalwar et al., 2025) (Shivaprasad & Anilkumar, 2021) (Lal, 2019) and Indonesia (Ekasari et al., 2024) (Adhariani, 2022) show that financial literacy, cooperative intermediation, and Sharia-based microfinance reinforce managerial competence and enterprise performance. In Latin America for example, Lemus and Rojas (Lemus & Rojas, 2022) demonstrate the importance of credit unions in extending financial inclusion to women in remote rural areas (Lemus & Rojas, 2022). Across-country evidence from Mia et al. (Mia et al., 2024) and global analyses by Hartarska et al. (Hartarska et al., 2014) identify gender-responsive governance as a structural determinant of equitable financial outreach (Hartarska et al., 2014).

3.2.2. Distribution of studies by methods

The empowerment and inclusion dimensions examined are multidimensional, reflecting intertwined economic, cognitive, relational, and institutional mechanisms that shape women's engagement in cooperative and financial systems. Economic and financial autonomy constitutes the most recurrent focus, with evidence from Morocco (Ibourk & Hninou, 2025), Ghana (Sannou et al., 2025), Nigeria (Onah et al., 2024), and Djibouti (Abdallah Ali et al., 2024) showing that cooperative participation or microcredit access strengthens income generation, investment capacity, and control over financial resources. A second key dimension relates to financial literacy and capability-building, particularly highlighted in Indonesia (Adhariani, 2022; Ekasari et al., 2024) and India (Kodmalwar et al., 2025), where literacy, accounting knowledge, and cooperative intermediation improve financial behaviour, credit confidence, and enterprise performance. The corpus also addresses decision-making power and intra-household bargaining, with studies from Uganda (Canelas et al., 2024b), Tanzania (Dutt et al., 2016), and India (Shivaprasad & Anilkumar, 2021) showing that cooperative and SHG participation enhances women's agency, though this agency is often moderated by patriarchal norms, particularly when husbands join the same cooperative networks. A further dimension concerns social and relational empowerment, documented in Tanzania (Dutt et al., 2016) and Ethiopia (Hillesland et al., 2022), where collective organizational structures foster social capital, confidence, and community engagement. Finally, several studies highlight institutional and governance-related dimensions, demonstrating that organisational identity and leadership composition significantly influence outreach to women; cross-country analyses by Mia et al. (Mia et al., 2024), Périlleux and Szafarz (Périlleux & Szafarz, 2015) and Hartarska et al. (Hartarska et al., 2014) confirm that gender-responsive governance, especially women's leadership within MFIs and cooperatives, is a decisive determinant of equitable financial

inclusion and social performance(Périlleux & Szafarz, 2015) (Hartarska et al., 2014).

3.2.3. Distribution of studies by financial literacy dimension

Across the reviewed studies, the empowerment and inclusion dimensions examined are multidimensional, reflecting intertwined economic, cognitive, relational, and institutional mechanisms that shape women's engagement in cooperative and financial systems. Economic and financial autonomy constitutes the most recurrent focus, with evidence from Morocco (Ibourk & Hninou, 2025) Ghana (Sannou et al., 2025), Nigeria (Onah et al., 2024), and Djibouti (Abdallah Ali et al., 2024) showing that cooperative participation or microcredit access strengthens income generation, investment capacity, and control over financial resources. A second key dimension relates to financial literacy and capability-building, particularly highlighted in Indonesia (Ekasari et al., 2024)(Adhariani, 2022) and India (Kodmalwar et al., 2025), where literacy, accounting knowledge, and cooperative intermediation improve financial behaviour, credit confidence, and enterprise performance. The corpus also addresses decision-making power and intra-household bargaining, with studies from Uganda (Canelas et al., 2024b), Tanzania (Dutt et al., 2016) and India (Anil Kumar et al., 2025) showing that cooperative and SHG participation enhances women's agency, though this agency is often moderated by patriarchal norms, particularly when husbands join the same cooperative networks. A further dimension concerns social and relational empowerment, documented in Tanzania (Dutt et al., 2016) and Ethiopia (Hillesland et al., 2022), where collective organizational structures foster social capital, confidence, and community engagement. Finally, several studies highlight institutional and governance-related dimensions, demonstrating that organisational identity and leadership composition significantly influence outreach to women; cross-country analyses by Mia et al. (Mia et al., 2024), Périlleux and Szafarz (Périlleux & Szafarz, 2015), and Hartarska et al. (Hartarska et al., 2014) confirm that gender-responsive governance, especially women's leadership within MFIs and cooperatives, is a decisive determinant of equitable financial inclusion and social performance(Périlleux & Szafarz, 2015)(Hartarska et al., 2014).

Table 1 Summary of study characteristics.

Author(s)	Country	Paper Title	Objective	Methodology	Sample / Population	Financial Mechanism	Empowerment / Inclusion Dimension	Key Findings
(Ibourk & Hninou, 2025)	Morocco	Empowering women through agricultural cooperatives: a multilevel analysis in Morocco's Marrakech-Safi region	Assess the effect of women-led agricultural cooperatives on economic autonomy & financial access	Quantitative (multilevel)	225 cooperative members	Agricultural cooperatives	Economic autonomy, financial access, decision-making	Cooperatives enhance autonomy, but barriers exist: limited market access & financial resources.
(Kodmalwar et al., 2025)	India	Bridging Financial Literacy and Credit Confidence: A Theoretical Model for Ongoing Client Engagement in Rural Microenterprise Lending	Develop a model linking financial literacy, credit confidence & engagement	Theoretical	,	Cooperative banks, microfinance	Financial literacy, credit confidence	Literacy + advisory support increases confidence and improves loan use.
(Sannou et al., 2025)	Ghana	Organizational innovations and access to sustainable finance in agriculture	Examine cooperatives & sustainable finance in women's Shea production	Mixed methods	50 Shea producers	Cooperative finance + sustainable credit	Investment capacity, economic empowerment	Finance access improves bargaining power; success depends on organizational innovations.
(Onah et al., 2024)	Nigeria	Strategies for Empowering Rural Women through Enhanced Agricultural Productivity	Identify how financial inclusion empowers rural women	Quantitative	2,512 women farmers	Microcredit, financial services	Financial access, welfare, economic empowerment	Inclusion increases productivity & autonomy; structural barriers persist.
(Abdallah Ali et al., 2024)	Djibouti	Empowering women through microcredit in Djibouti	Estimate microcredit's impact on empowerment	Econometric (IV)	2,060 households	Microcredit	Economic, social & interpersonal empowerment	Microcredit boosts autonomy; excessive debt yields negative outcomes.
(Dutt et al., 2016)	102 Countries	Practice what you preach: Does the legal status of microfinance institutions matter in gender equality?	Evaluate how MFIs' legal status affects women's financial access	Panel (ANOVA, RE model)	1,222 MFIs	Microfinance institutions	Female access to financial services	NGOs & cooperatives perform better than commercial MFIs in promoting gender equity & inclusion.
(Canelas et al., 2024b)	Uganda	Husbands and wives: power, peril and female participation in a Ugandan coffee cooperative	Analyse cooperative participation and intra-household financial power	Quantitative (PSM)	411 cooperative women + 196 non-members	Hybrid coffee-microfinance cooperative	Income, savings, financial decision-making	Membership increases income & savings; husband's co-participation reduces women's decision power.
(Ekasari et al., 2024)	Indonesia	The effect of financial literacy on Indonesian women micro entrepreneurs through financial intermediation	Test the mediating effect of cooperative intermediation	Quantitative (PLS-SEM)	Women micro-entrepreneurs	Cooperative intermediation	Financial literacy, financial performance	Literacy improves performance directly & indirectly via cooperatives (strong mediation).
(Hillesland et al., 2022)	Ethiopia	Does a joint United Nations microfinance 'plus' program empower female farmers in rural Ethiopia?	Evaluate a microfinance-plus program (pro-WEAI)	Mixed (baseline/endline)	Women in RUSACCOs	Rural savings & credit cooperatives	Intrinsic agency, financial autonomy	Positive empowerment for active beneficiaries; dropouts linked to social constraints & irregular access.

(Adhariani, 2022)	Indonesia	Microfinance and the Role of Accounting in Supporting Family-Resilience-Based Women's Empowerment	Explore Islamic microfinance + simplified accounting	Action research	40 female entrepreneurs	Sharia cooperative	Financial skills, management autonomy	Accounting training strengthens financial skills; empowerment conceptualized as family-based.
(Lemus & Rojas, 2022)	Chile	Credit unions in Chile and their role in financial inclusion	Explore credit unions' contribution to inclusion	Quantitative	Administrative loan data	Credit unions	Access to formal credit	Credit unions significantly expand women's financial inclusion in remote areas.
(Shivaprasad & Anilkumar, 2021)	India	The Social Impact of Microfinance	Assess social & financial impacts of SHGs	Quantitative	800 SHG members	Self-Help Groups	Financial independence, decision-making	SHGs strengthen financial autonomy & community participation.
(Ky et al., 2018)	Burkina Faso	Friends or Foes? Mobile money interaction with formal and informal finance	Examine mobile money's effect on women's use of formal finance	Econometric + PSM	National sample	Mobile money	Deposits in banks & credit unions	Mobile money facilitates transition to formal finance, especially among women.
(Lal, 2019)	India	Measuring impact of financial inclusion on rural development through cooperatives	Analyse cooperative-based inclusion	SEM, CFA	540 cooperative beneficiaries	Cooperative banks	Access to financial services	Cooperative-based inclusion improves development outcomes for women.
(Dutt et al., 2016)	Tanzania	Exploring Links between Women's Business Ownership and Empowerment among Maasai Women in Tanzania	Compare empowerment across coop vs microcredit vs non-owners	Quantitative (SEM)	224 women	Cooperatives & microcredit	Financial control, agency	Cooperatives outperform microcredit in financial autonomy & reduction of partner control.
(Périlleux & Szafarz, 2015)	Senegal	Women Leaders and Social Performance: Evidence from Financial Cooperatives in Senegal	Assess female leadership impact on inclusion	Quantitative	36 financial cooperatives	Financial cooperatives	Social orientation, credit access	Female-led boards improve women's access & cooperative social performance.
(Lindvert, 2017)	Tanzania	Perceptions of financial sources among women entrepreneurs in Tanzania	Examine women's perceptions of financing options	Quantitative survey	114 women entrepreneurs	MFIs, SACCOs, ROSCAs	Accessibility of financial services	Semi-formal finance perceived as most accessible; banks least accessible.
(Hartarska et al., 2014)	Global	Are women better bankers to the poor? Evidence from rural MFIs	Assess impact of female CEOs on women's outreach	Econometric (SFA)	250 MFIs worldwide	Microfinance institutions	Outreach efficiency to poor women	Female-led MFIs achieve higher outreach efficiency without sacrificing sustainability.

Source: Author conception

3.3. Key thematic analysis

3.3.1. Theme 2: Financial literacy as a core capability structuring inclusion pathways

Financial literacy emerges not simply as an informational asset but as a capability-enhancing mechanism that conditions women's capacity to access, evaluate, and strategically utilize financial services. Kodmalwar et al. (Kodmalwar et al., 2025) demonstrate that literacy operates through behavioural channels: it reduces informational asymmetries, strengthens credit confidence, and lowers the cognitive burden associated with loan procedures (Kodmalwar et al., 2025). Ekasari et al. (Ekasari et al., 2024) provide empirical confirmation by showing that financial literacy significantly improves enterprise performance and shapes financial behaviour through cooperative-mediated intermediation (Ekasari et al., 2024). Adhariani (Adhariani, 2022) reinforces this interpretation by evidencing that foundational accounting literacy equips women with the managerial competencies required to autonomously run microenterprises. These studies converge toward a rigorous conclusion: financial literacy is the primary enabling condition through which financial inclusion translates into effective economic agency. Without this capability, access to financial services remains largely symbolic and does not materially alter gendered economic outcomes (Adhariani, 2022).

3.3.2. Theme 2: Cooperatives as embedded institutional gateways to formal finance

Cooperatives consistently appear as institutionally embedded and socially legitimate gateways facilitating women's financial integration. Ibourk and Hninou (Ibourk & Hninou, 2025) show that Moroccan women's agricultural cooperatives create structured spaces where women collectively gain access to credit, negotiate market participation, and strengthen their control over productive assets (Ibourk & Hninou, 2025). Sannou et al. (Sannou et al., 2025) extend this finding by demonstrating that, in Ghana, cooperatives become transformative when combined with organizational innovations such as improved storage, collective marketing, and sustainable input financing (Sannou et al., 2025). Lemus and Rojas (Lemus & Rojas, 2022) provide complementary evidence from Chile's credit unions, which extend financial access to women and rural households systematically excluded from formal banking networks. The empirical coherence across contexts shows that cooperatives are not peripheral actors; rather, they operate as intermediary institutions that bridge women's informal economic practices with the formal financial ecosystem, reducing transaction costs, mitigating risk, and strengthening collective bargaining power (Lemus & Rojas, 2022).

3.3.3. theme 3: Microfinance as a conditional and structurally mediated empowerment tool

The literature portrays microfinance as a conditional empowerment mechanism, with outcomes largely determined by household gender dynamics, credit cycles, program design, and institutional governance. Abdallah Ali et al. (Abdallah Ali et al., 2024) provide rigorous instrumental-variable evidence that microcredit improves economic and interpersonal empowerment in Djibouti; however, they reveal a non-linear pattern where empowerment declines when loan intensity or duration becomes excessive (Abdallah Ali et al., 2024). Canelas et al. (Canelas et al., 2024a) illustrate that, among Ugandan coffee producers, women's participation in microfinance-embedded cooperatives enhances income and savings but remains vulnerable to intra-household power asymmetries, particularly when husbands join the same cooperative groups (Canelas et al., 2024b). Dutt et al. (Dutt et al., 2016) strengthen the argument by showing that cooperative-based financial participation yields more stable empowerment effects than individual microcredit among Maasai women. These findings converge toward a

rigorous insight: microfinance is not inherently emancipatory.(Duttagupta et al., 2020) Its impact depends on gender-sensitive design, debt sustainability, and explicit safeguards against male appropriation of financial benefits.

3.3.4. Theme 4: Digital financial services as scalable accelerators of gendered financial integration

Digital finance is emerging as a significant accelerator of women's access to formal financial systems. Ky et al. (Ky et al., 2018) provide strong empirical evidence that mobile money adoption increases women's likelihood of depositing in banks or credit unions, particularly among low-income and low-education demographics. By circumventing mobility constraints, reducing reliance on male intermediaries, and lowering transaction costs, digital platforms operate as technological equalizers that enable private, secure, and autonomous financial engagement. Importantly, digital tools mitigate, though do not eliminate, socio-cultural constraints(Ky et al., 2018). The overall literature supports a rigorous interpretation: digital finance does not merely broaden access; it reshapes the institutional environment by enabling new modalities of financial participation that are more compatible with women's time constraints, mobility limitations, and privacy needs.

3.3.5. theme 5: Gender-responsive governance as a structural determinant of financial inclusion

Governance structures emerge as a central explanatory factor shaping women's access to and outcomes within financial institutions. Hartarska et al. (Hartarska et al., 2014) demonstrate that MFIs led by female CEOs achieve significantly higher outreach to poor women, even when performance metrics and sustainability pressures are controlled for, a strong indication of leadership-induced organisational behaviour (Hartarska et al., 2014). Périlleux and Szafarz (Périlleux & Szafarz, 2015) confirm this dynamic within Senegalese cooperatives, showing that female-dominated boards prioritise socially oriented lending practices and improve women's credit access. Mia et al. (Mia et al., 2024) further note that NGO-based and cooperative MFIs systematically outperform for-profit MFIs in promoting gender equality (Périlleux & Szafarz, 2015). These findings demonstrate that the gender composition of leadership and governance is not a symbolic variable, it fundamentally shapes institutional priorities, risk perceptions, and credit allocation patterns, making gender-responsive governance a structural determinant of financial inclusion.

3.3.6. Theme 6: Financial inclusion as a multidimensional and transformative process

The reviewed studies indicate that financial inclusion produces effects that extend beyond economic outcomes, triggering multidimensional shifts in agency, decision-making, and community participation. Lal (2019) documents that cooperative-based financial inclusion strengthens rural development trajectories through increased women's access to credit and productive resources. Shivaprasad and Anilkumar (Shivaprasad & Anilkumar, 2021) show that Self-Help Groups enhance women's autonomy in managing household finances, participating in community decisions, and engaging in collective action (Shivaprasad & Anilkumar, 2021). Hillesland et al. (Hillesland et al., 2022), using the pro-WEAI framework, demonstrate that access to cooperative credit strengthens intrinsic agency, independence, and decision-making among Ethiopian women (Hillesland et al., 2022). This body of evidence supports a theoretically conclusion: financial inclusion functions as a platform for cumulative empowerment, where financial access catalyses psychological, social, and relational transformations that sustain long-term autonomy.

3.3.7. Theme 7: Socio-cultural constraints as enduring limitations on empowerment outcomes

Despite improvements in access, socio-cultural structures remain a powerful moderating force limiting the transformative potential of financial inclusion. Nwakile et al. (Nwakile & Onah, 2020) highlight the burden of unpaid care work, mobility restrictions, and gendered labour divisions as persistent barriers to women's financial engagement. Canelas et al. (Canelas et al., 2024a) illustrate how entrenched patriarchal norms enable male re-appropriation of financial gains when couples share cooperative membership, undermining women's decision-making authority (Canelas et al., 2024a). Hillesland et al. (Hillesland et al., 2022) also note that program dropout often reflects social resistance rather than individual financial failure (Hillesland et al., 2022). This evidence confirms a theoretically important insight: financial inclusion interventions cannot substitute for gender norm change. Sustainable empowerment requires simultaneous transformation of social structures, household dynamics, and community norms.

3.4. Main financial literacy barriers

- ***Structural and economic barriers: market exclusion and financial vulnerability***

A recurrent finding across the reviewed studies is that women's economic environments remain structurally constrained. Limited market access emerges as a significant barrier, particularly in rural and agricultural contexts. Ibourk and Hninou (Ibourk & Hninou, 2025) show that despite the positive contributions of women's agricultural cooperatives in Morocco, women's economic potential is hindered by insufficient access to markets and limited financial resources. Similar findings are observed in Nigeria, where Nwakile et al. (Nwakile & Onah, 2020) identify the lack of efficient market linkages as a key obstacle to women's productive engagement. Geographical isolation further compounds these constraints. Lemus and Rojas (Lemus & Rojas, 2022) demonstrate that in rural Chile, the absence of nearby financial institutions and the central role of credit unions create a dependency that limits women's financial choices. Income instability also emerges as an important structural barrier. Ekasari et al. (Ekasari et al., 2024) and Ky et al. (Ky et al., 2018) show that women with irregular income streams or unbanked status rely disproportionately on cooperatives or digital intermediaries, often due to exclusion from conventional banking.

- ***Capability barriers: low financial literacy and limited managerial skills***

With regard to capability barriers, most studies highlight the important role of capability constraints in shaping financial inclusion outcomes. Low financial literacy is consistently linked to reduced credit confidence, difficulty navigating financial procedures, and sub-optimal enterprise performance. Kodmalwar et al. (Kodmalwar et al., 2025) explicitly note that poor financial capability limits rural micro-entrepreneurs' ability to engage productively with formal financial services. The mediating role of cooperatives in enhancing financial capability is supported by the empirical finding of Ekasari et al. (Ekasari et al., 2024), while Adhariani (Adhariani, 2022) shows that basic accounting literacy improves financial management among women in Sharia-based cooperative systems. Another limitation cited in the literature, limited skills in managerial and financial competencies pose additional barriers. Shivaprasad and Anilkumar (Shivaprasad & Anilkumar, 2021) observe that many beneficiaries of microfinance programs lack the necessary competencies to interact effectively with formal financial institutions

- ***Socio-cultural barriers: gender norms, household power, and social resistance***

Socio-cultural constraints represent some of the most encountered barriers. In this regard, Nwakile et al. (Nwakile & Onah, 2020) identify the importance burden of unpaid care and domestic labor as a central factor that restrict rural women's time, mobility, and engagement in

financial activities. Gender norms governing intra-household power relations also emerge as influential determinants. Dutt et al. (Dutt et al., 2016) find that partner control and the threat or experience of domestic violence weaken women's autonomy even when they participate in microfinance or business initiatives. Also, Canelas et al. (Canelas et al., 2024a) provide evidence from Uganda showing that when husbands join the same cooperative self-help groups as their wives, women's financial decision-making significantly decreases. Similarly, Hillesland et al. (Hillesland et al., 2022) show that early dropout from microfinance programs may be linked to community- or spousal-level resistance.

- ***Institutional and governance barriers: bias, complexity, and structural exclusion***

Several studies point to institutional features within financial organizations that limit women's access and outcomes. Mia et al. (Mia et al., 2024) show that commercially driven MFIs exhibit significantly lower levels of female participation, both among clients and staff, compared to NGO-based or cooperative MFIs. This profit-oriented logic appears to deprioritize gender and social objectives. Governance-related biases are further revealed in the work of Hartarska et al. (Hartarska et al., 2014) and Périlleux and Szafarz (Périlleux & Szafarz, 2015), who show that male-dominated executive structures in MFIs and cooperatives influence credit allocation patterns, often resulting in gender-discriminatory practices or reduced social orientation.

Administrative and procedural barriers also emerge from the literature. Kodmalwar et al. (Kodmalwar et al., 2025) (Kodmalwar et al., 2025) and Lindvert et al. (Lindvert, 2017) both note that complex documentation and burdensome requirements deter women, particularly those with low literacy, from engaging with formal financial systems.

- ***Programmatic and design barriers: over-indebtedness, incomplete models, and credit instability***

Certain number of barriers relied on the design and implementation of financial inclusion initiatives themselves. Over-indebtedness is a critical issue highlighted by Abdallah Ali et al. (Abdallah Ali et al., 2024), who show that multiple loans or prolonged credit exposure can reverse empowerment gains in Djibouti. A different limitation emerges from the Ghanaian context, where Sannou et al. (Sannou et al., 2025) show that cooperatives alone are insufficient without complementary innovations such as improved infrastructure, production systems, and bargaining mechanisms. Instability in credit access is also identified as a barrier. Hillesland et al. (Hillesland et al., 2022) show that women who lose access to cooperative credit or microfinance services early in program cycles tend to drop out.

- ***Digital and technological barriers: unequal access and usage constraints***

Despite the promise of digital financial services, the literature identifies persistent barriers to their effective adoption. Prior work of Ky et al. (Ky et al., 2018) show that while mobile money increases women's access to formal deposits, barriers such as low digital literacy, irregular income, and technology access inequalities remain significant. These findings demonstrate that digital finance does not automatically translate into inclusion and requires supportive infrastructure, training, and user-friendly platforms to ensure equitable adoption among women. To consolidate the evidence emerging from the reviewed literature and to highlight the multidimensional nature of the constraints affecting women's financial inclusion, the identified barriers were organized into six analytical categories. This structure captures the main determinants—structural, capability-related, sociocultural, institutional, programmatic, and technological—that shape women's access to, use of, and outcomes from cooperative-based financial services. The following table provides an overview of these barriers alongside the empirical studies supporting each of them.

Table 2 Categories of Barriers Limiting Women's Financial Inclusion through Cooperatives: Identified Barriers and Supporting Empirical Evidence (2014–2025)

Barrier Category	Specific Barrier Identified	Studies Supportage the Barrier
1. Structural & Economic Barriers	Limited access to markets	(Ibourk & Hninou, 2025)
	Insufficient financial resources or inputs	(Ibourk & Hninou, 2025)
	Geographic isolation limiting access to financial institutions	(Lemus & Rojas, 2022)
	Income instability / unbanked status	(Ekasari et al., 2024) (Ky et al., 2018)
2. Capability & Literacy Barriers	Low financial literacy and limited financial capability	(Adhariani, 2022; Ekasari et al., 2024; Kodmalwar et al., 2025)
	Lack of financial, managerial, and business skills	(Shivaprasad & Anilkumar, 2021)
3. Socio-Cultural & Gender Norm Barriers	Patriarchal control and restrictions on women's decision-making	(Dutt et al., 2016); (Canelas et al., 2024b)
	Husband co-participation undermining women's agency	(Canelas et al., 2024b)
	Community or spousal resistance causing dropout	(Hillesland et al., 2022)
4. Institutional & Governance Barriers	Profit-driven MFIs limiting outreach to women	(Mia et al., 2024)
	Male-dominated governance shaping credit allocation	(Hartarska et al., 2014) (Périlleux & Szafarz, 2015)
	Complex or burdensome loan documentation and procedures	(Lindvert, 2017)(Lindvert, 2017) (Kodmalwar et al., 2025)
5. Programmatic & Design Barriers	Risk of over-indebtedness (multiple loans, long-term credit)	(Abdallah Ali et al., 2024)
	Cooperatives ineffective without complementary innovations	(Sannou et al., 2025)
	Inconsistent or unstable access to credit (dropout risk)	(Hillesland et al., 2022)
6. Digital & Technological Barriers	Limited adoption of digital financial services due to low digital access or literacy	(Ky et al., 2018)

Source: Author conception

4. Discussion

The present research aims to synthesise the empirical literature which link women's financial literacy, cooperative participation, and empowerment, guided by six objectives: mapping existing evidence; identifying the main conceptual frameworks; analysing how financial literacy is cultivated and institutionalised within cooperatives; assessing its contribution to governance, financial performance, and empowerment; identifying methodological trends and gaps; and generating insights to inform gender-responsive and financially sustainable cooperative development. Using the PRISMA-ScR framework and the PCC approach, the review systematically identified and thematically analysed eighteen empirical studies drawn from Scopus and Web of Science to address the overarching research question: How does financial literacy interact with cooperative participation to shape women's financial inclusion and empowerment?

The integrated evidence from the eighteen studies shows that financial literacy functions as a core capability through which women access, interpret, strategically use financial services. Studies consistently demonstrate that higher financial literacy enhances women's ability to manage savings, credit, and enterprise finances, thereby reinforcing decision-making autonomy (Ekasari et al., 2024; Kodmalwar et al., 2025). Basic financial and accounting competencies improve financial performance and managerial confidence among women micro-entrepreneurs, especially within cooperative or Sharia-based financial structures (Adhariani, 2022). These

findings align with the broader conclusion that financial literacy is the primary mechanism translating financial access into meaningful empowerment outcomes.

Across diverse national contexts, the data reveal a common pattern: cooperatives emerge as the most inclusive and structurally enabling financial institutions (Arestis & Phelps, 2023). Agricultural and producer cooperatives in Morocco, India, Uganda, and Ghana enhance women's control over financial resources, facilitate market linkages, and strengthen collective bargaining power (Canelas et al., 2024a; Ibourk & Hninou, 2025; Sannou et al., 2025; Shivaprasad & Anilkumar, 2021). Cooperative-based financial education and institutional intermediation boost financial behaviour and enterprise performance, as demonstrated in Indonesia (Ekasari et al., 2024). Moreover, studies from Senegal, as well as global MFI datasets, show that cooperatives and NGO-based MFIs, especially those led by women, achieve stronger outreach to women and demonstrate higher social performance compared to commercial MFIs (Hartarska et al., 2014; Mia et al., 2024; Périlleux & Szafarz, 2015). These results confirm that institutional form and governance structure are decisive determinants of gender-equitable financial inclusion.

The evidence on microfinance indicates conditional empowerment effects. In Djibouti, for example, microcredit increases women's economic and social autonomy, but empowerment declines when loan cycles generate excessive indebtedness (Abdallah Ali et al., 2024). In Nigeria and Burkina Faso, microfinance improves productivity, access to formal financial services, and investment capacity (Ky et al., 2018; Nwakile & Onah, 2020). However, studies from Tanzania and Uganda show that intra-household dynamics can weaken women's financial decision-making even when income rises (Canelas et al., 2024a). These findings confirm that microfinance is not inherently transformative; its effects depend on program design, debt sustainability, and gender power relations.

With regard to Digital financial services, it represents a rapidly expanding but uneven pathway. Mobile money platforms enable women to transition from informal savings to formal banking, especially in contexts of geographic isolation or limited access to banks (Ky et al., 2018) (Lemus & Rojas, 2022). However, digital divides limit the gender equity potential of digital finance, particularly among low-income women.

Several additional cross-cutting insights emerge from the synthesis. First, financial inclusion is most effective when embedded within cooperative or collective structures, which magnify the benefits of financial literacy through shared governance, peer learning, and mutual accountability (G., 2018). Second, institutional and regulatory contexts strongly shape empowerment trajectories, as demonstrated by the superior gender outreach of NGO-based and cooperative MFIs (Mia et al., 2024). Third, socio-cultural barriers remain among the most durable impediments: unpaid care work, patriarchal norms, and household power asymmetries continue to limit women's ability to exercise financial autonomy (Dutt et al., 2016) (Onah et al., 2024) (Hillesland et al., 2022). Fourth, financial inclusion does not automatically translate into empowerment; the transformation depends on capability-building, sustained access, and enabling institutional governance.

The findings of this scoping review align with and anterior studies on women's financial inclusion, which confirm several established insights while also refining and, in some cases, challenging dominant assumptions. The results confirm widespread evidence that financial literacy is a critical determinant of women's financial behaviour and empowerment. Consistent with existing studies, the reviewed studies show that financial knowledge strengthens women's confidence, enhances credit management, and improves enterprise performance (Ekasari et al., 2024) (Kodmalwar et al., 2025). This mirrors broader theoretical claims that financial capability functions as a foundational resource enabling meaningful financial participation.

The review supports also the growing body of research emphasising the role of cooperatives as socially embedded intermediaries in women's economic empowerment. Previous studies have

highlighted cooperatives' potential to foster trust, strengthen social capital, and reduce transaction costs, and the evidence here aligns with these findings (Ibourk & Hninou, 2025; Sannou et al., 2025). At the same time, the review refines past assumptions by demonstrating that cooperatives do more than facilitate access: they institutionalise financial literacy, transforming individual capabilities into collective organisational capacity, a contribution less articulated in prior work.

The results challenge the classical view of microfinance as an inherently empowering tool. While previous literature often associated microcredit with increased income and autonomy, the reviewed studies reveal more conditional and sometimes contradictory results. For example, evidence of over-indebtedness (Abdallah Ali et al., 2024) and the erosion of women's bargaining power when husbands join the same cooperative structures (Canelas et al., 2024a) complicate earlier narratives that positioned microfinance as a uniformly positive mechanism. These findings align with emerging critiques that highlight the gendered risks embedded within microfinance programs and demonstrate the need for gender-responsive design.

Further, this review corroborates broader research showing that digital finance can expand women's economic opportunities, yet simultaneously exposes persistent digital divides. Findings from Burkina Faso and Chile affirm that mobile money and digital credit unions can effectively broaden access (Ky et al., 2018; Lemus & Rojas, 2022). However, the review also highlights gaps that remain underexplored in earlier work and require more systematic investigation. These insights contribute to the emerging literature on gendered digital exclusion. Consistent with institutional and feminist economics literature, the findings reaffirm the importance of gender-responsive governance. Evidence from Senegalese cooperatives and global MFIs shows that women-led institutions achieve stronger outreach and social performance (Hartarska et al., 2014; Périlleux & Szafarz, 2015). This supports long-standing arguments that governance structures and leadership composition shape financial inclusion outcomes. However, the review nuances this understanding by showing that institutional mission, NGO versus for-profit, also significantly influences gender equity (Mia et al., 2024), refining earlier governance-focused frameworks.

The review identifies contradictions and unresolved gaps within the existing literature. Although many studies report positive associations between financial access and empowerment, persistent socio-cultural constraints, such as unpaid care burdens, patriarchal norms, and community resistance, continue to limit women's agency (Nwakile & Onah, 2020) (Dutt et al., 2016). Earlier literature often treated these barriers as contextual background factors; the studies reviewed here demonstrate that they are central determinants of financial outcomes. Additionally, the scarcity of longitudinal designs leaves unanswered questions about the sustainability of empowerment gains over time.

Study contribution

Theatrically, this review advances research by clarifying how financial literacy functions within women's cooperatives as a shared operational capacity rather than an isolated individual trait. It specifies the mechanisms through which financial knowledge influences governance, transparency, and decision-making. By comparing cooperative, microfinance, and digital finance settings, the review identifies concrete factors, such as leadership composition, credit design, and technological access, that shape empowerment outcomes. It also highlights understudied elements, including intra-household bargaining, procedural bias in financial institutions, and gendered digital constraints. These contributions provide focused entry points for researchers seeking to examine how financial capabilities operate within real organisational and institutional environments.

Study implication

The study shows that improving women's financial inclusion requires policies that not only

expand access to financial services but also strengthen financial education and address the social and cultural barriers that limit women's autonomy. In this process, cooperatives play a key role: by improving their governance and integrating financial literacy into their daily activities, they can enhance members' decision-making and support the cooperative's overall stability. At the same time, microfinance institutions need to design credit programs that prevent over-indebtedness and take household gender dynamics into account, as training and advisory support greatly increase the likelihood of positive outcomes. Digital financial platforms also offer important opportunities, but they are effective only when women have the necessary digital skills and affordable access to technology. Therefore, initiatives should include digital literacy training and promote user-friendly solutions. Finally, the review highlights the need for further research to understand how financial literacy, cooperative participation, and institutional support interact over time to shape women's empowerment, making comparative and longitudinal studies particularly valuable.

Limitations

This study has several limitations that should be considered. First, the review relied on the Scopus and Web of Science database, which may have excluded relevant studies from elsewhere and may limit the completeness of the evidence. Second, the included studies used different methods, measures, and theoretical frameworks, making it difficult to compare results and preventing any form of quantitative synthesis. Third, most studies were cross-sectional, which limits the ability to understand long-term effects of financial literacy, cooperative participation, or microfinance on women's empowerment. Fourth, many findings were based on self-reported data, which may be affected by recall or social desirability bias. Fifth, because the review focused mainly on low- and middle-income countries, the results may not apply to other contexts with different financial systems and gender norms. Finally, as a scoping review, this study did not include a formal quality appraisal of the included studies, meaning that the strength of evidence varies across the literature.

5. Conclusion

This scoping review shows that women's financial literacy is shaped by several interconnected factors: their financial skills, the role of cooperatives, the design of microfinance programs, digital access, and the influence of social norms. The evidence indicates that financial literacy is not only an individual skill but also a shared resource that helps cooperatives operate more effectively and improves women's confidence in financial decision-making.

Cooperatives emerge as important institutions that support women by giving them collective bargaining power, reducing financial barriers, and providing safer access to formal financial services. Microfinance, however, produces mixed results. It can improve women's autonomy when programs are well designed and sensitive to gender inequalities, but it can also lead to debt problems or reinforce household power imbalances when these conditions are not met (Setyaka, 2022).

Digital financial services are promising but still limited by unequal access to technology and low digital literacy among women. As a result, digital solutions alone are not enough to ensure meaningful financial inclusion (Mpofu, 2023; Sultana, 2025).

Our findings show that real empowerment requires more than access to financial products. It depends on building women's capabilities, improving cooperative governance, and addressing social and cultural constraints that limit women's control over financial resources. Future research should focus on understanding how these different factors interact over time and how cooperative-based models can support more sustainable and equitable financial outcomes for women.

Future research should move beyond measuring access to examine how financial inclusion translates into sustained empowerment. Longitudinal and multi-level studies are needed to capture how individual capabilities, household dynamics, and institutional conditions interact over. Further studies should adopt an intersectional perspective, recognizing that gender intersects with education, class, and geography to produce unequal outcomes. As digital finance expands, evidence is needed on gendered digital barriers, including literacy, affordability, and social norms, to ensure that digital inclusion contributes to genuine empowerment rather than reinforcing inequality. Finally, policy-focused and participatory research should test integrated models that combine financial education, cooperative governance, and social norm change. Advancing women's financial inclusion thus requires evidence-driven, gender-responsive systems that link access with real agency and long-term empowerment.

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