

Andragogy and Financial Literacy in Indonesia: An Integrative Review of Adult Education Practices

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Abstract

Background – Financial literacy is an increasingly important adult capability because household decisions now combine budgeting, saving, borrowing, investment, and digitally mediated financial services. In Indonesia, these decisions are shaped by uneven access to financial services, differences in digital competence, and the financial management needs of households and micro, small, and medium enterprises.

Research Urgency – Recent Indonesian studies are distributed across financial inclusion, fintech adoption, MSME finance, digital literacy, and community education. The evidence is less often synthesized from an adult-learning perspective that asks how relevance, experience, participation, cultural context, mentoring, and evaluation shape financial learning.

Research Objectives – This review synthesizes recent evidence on adult financial literacy in Indonesia, identifies andragogical principles that are visible in effective educational practice, examines digital and cultural conditions that affect participation, and proposes implications for nonformal and community-based financial education.

Research Method – An integrative review was conducted using 54 peer-reviewed and DOI-traceable publications from 2022–2026. Indonesian studies were prioritized for contextual evidence, while recent international studies were used to interpret financial literacy, digital financial capability, and adult-learning design. Findings were organized through thematic comparison rather than meta-analysis.

Research Findings – Five recurring design requirements were identified: problem-centered learning tied to immediate financial decisions; use of learners' prior experience; guided practice and reflection; support for digital financial capability and risk awareness; and contextualization through community, livelihood, and, where appropriate, Islamic financial values. Evidence also indicates that one-off knowledge transfer is insufficient when programs lack mentoring, accessibility, and follow-up evaluation.

Research Conclusion – Andragogy is most useful as a design framework for financial education rather than as a stand-alone explanation of financial behavior. Adult financial literacy programs are more defensible when practical learning, digital inclusion, culturally responsive facilitation, and sustained support are connected to observable financial practices.

Research Novelty/Contribution – This review develops a community-based andragogical framework for adult financial literacy education in Indonesia. The framework integrates problem-centered learning, prior experience, guided practice, digital financial capability, culturally responsive facilitation, mentoring, and outcome-based evaluation. It extends existing financial-literacy research by positioning community learning infrastructure as a mechanism that connects financial knowledge with observable financial practices.

Keywords: adult education; andragogy; digital financial literacy; financial inclusion; financial literacy

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INTRODUCTION

Financial literacy is no longer limited to knowing basic financial concepts. It includes the capacity to interpret information, evaluate alternatives, plan across time, and translate knowledge into decisions that support financial well-being. Recent scholarship treats financial literacy as a capability with consequences for household resilience, participation in financial markets, and the quality of financial choices (Lusardi & Messy, 2023; Lusardi & Mitchell, 2023; Kaiser et al., 2022). Financial education can improve knowledge and downstream behavior, but its effects depend on the design, intensity, relevance, and context of the intervention rather than on information exposure alone.

Digitalization has widened this educational challenge. Financial decisions are increasingly mediated through mobile banking, digital payments, fintech applications, online investment, and algorithmic information environments. Digital financial literacy therefore requires both financial understanding and the ability to use digital services critically, safely, and purposefully (Koskelainen et al., 2023; Choung et al., 2023; Kumar et al., 2023; Kass-Hanna et al., 2022). Research on fintech and digital services further shows that access is meaningful only when users can evaluate products, risks, and consequences (Bhatt et al., 2022; Khan et al., 2022; Mishra et al., 2024).

The Indonesian context makes this intersection especially important. Evidence indicates that digital financial literacy is associated with digital financial inclusion, while demographic conditions continue to shape access and use (Widyastuti et al., 2024; Rahayu, 2022). Studies involving Indonesian rural communities and MSMEs similarly connect financial literacy with consumption, financing access, financial behavior, and business performance (Wardhono et al., 2022; Kusumawardhani et al., 2023; Putri et al., 2023; Suidarma et al., 2024). These findings suggest that financial education cannot be separated from the livelihood settings in which adults actually make decisions. The same point appears in studies of small enterprises and digitally mediated finance. Financial literacy and digitalization are linked to business development, profitability, access to finance, and the capacity to use financial technology, although outcomes vary across groups and institutional settings (Ardiansyah et al., 2023; Sitriani et al., 2025; Rusliati et al., 2024; Al-Shami et al., 2024). International evidence also indicates that financial capability and digital access can strengthen enterprise performance when people have the skills needed to interpret and use financial tools (Frimpong et al., 2022; Pandey et al., 2022).

An adult-education perspective adds a pedagogical question that is often secondary in finance research: how do adults learn to use financial knowledge? Contemporary andragogy emphasizes relevance to immediate problems, use of prior experience, participation in learning decisions, application, reflection, and a learning environment that supports adult agency (Knapke et al., 2024; Broek et al., 2024; St. Clair, 2024). Indonesian nonformal education research likewise shows that adult participation is strengthened by needs-oriented training, contextual practice, and evaluation that is connected to learner experience (Setiawati & Shofwan, 2023; Akhadi & Shofwan, 2024).

Recent nonformal education research provides a relevant pedagogical basis for translating andragogical principles into program design. Studies on training management, team-based projects, and multimodal technopreneurship indicate that structured facilitation, contextually relevant media, participatory tasks, and systematic evaluation can strengthen adult learning processes (Djibu et al., 2024; Sari et al., 2024; Ilyas et al., 2025). Related JoNE studies extend this argument by demonstrating the value of digital learning media, project-based training, mentoring, and community-based provision (Darmawan et al., 2025; Firdaus et al., 2026; Hidayat et al., 2026; Hayat et al., 2024). These studies are not financial-literacy evaluations, but they provide a pedagogical basis for designing adult financial education beyond one-way lectures.

Community and institutional context also matter. Local adult-learning systems depend on accessibility, relationships, support, and the social spaces in which learning can continue (Broek et al., 2024; Hayat et al., 2026; Lutfiansyah et al., 2026). Research on digital literacy in marginal communities further shows that knowledge is constructed through experience and social interaction, while coaching-oriented nonformal education can support the transfer of learning into practice (Nugroho et al., 2024; Widodo et al.,

2024; Suminar et al., 2024). These findings are highly relevant to financial literacy because financial decisions are repeated practices rather than isolated test items.

Cultural responsiveness is another important dimension in Indonesia. Islamic financial values can provide a familiar interpretive frame for household and community financial education when concepts such as responsibility, fairness, planning, and avoidance of prohibited financial practices are translated into practical decisions (Jinan et al., 2024; Rahman et al., 2023). Cultural adaptation, however, should strengthen relevance without narrowing access for participants from other religious or social backgrounds. Financial education in plural communities therefore requires a distinction between context-sensitive examples and universal access to basic financial capability.

The literature consequently contains two bodies of evidence that are rarely connected directly: financial-literacy research explains financial knowledge, behavior, inclusion, and digital capability, while adult and nonformal education research explains how adults participate, practice, reflect, and sustain learning. Recent financial-education studies also caution that knowledge, confidence, framing, and advice interact in complex ways (Ansar et al., 2023; Fornero & Lo Prete, 2023; Frisancho, 2023; Gerrans et al., 2023; Torp et al., 2023). This review connects these strands to ask what a recent, context-sensitive andragogical framework for adult financial literacy in Indonesia should contain.

Accordingly, this study has four objectives: (1) to synthesize recent evidence on financial literacy and digital financial capability relevant to Indonesian adults; (2) to identify andragogical design principles that can strengthen financial education; (3) to examine the role of community, digital, livelihood, and Islamic contextual factors; and (4) to identify program and research gaps relevant to nonformal education. The contribution is an integrative educational interpretation rather than a claim that all reviewed financial outcomes were caused by andragogical methods.

METHODS

Review Design and Scope

The study used an integrative literature review. This design was selected because the supplied manuscript synthesized heterogeneous research rather than documenting the database search, deduplication, screening flow, and risk-of-bias procedures required for a full systematic review. The revised review therefore does not claim PRISMA-style completeness. Instead, it integrates empirical and conceptual evidence relevant to adult financial literacy, digital financial capability, and nonformal education. Recent review guidance supports transparent alignment between the review question, source selection, synthesis logic, and the strength of conclusions (Khan et al., 2022; Mishra et al., 2024).

Eligibility and Source Verification

The review was bounded to publications from 2022–2026 to emphasize evidence from the most recent five-year publication window available for this manuscript. Sources were retained when they were peer-reviewed, traceable through a DOI, and relevant to at least one of four domains: financial literacy or financial behavior; digital financial literacy or financial inclusion; adult, community, or nonformal education; and Indonesian contextual evidence. Indonesian research was prioritized for contextual interpretation, while recent international studies were used where they provided stronger conceptual or comparative evidence. Older sources in the supplied reference list were removed rather than retained as routine citations.

Fifty-four publications met these editorial and thematic criteria and are cited in the review. DOI strings were standardized to the <https://doi.org/> format in the reference list. The evidence base includes studies on financial education and well-being (Kaiser et al., 2022; Lusardi & Messy, 2023; Zhang & Chatterjee, 2023), digital financial capability (Koskelainen et al., 2023; Choung et al., 2023; Senduk et al., 2024), Indonesian

MSMEs and communities (Muat et al., 2024; Utami & Kusumahadi, 2024; Wufron et al., 2026), and recent nonformal education research (Kurniawan et al., 2026; Sopingi et al., 2026).

Thematic Synthesis

Evidence was compared iteratively across studies and organized into five analytical themes: (1) relevance and use of prior experience; (2) experiential problem solving and guided practice; (3) digital financial capability and inclusion; (4) cultural and livelihood contextualization; and (5) mentoring, governance, and evaluation for sustained learning. The analysis distinguishes evidence about financial outcomes from evidence about educational design. This prevents findings from nonformal education studies from being presented as direct proof of financial-literacy outcomes and prevents finance studies from being interpreted as proof of andragogical effectiveness when pedagogy was not measured.

RESULTS AND DISCUSSION

Adult Relevance, Experience, and Problem-Centered Learning

The strongest cross-cutting implication is that adult financial education should begin with decisions learners already face. Household budgeting, debt, saving, business cash flow, financing choices, and digital payment decisions provide concrete problems around which concepts can be introduced. This is consistent with evidence that financial education is more consequential when knowledge can be translated into decisions and behaviors (Kaiser et al., 2022; Lusardi & Mitchell, 2023; Lusardi & Messy, 2023). It is also consistent with andragogical practice, where relevance, prior experience, and immediate application increase the usefulness of learning (Knapke et al., 2024; Setiawati & Shofwan, 2023).

For Indonesian MSMEs, the practical orientation is especially clear. Financial knowledge and attitudes are associated with management behavior, while digital financial literacy and financing capability are linked with enterprise performance and access to finance (Putri et al., 2023; Kusumawardhani et al., 2023; Suidarma et al., 2024; Muat et al., 2024). These relationships do not prove that a particular training method caused better performance. They do, however, identify the decisions around which adult learning can be designed: separating household and business funds, recording cash flow, comparing financing costs, managing repayment, and evaluating digital financial products.

Experiential Learning, Practice, and Reflection

A second theme concerns the difference between explaining finance and practicing financial decisions. Project-based, team-based, and multimodal learning research in nonformal education shows that participants can be positioned as active problem solvers rather than recipients of information (Sari et al., 2024; Ilyas et al., 2025; Firdaus et al., 2026). Training-management research by Imam Shofwan and colleagues also emphasizes that facilitation, implementation, and evaluation should be planned as connected processes (Akhadi & Shofwan, 2024; Djibu et al., 2024). Applied to financial literacy, these principles support simulations, guided comparisons, budgeting exercises, reflection on prior financial decisions, and peer discussion of realistic cases.

Reflection is important because financial decisions contain uncertainty, emotions, social influence, and framing effects. Evidence on investment fear of missing out, mortgage framing, and financial stress shows that knowledge does not operate in isolation (Gerrans et al., 2023; Torp et al., 2023; Zhang & Chatterjee, 2023). A reflective adult-learning design can therefore ask learners to explain why a choice was made, what information was used, which risks were overlooked, and how the decision could be improved. This approach is more educationally meaningful than measuring recall alone.

Digital Financial Literacy and Inclusion

Digital financial capability emerged as a central requirement. The digital age expands access to services while also increasing the need to assess interfaces, terms, data use, fraud risks, social-media information, and rapidly changing financial products (Koskelainen et al., 2023; Bhatt et al., 2022; Kumar et al., 2023). Indonesian evidence links digital financial literacy with digital financial inclusion and shows that demographic characteristics remain relevant to participation (Widyastuti et al., 2024; Rahayu, 2022). Batik-enterprise evidence also indicates that social-media use can interact with financial and digital financial literacy in shaping inclusion (Al-Shami et al., 2024).

This has two implications for adult education. First, financial and digital literacy should not be taught as separate competencies when the target decision is digital. Second, blended or technology-supported learning must not assume that all adults have equal devices, connectivity, confidence, or reading skills. Community-based digital learning research indicates that media must be accessible and connected to participants' existing learning practices (Darmawan et al., 2025; Nugroho et al., 2024). Rural financial-literacy research similarly identifies persistent access and capability challenges (Czech et al., 2024; Utami & Kusumahadi, 2024; Wardhono et al., 2022).

Community, Livelihood, and Cultural Contextualization

Adult learning takes place within social and economic contexts. Community-based nonformal education research in Indonesia emphasizes local participation, community potential, curriculum relevance, and institutional support (Hayat et al., 2024; Hayat et al., 2026; Kurniawan et al., 2026). These principles support financial education that uses familiar income cycles, livelihood risks, local financial institutions, and community networks rather than generic examples detached from participants' daily lives.

In Muslim-majority contexts, Islamic financial principles can strengthen relevance when they are connected to concrete financial decisions. Studies on Islamic financial planning and the integration of sharia principles in education demonstrate how ethical and religious concepts can be translated into planning and management discussions (Rahman et al., 2023; Jinan et al., 2024). The pedagogical purpose should be comprehension and responsible decision making, not the assumption that all participants share identical religious commitments. Contextualization is therefore a resource for inclusion when it remains responsive to learner diversity.

Mentoring, Governance, and Sustainability

A recurring limitation of short financial-literacy activities is that immediate knowledge gains do not necessarily demonstrate sustained behavior. Recent financial-education research distinguishes between knowledge, behavior, well-being, and effective use of financial services (Ansar et al., 2023; Fornero & Lo Prete, 2023; Frisancho, 2023). For nonformal programs, this means evaluation should extend beyond attendance or post-test scores to include observable practices such as record keeping, comparison of financial products, budgeting routines, safe digital use, and follow-up decisions. JoNE research provides useful operational guidance. Mentoring can support experimentation and adaptation after formal sessions, while governance of community learning centers affects continuity and accountability (Hidayat et al., 2026; Sopingi et al., 2026; Lutfiansyah et al., 2026). Partnership-based life-skills training and coaching-oriented program development also show the importance of institutional links and continued support (Suminar et al., 2024; Widodo et al., 2024). These findings suggest that adult financial literacy should be designed as a learning process with follow-up rather than as a one-off seminar.

At the same time, broader financial inclusion should not be reduced to education alone. Access to suitable services, product design, digital infrastructure, consumer protection, and socioeconomic conditions also shape financial outcomes (Kass-Hanna et al., 2022; Pandey et al., 2022; Mishra et al., 2024). Indonesian evidence on financial inclusion and financial technology likewise indicates that knowledge operates within

institutional and technological conditions (Rusliati et al., 2024; Wufron et al., 2026). Andragogy can improve how people learn, but it cannot substitute for fair and accessible financial systems.

Table 1. Andragogical Synthesis for Adult Financial Literacy Education

Design focus	Educational implication	Suggested program evidence
Learner relevance and prior experience	Begin with household, livelihood, debt, saving, financing, or business decisions that participants already face.	Needs assessment; participant-defined problems; relevance ratings.
Experiential problem solving	Use calculation, comparison, simulation, case discussion, practice, and reflection rather than information transfer alone.	Completed budgeting or cash-flow tasks; product comparisons; decision explanations.
Digital financial capability	Integrate financial understanding with safe use of digital services, critical evaluation of online information, and risk awareness.	Observed digital tasks; fraud/risk recognition; safe transaction practices.
Cultural and livelihood contextualization	Use local livelihood cycles and culturally meaningful examples, including Islamic financial values where relevant and inclusive.	Contextual examples; participant comprehension; inclusive participation.
Mentoring, governance, and follow-up	Connect training with coaching, community learning infrastructure, referrals, and evaluation over time.	Follow-up practice; mentoring records; behavior indicators; service access.

Source: Synthesis of reviewed literature, 2026

Integrated Interpretation and Research Gaps

The synthesis indicates that andragogy adds value by specifying the learning process through which financial capability can be developed. Its strongest contribution is not a claim that adult-centered teaching automatically produces financial well-being, but a set of design requirements: relevance, experience, participation, application, reflection, and learner agency. Recent adult-learning scholarship supports this process orientation (Broek et al., 2024; St. Clair, 2024; Knapke et al., 2024), while JoNE studies show how it can be operationalized through community provision, digital media, project work, mentoring, and program management (Darmawan et al., 2025; Firdaus et al., 2026; Sari et al., 2024; Hidayat et al., 2026).

Three research gaps remain. First, more longitudinal studies are needed to determine whether adult financial education changes behavior after training rather than only knowledge immediately after it. Second, research should compare delivery models across rural and urban settings, age groups, gender, livelihood types, and levels of digital access. Third, future studies should measure both educational processes and financial outcomes so that claims about andragogy can be tested directly instead of inferred from separate literatures. Recent work on financial capability and digital inclusion provides useful outcome constructs for such designs (Senduk et al., 2024; Widyastuti et al., 2024; Choung et al., 2023).

LIMITATIONS

This review is integrative rather than exhaustive. It does not report a complete database search history, duplicate-removal record, independent screening process, or formal risk-of-bias assessment, and therefore should not be interpreted as a PRISMA systematic review. The 2022–2026 window improves recency but excludes seminal older literature. The DOI-traceability criterion also favors formally published sources over local materials without persistent identifiers. Finally, the reviewed studies use heterogeneous populations, outcomes, and designs, so the synthesis identifies patterns and design implications rather than pooled effect sizes or causal estimates.

CONCLUSION

Recent evidence supports a view of adult financial literacy as a practical, contextual, and increasingly digital learning challenge. Financial knowledge is important, but adults must also be able to apply it to budgeting, saving, credit, business management, and digital financial services. In Indonesia, the relevance of financial education is shaped by livelihood conditions, digital access, community infrastructure, and cultural context. An andragogical approach is therefore most defensible when programs begin with participants' actual financial problems, recognize prior experience, provide guided practice and reflection, strengthen digital financial capability, and continue through mentoring and evaluation. Research by Imam Shofwan and other JoNE authors contributes practical evidence about how nonformal learning can be organized through needs-responsive training, multimodal and project-oriented learning, mentoring, community provision, and systematic evaluation. These principles can strengthen financial education without overstating what education alone can accomplish.

Future research should test this integrated framework using longitudinal and comparative designs that measure both learning processes and financial behavior. Such work can clarify which combinations of facilitation, digital support, cultural contextualization, and follow-up are most effective for different adult groups and can provide a stronger evidence base for inclusive nonformal financial education in Indonesia.

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