

Improving Community Financial Literacy to Prevent Illegal Online Lending and Investment Fraud

Afrizal^{1*}, Sipnarong Kanchanawongpaisan², Muhammad Hafiz Abd.Rashid³, Phan Bao Giang⁴, Syahriyal⁵, Eka Nurlina⁶, Stiven Jerry Immanuel Hutabarat⁷

^{1,7} Program Studi Manajemen, Sekolah Tinggi Ilmu Ekonomi Eka Prasetya, ² Shinawatra University Thailand, ³ Universiti Teknologi Mara (UiTM) Malaysia, ⁴ Universiy of Economics and Finance, Ho Chi Minh (UEF) Vietnam, ^{5,6} Universitas Syiah Kuala

*Corresponding author

E-mail: rizal.loebis74@gmail.com (Afrizal)*

Article History:

Received: Desember, 2025

Revised: Desember, 2025

Accepted: Desember, 2025

Abstract: *The International Community Service program was implemented in Pematang Johar Village, Deli Serdang Regency, North Sumatra—an emerging semi-periurban area characterized by socioeconomic vulnerabilities that heighten residents' exposure to illegal online lending and fraudulent investment schemes. Utilizing the Participatory Action Learning and Action Research (PALAR) approach, the program integrated experiential learning, critical reflection, group discussions, and locally relevant case studies to strengthen financial literacy. Evaluation results indicate substantial improvements across key indicators, including knowledge of licensed financial institutions, the ability to identify illegal financial practices, and overall financial prudence. These findings demonstrate that contextualized, community-based financial education effectively enhances risk awareness and encourages safer financial behaviour. The program further provides practical insights for designing scalable and replicable community financial literacy models applicable to similar semi-periurban contexts.*

Keywords:

Community Education; Financial Literacy; Illegal Online Lending; International Community Service; Investment Fraud; PALAR

Introduction

The digitalization of financial services in Indonesia has expanded access while simultaneously increasing consumer exposure to complex risks. The rapid growth of both licensed and unlicensed digital platforms has been accompanied by a surge in illegal online lending and fraudulent investment schemes. These unregulated services often promise quick approval but conceal predatory interest rates, abusive collection practices, and the absence of legal protection, trapping many individuals in harmful

debt cycles.

OJK recorded 20,378 complaints related to illegal financial activities in 2025—including 16,343 illegal online lending cases and 4,035 investment fraud cases (OJK, 2025). Losses from fraudulent investments reached IDR 142.131 trillion between 2017 and May 2025 (Firmansyah, 2025). Illegal lenders and fraudulent schemes typically operate without authorization and violate regulatory standards outlined in POJK No. 10/POJK.05/2022 (OJK, 2018; OJK, 2022; OJK, 2023). The prevalence of such practices is exacerbated by low financial literacy and behavioural biases that undermine risk assessment (Kaiser & Lusardi (2024).

Although financial inclusion has risen to 76.56 percent, national financial literacy remains stagnant at 65.43 percent (OJK, 2024) illustrating a persistent access-understanding gap also evident in developing countries globally (OECD, 2022; World Bank Group, 2023). Low literacy is linked to poor financial decisions, weak debt management, and vulnerability to economic shocks (Lusardi & Mitchell, 2014; Afrizal et al., 2025). Global evidence further shows rising digital fraud driven by limited financial and digital capabilities (OECD, 2022).

These conditions underscore the need for contextualized, community-based financial education, particularly for vulnerable and low-income groups (World Bank Group, 2023). Pematang Johar Village—an economically active semi-periurban area with high digital use but limited financial and digital literacy—illustrates this vulnerability. Residents face significant exposure to illegal lending and investment schemes.

Accordingly, a community financial literacy program was implemented to strengthen knowledge, protective behaviours, and socio-economic resilience. The initiative affirms that financial literacy is not only an individual competency but also a form of social empowerment vital for navigating digital financial risks.

Methods

The community engagement program was conducted on 15 October 2025 at the Pematang Johar Village Hall in Deli Serdang Regency, North Sumatra, involving 45 participants comprising microenterprise owners, market vendors, informal workers, village officials, and youth representatives. The program adopted a participatory learning approach that places concrete experience and critical reflection at the core of the learning process (Kolb, 2014). Building upon these principles, Zuber-skerritt (2015) developed the Participatory Action Learning and Action Research (PALAR)

framework, which emphasizes inclusivity, collaboration, and community empowerment and has been recognized for its effectiveness in generating transformative and sustainable change.

In this program, PALAR was employed to encourage active community participation in understanding digital financial risks, evaluating personal financial behaviour, and developing collective strategies to prevent involvement in illegal online lending and fraudulent investment schemes. This approach was not only educational but also transformative, fostering lasting changes in financial attitudes and behaviours at the community level.

The implementation consisted of three key stages: (1) Preparation, (2) Implementation, and (3) Evaluation. Each stage was designed in accordance with the participatory learning cycle—Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation (Kolb, 2014).

1. Preparation Stage

During the initial phase, the team coordinated with village authorities to determine participant targets, training venues, and logistical needs. Training modules were then developed, covering three core topics: fundamental financial literacy, identification of illegal financial activities, and safe digital financial practices. These modules were tailored to the needs of the local community and structured to ensure accessibility and clarity for participants.

The team also developed baseline evaluation instruments, including pre-post tests and brief interviews, to assess participants' initial understanding of financial concepts. To enhance experiential learning, several real-life case studies—such as Smart Wallet, Indosurya, Alimama, KreditQ, and VTuber—were prepared so participants could learn directly from incidents that had occurred within their broader social context.

2. Implementation Stage

The training comprised four main sessions delivered over the course of a full day. The first session introduced basic financial literacy, focusing on strategies for prudent household financial management. The second session centered on detecting illegal financial practices through simulations that enabled participants to identify common characteristics of illegal online lending and fraudulent investment schemes. In the third session, participants received training on safe digital financial practices, including how to verify the legality of financial applications via the official OJK website and CekFintech.id. The program concluded with a reflective discussion session and the formulation of a collective action plan, culminating in the establishment of the

Financial Wisdom Forum (Forum Warga Bijak Finansial) as a community-based platform for sustaining financial literacy initiatives.

3. Evaluation Stage

Program evaluation was conducted using pre-post tests to measure changes in participants' knowledge following the training. Group interviews were carried out to capture shifts in perceptions and to document participants' experiences throughout the learning process. Three weeks after the training, the team conducted a field observation to assess the follow-up activities of the Financial Wisdom Forum and to observe how participants had begun applying their newly acquired knowledge in daily financial decision-making. This multi-layered evaluation approach enabled a comprehensive assessment of program effectiveness and helped identify areas requiring additional community support.



Figure 1. International Community Service Team of Sekolah Tinggi Ilmu Ekonomi Eka Prasetya Together with International Participants



Figure 2. International Community Service Activities in Pematang Johar Village

Results

The findings of the financial literacy education program indicate that low levels of financial literacy and widespread exposure to illegal online lending and fraudulent investment schemes form part of a broader national challenge, as reflected in the high volume of reports and substantial financial losses associated with illegal financial practices. These conditions highlight the persistent financial vulnerability faced by communities and reinforce the urgency of sustained, structured educational interventions at the community level. In this context, financial literacy emerges as a strategic priority for systemic prevention. For Pematang Johar Village—characterized by a large population of microentrepreneurs, informal workers, and digitally active youth—such interventions are particularly relevant, as these economically productive groups frequently encounter urgent liquidity needs and elevated risks associated with digital financial platforms.

The program implemented in Pematang Johar on 15 October 2025 produced substantial improvements across three key dimensions: knowledge of licensed financial institutions, the ability to identify illegal online lending and investment schemes, and financial prudence. Table 1 summarizes the changes observed:

Table 1. Pre- and Post-Training Outcomes of the Financial Literacy Program in Desa Pematang Johar

Indicator	Before Training	After Training	Improvement
Knowledge of legal financial institutions	28%	88%	+60%
Ability to identify illegal lending/investment	34%	91%	+57%
Financial prudence	52%	84%	+32%

Source: Field Data, 2025

Evaluation results demonstrate significant gains in participants' competencies following the training. Knowledge of legal financial institutions increased from 28 percent to 88 percent—a 60 percent improvement. Similarly, the ability to recognize illegal online lending and fraudulent investment schemes rose from 34 percent to 91 percent, representing a 57 percent increase in risk detection capacity. Financial prudence also improved meaningfully, rising from 52 percent to 84 percent, an increase of 32 percent. Collectively, these outcomes affirm the program's effectiveness in strengthening participants' financial literacy, vigilance, and behavioural readiness.

Discussion

The success of the program can be attributed to its reliance on real-world case studies involving illegal lending and fraudulent investments, which allowed participants to grasp financial risks through concrete examples. The relevance of the training was further reinforced by the exclusive use of Indonesian cases, facilitating direct applicability to participants' daily financial decisions. The establishment of the *Pematang Johar Financial Wisdom Forum* also fostered a new social norm that encourages ongoing financial caution among community members. In addition, the program equipped participants with practical verification tools—such as checking financial service legality via OJK platforms and documenting suspicious offers—which strengthened their capacity to independently prevent financial misconduct.

The results align closely with evidence-based literature on financial education. First, the behavioural improvements observed correspond with findings from meta-analytic studies showing that financial education consistently increases financial

knowledge and, albeit to a lesser extent, positively influences financial behaviour. Kaiser & Menkhoff (2017) documented significant effects on both knowledge and financial actions, while Sun et al. (2020) underscored the importance of relevant, context-specific financial education in helping individuals navigate financial products, services, and activities. These findings reinforce the notion that systematically designed financial literacy interventions can generate measurable and sustained behavioural change. Although initial behavioural improvements were evident—such as budgeting and verification of financial services—ongoing monitoring remains essential to ensure medium-term behavioural internalization.

Second, the results reaffirm that digitally active yet financially underserved productive-age adults remain the most vulnerable demographic. Recent studies show that financial literacy—particularly digital financial literacy—directly influences financial decision-making, investment behaviour, and credit management. Abdurrahman & Nugroho (2024) found digital financial literacy to be a significant determinant of financial well-being among young digital users. Similarly, Rahmiyati & Somodiharjo (2025) concluded that financial literacy is a key predictor of investment decision quality among young adults exposed to diverse digital financial instruments. Supporting this study Imawan et al. (2025), demonstrated that targeted education and technology-assisted interventions can effectively improve financial literacy among productive-age adults; without such interventions, this group remains highly vulnerable to digital financial risks. These findings underscore the strategic importance of focusing interventions on productive cohorts who, despite being economically active, face disproportionate digital exposure.

Third, understanding the modus operandi of illegal financial schemes is critical, as individuals often fall victim not only due to limited information but also due to emotional triggers, excessive digital trust, and urgent financial pressures. Recent evidence by Puri et al. (2025) demonstrates that platform trust, high digital engagement, and emotional influence significantly increase user susceptibility to financial fraud such as illegal online lending and fraudulent investments. Victims also experience profound psychological impacts—including shame, loss of trust, and anxiety—which hinder reporting and recovery efforts (Akbar et al., 2025). The program's explicit emphasis on identifying warning signs—such as promises of quick profits, urgent demands, and misuse of personal data—helped participants sharpen their risk recognition skills.

Fourth, the magnitude of national economic losses caused by financial fraud highlights the essential role of community-based preventive interventions. Local financial education programs provide a strategic complement to government law-

enforcement efforts by strengthening grassroots resilience.

Finally, the effectiveness of community-based approaches in this program is evident in the strong peer-learning interactions and the high contextual relevance of the training materials. These findings align with OECD/INFE (2023), which emphasizes that small-group, community-based financial learning enhances comprehension by enabling participants to exchange real-life experiences. García & Pérez-Oleaga (2025) further argue that financial literacy initiatives are most effective when delivered through contextual and participatory methods such as group discussions and case-based learning, which deepen understanding and promote behavioural change. The peer-supported, locally grounded approach adopted in this program thus constitutes a key strategy for cultivating sustainable financial behaviour.

Taken together, these results suggest that financial literacy programs designed to be contextualized, community-based, and continuous offer the strongest potential for reducing financial vulnerability, particularly among digitally active productive populations. Such approaches not only enhance knowledge but also reinforce safer and more adaptive financial behaviour. The implications are clear: future financial literacy initiatives should integrate participatory learning, real-world case studies, and community follow-up mechanisms, while also aligning with expanded access to legal financial services. This integrated model ensures that financial literacy efforts extend beyond knowledge transfer to foster systemic improvements in household and community financial resilience.

Conclusion

The financial literacy education program implemented in Pematang Johar Village has proven effective in enhancing community knowledge, awareness, and financial prudence in relation to the risks posed by illegal online lending and fraudulent investment schemes. Through the PALAR approach, which emphasizes experiential learning, participants not only gained a foundational understanding of financial concepts but also developed the ability to identify the various forms of illegal financial practices that proliferate in the digital era. The increase in knowledge and improvements in financial behaviour demonstrate that community-based education can significantly strengthen economic resilience and legal awareness within rural and semi-periurban communities.

The program's success is further reflected in the establishment of the *Pematang Johar Financial Wisdom Forum*, which serves as a sustained platform for financial

education and community-level advocacy. Moving forward, similar initiatives should be expanded by integrating them into local government policies and OJK's financial education agenda to ensure long-term continuity. The experiential learning model should be replicated in other regions with the support of higher education institutions as implementation partners, while the capacity of local community facilitators must be strengthened so they can function effectively as financial literacy agents. In addition, leveraging local digital media can broaden outreach, and ongoing collaboration between regulators, financial institutions, and educational organizations is essential to fostering a healthy and inclusive financial ecosystem.

In sum, community-based financial literacy programs not only increase knowledge but also function as a form of social empowerment, cultivating communities that are more self-reliant, vigilant, and financially capable in navigating the challenges of the digital economy.

Reference

Abdurrahman, A., & Nugroho, D. A. (2024). The role of digital financial literacy on financial well-being with financial technology, financial confidence, financial behavior as intervening and sociodemography as moderation. *Jurnal Ekonomi Dan Bisnis*, 27(2), 191–220. <https://doi.org/10.24914/jeb.v27i2.11891>

Afrizal, Simarmata, A. M., Marpaung, L. W., Dian Setyorini4, S. R., Loo, P., & Pristiyono. (2025). Transformasi Pemahaman Keuangan: Sesi Literasi Keuangan Untuk Siswa SMKN 2 Rantau Utara Labuhan Batu. *Gudang Jurnal Pengabdian Masyarakat*, 3(1), 143–148.

Akbar, F., Hussain, J., Usman, M. B., & Afzal, J. (2025). The Impact of Financial Scams on Consumer Trust in the Banking Sector: A Qualitative Analysis. *International Journal of Discovery in Social Sciences*, 1(1). <https://doi.org/10.64060/ijdss.v1i1.5>

Firmansyah, F. (2025). OJK: Kerugian Akibat Investasi Ilegal Rp 142 Triliun. *Tempo*. <https://www.tempo.co/ekonomi/ojk-kerugian-akibat-investasi-illegal-rp-142-triliun-1725342>

García, G. L., & Pérez-Oleaga, C. M. (2025). What works in financial education? Experimental evidence on program impact. *Journal of Behavioral and Experimental Economics*, 119(June), 102401. <https://doi.org/10.1016/j.socec.2025.102401>

Imawan, R., Putra, W. P., Alqahtani, R., Milakis, E. D., & Dumchykov, M. (2025). Enhancing Financial Literacy in Young Adults: An Android-Based Personal Finance Management Tool. *Journal of Hypermedia & Technology-Enhanced Learning*, 3(1), 64–89. <https://doi.org/10.58536/j-hytel.166>

Kaiser, T., & Lusardi, A. (2024). 3. Financial literacy and financial education in Poland. An overview. In *Financial Literacy and Financial Education: An Overview* (Issue 16926). Institute of Labor Economics (IZA).

Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when? *World Bank Economic Review*, 31(3), 611–630. <https://doi.org/10.1093/wber/lhx018>

Kolb, D. A. (2014). Experiential Learning: Experience as The Source of Learning and Development.

Pearson Education, Inc. <https://doi.org/10.1016/B978-0-7506-7223-8.50017-4>

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>

OECD/INFE. (2023). International Survey of Adult Financial Literacy. *Oecd/Infe*. https://www.oecd.org/en/publications/oecd-infe-2023-international-survey-of-adult-financial-literacy_56003a32-en.html

OECD. (2022). *OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion* 2022. <https://doi.org/10.1787/cbc4114f-en>

OJK. (2018). *Perbandingan Fintech Lending Ilegal Dan Terdaftar/Berizin. Otoritas Jasa Keuangan*. <https://www.ojk.go.id/id/kanal/iknb/data-dan-statistik/direktori/fintech/Pages/FAQ-Kategori-Umum.aspx>

OJK. (2022). *Peraturan Otoritas Jasa Keuangan tentang Layanan Pendanaan Bersama Berbasis Teknologi Informasi*. 2, 1–42.

OJK. (2024). *hasil Survei Nasional Literasi dan Inklusi Keuangan (SNLIK) 2024*.

OJK. (2025). *Siaran Pers Rdkb Oktober 2025 Sektor Jasa Keuangan Yang Resilien Untuk Mendukung Ketahanan Ekonomi Nasional* (Issue November).

Puri, L., Kumar, A., & Singh, R. (2025). What drives or discourages fraud-safe behavior in digital transactions? a BRT perspective. *Acta Psychologica*, 260(October). <https://doi.org/10.1016/j.actpsy.2025.105675>

Rahmiyati, N., & Somodiharjo, K. (2025). The Impact of Financial Literacy, Invesment Decision-Making, Risk Tolerance, and Behavioral Biases on Individual Invesment Performance. *The Es Accounting And Finance*, 3(03), 223–237. <https://doi.org/10.58812/esaf.v3i03.668>

Sun, H., Yuen, D. C. Y., Zhang, J., & Zhang, X. (2020). Is knowledge powerful? Evidence from financial education and earnings quality. *Research in International Business and Finance*, 52, 101179. <https://doi.org/10.1016/j.ribaf.2019.101179>

Zuber-skerritt, O. (2015). Educational Research for Social Change (ERSC) Participatory Action Learning and Action Research (PALAR) for Community Engagement: A Theoretical Framework. *Action Research*, 4(1), 1–27. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.464.5871&rep=rep1&type=pdfning_Resources/Articles/-Zuber_Skerrit_2001_ALAR_Paradigm.pdf