Rural Women's Perspectives on Financial Inclusion: A Case of Rural Women in Kenya

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DOI: https://dx.doi.org/10.51244/IJRSI.2025.1210000261

Received: 26 October 2025; Accepted: 03 November 2025; Published: 18 November 2025

ABSTRACT

Financial inclusion has emerged as a central pillar of global development, yet disparities persist among vulnerable populations especially rural women in developing countries. Despite Kenya's impressive 84.7% financial inclusion rate, many rural women remain excluded from meaningful participation in the formal financial system. This paper examines the role of rural women's perspectives and financial literacy in digital financial inclusion in Kenya. Using data from 961 respondents collected through a structured questionnaire and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), the study finds that rural women's perspectives have a significant positive effect ($\beta = 0.433$, $R^2 = 0.187$) on financial inclusion. The findings reveal that while 94% of respondents perceive digital finance as beneficial, only 12% feel safe using it, and 77% have not received any formal financial training. These results highlight that psychological and perceptual barriers trust, safety, and literacy play a decisive role in shaping financial behavior. Grounded in the Vulnerable Group Theory, the study concludes that shifting perceptions through gender-sensitive financial literacy programs, confidence-building mechanisms, and consumer protection measures is essential for equitable and sustainable financial inclusion.

Keywords: Rural Women Perspectives, Financial Literacy, Digital Finance, Financial Inclusion, vulnerable Group Theory

Funding: This study received no specific financial support.

Institutional Review Board Statement: The Ethical Committee of Machakos University, Kenya has granted approval for this

study on 07 May 2024 (Ref. MksU/ASA/GS/3/3).

Transparency: The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital

features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

INTRODUCTION

Financial inclusion widely recognized as a cornerstone of global development has emerged as a major policy priority for governments, development partners, and financial institutions worldwide (Buch, 2017; Ozili, 2020). Defined by the World Bank (2018) as access to affordable, appropriate, and useful financial products and services, financial inclusion is essential for reducing poverty, enhancing household welfare, promoting entrepreneurship, and fostering equitable economic growth. In developing and emerging economies, these efforts often focus on integrating previously marginalized populations such as low-income earners, rural dwellers, and women into the formal financial ecosystem (Sowjanga et al., 2015).

Globally, notable progress has been achieved. According to Demirgüç-Kunt et al. (2022), account ownership among adults rose to 76% in 2021, marking a 50% increase within a decade. In Sub-Saharan Africa, innovations in mobile money have been instrumental in driving this progress. Kenya, for instance, stands out as a success story, with a financial inclusion rate of 84.7% in 2024, largely attributed to the expansion of digital financial services such as M-Pesa and agency banking (FinAccess Survey, 2024).

However, these aggregate statistics mask persistent gender and regional disparities. Despite high national inclusion rates, many rural women remain excluded or only superficially included lacking access to diverse financial products such as savings, credit, insurance, and investment opportunities. The FinAccess Survey (2024) reveals stark contrasts: while urban counties like Kiambu report inclusion levels exceeding 96%, rural counties such as Bungoma and Migori lag considerably behind. These disparities are often attributed to limited financial and digital literacy, restricted access to technology, low asset ownership, and deep-rooted socio-cultural norms that constrain women's financial autonomy (OECD, 2018; Grohmann et al., 2018).

Understanding rural women's perspectives on financial inclusion is therefore critical to bridging these gaps. Their perceptions shaped by lived experiences, cultural contexts, and exposure to digital and traditional financial systems offer valuable insights into the enablers and barriers of effective financial participation. Yet, despite Kenya's notable digital finance advancements, there remains limited empirical evidence capturing how rural women themselves perceive, interpret, and engage with financial inclusion efforts.

This study seeks to fill that gap by examining rural women's perspectives on financial inclusion in Kenya. It explores how financial literacy, access to digital financial services, and security concerns influence women's engagement with formal financial systems. By centering rural women's voices, the study contributes to the ongoing discourse on inclusive finance, offering actionable insights for policymakers, practitioners, and development stakeholders working to promote equitable and gender-responsive financial inclusion.

Rural Women in Kenya

Women constitute slightly more than half of Kenya's population, with the majority residing in rural areas where they contribute substantially to agricultural labor and household subsistence (Mwangi, 2018). Despite this significant economic role, rural women's participation in formal financial activities remains considerably lower than that of men. According to the World Bank Group (2021), this limited engagement renders women marginal contributors to the financial sector and often financially dependent on men for decision-making and resource control.

Evidence from the Financial Sector Deepening Kenya (2024) indicates that financial roles and responsibilities in Kenyan society are disproportionately skewed in favor of men, positioning them as the primary beneficiaries of financial inclusion initiatives. Consequently, many men migrate to urban centers in search of better economic opportunities, leaving women to manage rural households and community affairs. This dynamic further entrenches rural women's financial exclusion, reducing their access to credit, savings, and insurance mechanisms (Mwangi, 2018). The ripple effect of such exclusion manifests in heightened poverty levels and constrained empowerment opportunities for women, thereby slowing overall rural economic growth (Financial Sector Deepening Kenya, 2024). Conversely, enhancing women's participation in financial systems has been shown to reduce poverty, stimulate productivity, and foster more inclusive economic development (World Bank Group, 2021).

Agbo and Isa (2017) define rural women as those residing in non-urban areas who have established their livelihoods within village or interior communities. They play a vital role in supporting their households and contributing to local economies through farm work, informal trade, and community-based activities (Mmuozoba, 2022). Globally, rural women are recognized as critical agents of transformational economic, social, and environmental change; however, they remain constrained by limited access to education, healthcare, and productive assets (UN, 2021).

Rural women in Kenya are predominantly engaged in low-skilled, low-productivity, and low-paying occupations, often under poor working conditions and with limited upward mobility (UN, 2021). Moreover, many share similar socio-cultural characteristics, including communal lifestyles, traditional gender norms, and limited formal education. While some are literate, the majority possess low literacy levels, which further restricts their access to financial information, opportunities, and essential services (Agbo & Isa, 2017). These structural and socio-cultural barriers collectively reinforce the gender gap in financial inclusion and underscore the urgency of targeted, context-sensitive interventions to empower rural women economically.

LITERATURE REVIEW

2.1 Theoretical Foundation: Vulnerable Group Theory

The Vulnerable Group Theory (VGT), advanced by J.D. Von Pischke (1991), provides a foundational framework for understanding the systemic barriers that exclude certain population segments from formal financial systems. The theory posits that individuals who are poor, geographically isolated, or socially marginalized—such as rural women and youth—are inherently more susceptible to financial exclusion. Their exclusion is not incidental but a predictable outcome of structural constraints, including low education levels, limited access to formal institutions, and gender-based inequalities.

This theory aligns directly with the present study's objective of examining rural women's perspectives on financial inclusion and identifying actionable strategies to address their perceived barriers. By positioning rural women as a vulnerable group, VGT underscores that financial exclusion arises from both institutional barriers and psychological constraints, including mistrust, perceived insecurity, and lack of confidence in financial systems (UN Women, 2022).

VGT further provides an analytical lens for assessing whether interventions—such as financial literacy programs or digital finance innovations—are genuinely inclusive and context-responsive. For instance, understanding whether mobile banking applications accommodate low-literacy users or whether financial education programs are tailored to women's socio-economic roles (e.g., smallholder farmers or micro-entrepreneurs) reflects how effectively interventions address vulnerability.

Finally, VGT emphasizes both access and quality of financial services highlighting the importance of affordability, appropriateness, and relevance of financial products (FinAccess, 2021). This theoretical orientation resonates with the present study's goal of moving beyond mere account ownership toward understanding whether rural women's engagement with financial services translates into tangible empowerment and improved well-being.

2.2 Empirical Review

Empirical literature on rural women's financial inclusion presents a dual narrative: on one hand, digital and formal finance initiatives have substantially expanded access; on the other, deep-rooted structural and socio-cultural constraints continue to limit effective usage and empowerment outcomes.

Siddik and Zaman (2022), employing Structural Equation Modelling (SEM) among 280 rural women entrepreneurs in Bangladesh, found that perceived usefulness and ease of use were key drivers of Digital Financial Services (DFS) adoption. DFS usage improved financial management capabilities and perceived financial security. Similarly, Banga and Mahajan (2021), through econometric analysis of 400 rural women in India, reported that digital payment adoption significantly enhanced women's decision-making power and control over income—though these benefits were strongest among women with higher baseline financial literacy, revealing that literacy mediates empowerment.

Kumar and Raghavendra (2018), studying 540 Self-Help Group (SHG) women in Karnataka, found that education, SHG participation, and phone ownership significantly predicted active financial account usage. Their findings indicated that social intermediation—through SHGs—converted access into consistent usage, while low digital literacy and distance to financial institutions remained barriers. Similarly, Doss et al. (2019), using multi-country data from Ethiopia, Malawi, and Nigeria, observed persistent gender gaps in individual account ownership. However, mobile money networks helped narrow these gaps in areas with dense agent coverage, demonstrating that proximity and trust infrastructure are critical for usage.

Koomson et al. (2020), using data from 2,093 rural women in Ghana, found that financial inclusion significantly reduced multidimensional poverty, especially through savings and mobile money. Complementing this, Barboni and Field (2021) conducted a Randomized Controlled Trial (RCT) with 3,000 rural women in Bangladesh and found that providing private mobile money accounts enhanced women's private savings, privacy, and control over remittance use, reinforcing their agency and resilience.

Longitudinal evidence by Jack and Suri (2022) further demonstrated that expansion of M-Pesa agents in rural Kenya increased women's labor market participation and non-farm enterprise ownership linking digital inclusion to real economic empowerment.

Despite such positive outcomes, persistent non-financial barriers continue to constrain inclusion. Agyekum et al. (2021), through a mixed-methods study of 402 micro-entrepreneurs in Ghana, reported that while DFS supported payments and savings, barriers like collateral requirements, high transaction costs, and documentation hurdles persisted, especially for credit access. The study also highlighted the importance of social capital in sustaining savings behavior through Village Savings and Loan Associations (VSLAs).

Chirwa and Manjolo (2023), analyzing 1,146 rural women farmers in Malawi, found that peer effects and trust in digital systems were stronger predictors of DFS adoption than handset ownership alone, showing that social networks amplify inclusion outcomes. Similarly, Rahman and Khatun (2024) provided causal evidence, using instrumental variables on 2,780 rural women in Bangladesh, that active DFS use (beyond ownership) improved women's household decision-making and child nutrition outcomes. Their findings underscored that training and agent reliability are indispensable for meaningful digital engagement.

Complementing this, Adegbite and Machethe (2020) in South Africa revealed that patriarchal norms, limited financial autonomy, and male control over household resources remained significant barriers, even where access existed. These findings align with Djurfeldt, Dzanku, and Isinika (2018), whose cross-country synthesis across Africa and Asia confirmed that gender biases in asset ownership and credit systems perpetuate exclusion, despite women's active roles in productive sectors.

Finally, Ozturk and Topal (2019), using Probit and Logit regression analysis among 512 rural women in Turkey, found that while education and proximity influenced access, participation in social networks (e.g., microcredit groups or cooperatives) was the strongest predictor of formal financial usage. This reinforces the critical role of community-based and mobile solutions that leverage social ties to overcome physical and informational barriers.

Conceptual Framework

To examine rural women's perspectives on financial inclusion in Kenya, the study developed a conceptual framework that illustrates how rural women's perspectives act as a central determinant of financial inclusion, influenced by psychological, social, and contextual dimensions.

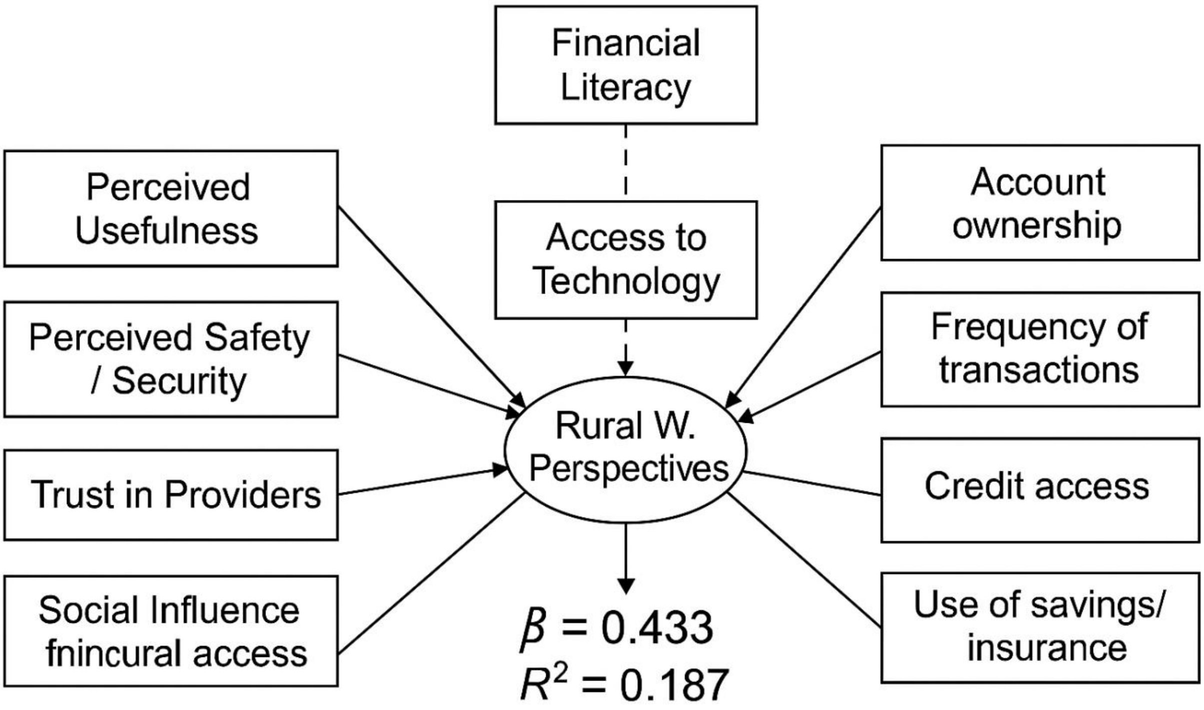


Figure 1. Conceptual model — Rural Women's Perspectives and Financial Inclusior

Figure 1 presents the conceptual model illustrating the relationship between rural women's perspectives and financial inclusion. The model posits that rural women's perceptions of digital financial services captured through four reflective dimensions of perceived usefulness, perceived safety, trust in providers, and social influence are central to their participation in formal financial systems. These dimensions collectively shape women's overall outlook toward adopting and using financial services. The model further hypothesizes that favorable perceptions positively influence financial inclusion outcomes such as account ownership, frequency of transactions, access to credit, and use of savings or insurance services ($\beta = 0.433$, $R^2 = 0.187$). The relationship is moderated by financial literacy and access to technology, which enhance the strength of the association by enabling informed and convenient engagement with financial tools. Control variables such as age, education, and income are also acknowledged as background influences. Overall, the model emphasizes that improving rural women's perceptions alongside literacy and technological access is critical for achieving meaningful and sustainable financial inclusion.

METHODOLOGY

This study employed a descriptive cross-sectional research design to examine the influence of rural women's perspectives on financial inclusion in Kenya in 2024. The design was appropriate as it enabled the systematic description and analysis of rural women's attitudes, perceptions, and experiences with financial inclusion at a specific point in time.

The target population comprised approximately 13.1 million rural women across Kenya. The sampling frame for the study was developed by demarcating Kenya into 8 regions following the previous provincial administrative system so as to capture inclusivity. These regions included; Western, Nairobi, Nyanza, Eastern, Central, Coastal, North Eastern and Rift Valley. Seven (7) of these regions excluding Nairobi that is purely urban were considered for the study since they displayed high degrees of rural representation. A total of seven counties one from each of the 7 regions namely Migori, Bungoma, Meru, Nyandarua, Narok, Kwale and Garissa Counties were purposively sampled given that they displayed high degree of financial exclusivity among women (FinAccess, 2022).

Based on the sample frame, one subcounty that is purely rural in each of these counties was purposively selected as it provided rich information that contributed positively to this study. Rural women were then randomly selected from the wards in each of the selected sub counties. Wards in town or urban centers were not part of the study. Based on OECD (2021) recommendations for social research, a sample size of 1,000 respondents was determined as adequate. However, due to incomplete data, the final sample comprised 961 rural women.

The study relied on primary data, collected using structured questionnaires adapted from the Global Findex Database (2021) and FINSCOPE survey instruments. These tools were modified to reflect the specific context of rural Kenyan women and to capture data on their perspectives, financial literacy, and access to formal and digital financial services. The questionnaires were administered verbally to accommodate participants with limited literacy, ensuring accurate data collection and inclusivity.

Data analysis was conducted using the Partial Least Squares Structural Equation Modelling (PLS-SEM) technique, which was suitable for assessing complex relationships between latent constructs such as perceptions and inclusion outcomes. Additionally, descriptive statistics were employed to summarize key variables, while Chi-square tests were used to determine associations between categorical variables.

The analytic process followed a multi-step approach: (i) description of the study variables and their interrelationships, (ii) application of multi-stage sampling to obtain a representative sample, (iii) administration of validated and contextually adapted instruments for data collection, and (iv) use of PLS-SEM and inferential statistics to model and interpret the relationship between rural women's perspectives and financial inclusion.

RESULTS AND DISCUSSION

To determine the rural women's perspective on financial inclusion, the study used descriptive analysis and the Partial Least Squares Structural Equation Modelling (PLS-SEM) method.

5.1 Descriptive Results

Rural women's perspectives on financial inclusion were assessed using six indicators related to financial training, access to digital finance, and perceived security in using digital financial services. Each indicator was scored on a six-point scale, where higher scores represent more positive attitudes toward financial inclusion. The results are summarized in Table 1.

Table 1: Rural Women's Perspectives on Financial Inclusion by Region

Region	N	Maximum Score	Mean Score (Perception)
Western	191	6	4.98
Eastern	70	6	4.89
Central	90	6	4.78
Coastal	138	6	4.75
Nyanza	130	6	3.92
Rift Valley	177	6	3.68
North Eastern	150	6	1.71
Overall	**961**	**6**	**4.17**

Regionally, women from the Western (M = 4.98), Eastern (M = 4.89), and Central (M = 4.78) regions exhibited the most positive attitudes toward financial inclusion, followed closely by the Coastal region (M = 4.75). The Nyanza and Rift Valley regions recorded moderately positive perceptions, while the North Eastern region (M = 1.71) reported the lowest perception scores, reflecting less favorable attitudes toward financial inclusion.

These variations suggest that, while many rural women acknowledge the potential benefits of financial inclusion, concerns such as trust, security, and cost transparency temper their enthusiasm. As noted by Ozili (2020), access to financial services particularly microcredit can sometimes generate insecurity when hidden charges or perceived risks discourage participation.

The markedly low perceptions observed in the North Eastern region may be attributed to structural and socio-cultural challenges such as limited access to formal financial institutions, low digital literacy, restrictive gender norms, and security concerns, all of which constrain women's confidence in financial systems.

Overall, the national mean score (M = 4.17) reflects a moderately positive perception of financial inclusion among rural women in Kenya, suggesting recognition of its potential to improve livelihoods through access to savings, credit, insurance, and digital payment services

Regional Perspectives on Key Indicators

To further explore regional variation, respondents were asked specific questions relating to financial training, perceived benefits of digital finance, and safety in using digital financial services. The results are presented in Table 2.

Table 2: Regional Perspectives on Key Financial Inclusion Indicators (%)

Perspective	**Western**	**Eastern**	**North Eastern**	**Central**	**Coastal**	**Rift Valley**	**Nyanza**
Received formal/informal financial training	32.5	25.0	7.3	33.2	12.0	20.0	30.0
Believe access to digital finance is beneficial	95.4	90.0	96.8	88.0	97.4	96.8	97.7
Feel safe using digital financial services	20.0	14.8	1.6	15.2	11.0	10.0	9.0

A strong consensus emerged across all regions regarding the benefits of digital finance, with more than 90% of respondents expressing positive attitudes toward its potential value. This indicates high awareness and latent demand for digital financial solutions among rural women.

However, only a small proportion of respondents had received any form of financial training, highlighting a substantial gap in financial literacy that limits effective utilization of available financial tools. Moreover, perceptions of safety in digital finance were low across all regions, with less than 20% of respondents reporting confidence in using digital financial platforms. These findings emphasize the need for targeted education and trust-building measures to mitigate fears of fraud and enhance confidence in digital transactions.

Aggregate Findings

The overall national responses on key perception indicators is presented in Table 3.

Table 3: Aggregate Responses on Rural Women's Perspectives

Perspective	Response	Frequency	Percentage
Received financial training (formal/informal)	Yes	217	23%
Believe access to digital finance is beneficial	Yes	906	94%
Feel safe using digital financial services	Yes	111	12%

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue X October 2025

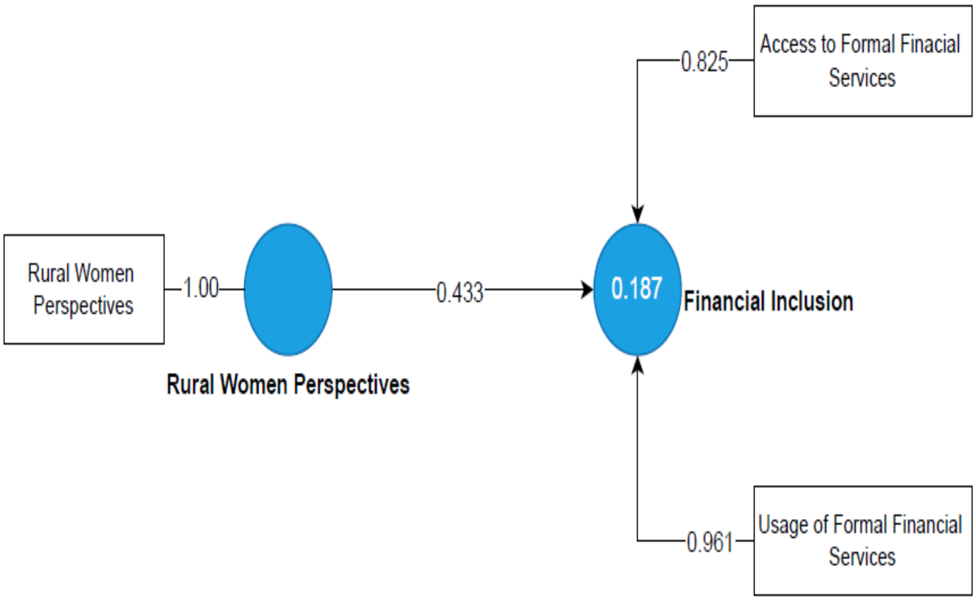
Nationally, only 23% of respondents had received financial training, indicating a significant knowledge gap that limits informed financial decision-making and engagement with formal financial systems. Conversely, 94% of rural women recognized the potential benefits of digital finance, signaling readiness for adoption if barriers related to trust and digital safety are addressed.

However, 88% of respondents reported feeling unsafe using digital financial platforms, suggesting that security concerns remain a primary deterrent to digital financial inclusion. This reinforces the argument that improving women's perceptions of safety and reliability is as critical as expanding access to financial products.

Collectively, the results demonstrate that while Kenyan rural women generally hold positive views toward financial inclusion, significant perceptual and educational barriers persist. The data reveal strong latent demand for digital financial services but limited confidence and capability to engage with them effectively. Enhancing financial literacy**,** addressing security concerns, and building institutional trust will therefore be essential to converting positive attitudes into sustained participation in formal financial systems.

5.2 Partial Least Squares Structural Equation Modelling Results

Using the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique, the paper sought to find out the structural relationship between rural women's perspectives and financial inclusion in Kenya. The findings are represented in Figure 1.



Note: Blue circles represent the variables while the rectangles represent the indicators of the variable.

The number inside the blue circle represents the R-Squared; The arrows represent the path coefficients.

Figure 1 Rural Women Perspectives on Financial Inclusion

The results of the Partial Least Squares Structural Equation Modelling (PLS-SEM) analysis indicate that rural women's perspectives exert a statistically significant and positive influence on financial inclusion. The model yielded a path coefficient of $\beta = 0.433$, suggesting that a one-unit improvement in rural women's perceptions of financial services corresponds to a 0.433-unit increase in financial inclusion, holding other factors constant. This finding underscores the critical role of perception particularly regarding trust, relevance, and accessibility in determining the extent to which rural women engage with formal financial systems. Accordingly, interventions aimed at improving attitudes, beliefs, and lived experiences among rural women are essential pathways for enhancing both access to and effective utilization of financial services.

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue X October 2025

Table 4: Measurement Model Assessment

Relationship	β	Cronbach's Alpha (α)	VIF	f2	R2
Rural Women Perspectives and Financial Inclusion	0.433	0.86	1.000	0.17	0.187

The results indicate that Rural Women's Perspectives exert a positive and statistically meaningful influence on Financial Inclusion (β = 0.433), explaining approximately 18.7% of the variance ($R^2 = 0.187$). The construct demonstrated strong internal reliability (Cronbach's α = 0.86), confirming consistency among its measurement indicators. The variance inflation factor (VIF = 1.000) shows that multicollinearity was not a concern. The effect size ($f^2 = 0.17$) signifies a medium practical impact, suggesting that improvements in women's perceptions such as perceived usefulness, safety, trust, and social influence—moderately enhance their participation in financial services. Overall, these results underscore the central role of attitudinal and perceptual factors in promoting inclusive financial engagement among rural women.

R-Squared Interpretation

The model's coefficient of determination ($R^2 = 0.187$) indicates that rural women's perspectives explain 18.7% of the variance in financial inclusion. Although modest, this level of explanatory power is meaningful within the context of behavioral and perception-based research. It highlights that psychological and perceptual factors are influential in determining adoption and usage patterns. Specifically, negative perceptions such as distrust of financial institutions, concerns about fraud, and fear of technological complexity contribute to self-exclusion, keeping many women outside the formal financial system. Conversely, positive perceptions foster confidence and a greater willingness to adopt and consistently use digital and formal financial services.

These findings are consistent with the Vulnerable Group Theory (VGT), which posits that marginalized populations are disproportionately excluded from mainstream financial systems due to both structural and attitudinal constraints (Ozili, 2025). Rural Kenyan women often disadvantaged by limited asset ownership, unstable income sources, and deep-rooted socio-cultural inequalities (World Bank, 2021) exemplify this dual vulnerability. From the VGT perspective, sustainable financial inclusion therefore requires not only structural accessibility but also interventions that respond to women's perceptions, needs, and social realities.

Furthermore, the explanatory power of the model emphasizes that self-exclusion, driven by perception, is a significant yet underexplored dimension of financial exclusion. Even when financial services are physically or technologically accessible, mistrust and perceived insecurity can suppress engagement. As noted by UN Women (2019) and FAO (2024), perceived risks and a lack of confidence in digital financial systems often inhibit full participation. Consequently, efforts to improve financial inclusion must prioritize gender-sensitive financial literacy programs, trust-building strategies, and context-specific consumer education. Enhancing positive perceptions is a necessary precursor to behavioral change and the sustained adoption of financial services, aligning closely with the principles of VGT.

Theoretical Contribution

This study contributes to the broader financial inclusion discourse by empirically validating the role of perceptions as an intangible yet powerful determinant of inclusion outcomes. While existing scholarship has primarily emphasized measurable enablers such as financial literacy, income, and access to technology this paper demonstrates that attitudes, perceptions, and lived experiences are equally critical in shaping financial behavior. The significant path coefficient (β = 0.433) and explanatory value ($R^2 = 0.187$) provide evidence that positive perceptions not only facilitate access but also enhance sustained usage of financial services, whereas negative perceptions reinforce self-exclusion.

By framing these findings within the Vulnerable Group Theory, the study advances theoretical understanding by showing that financial exclusion arises not only from structural inequalities but also from internalized psychological barriers. Rural women's perceptions thus function as both a barrier and a catalyst to inclusion: negative perceptions entrench vulnerability, while positive ones promote empowerment and resilience through financial engagement.

In extending the application of VGT to digital finance, the study proposes that perceptions act as a mediating dimension bridging the gap between structural access (the availability of services) and behavioral adoption (active usage). Addressing these perceptual barriers is therefore as crucial as dismantling structural ones in the pursuit of inclusive financial ecosystems.

DISCUSSION

The findings reveal that financial literacy remains a major constraint to financial inclusion among rural women in Kenya. Only about 22.6% of respondents had received any form of formal or informal training in basic financial concepts such as saving, budgeting, and credit management. This limited exposure to financial education significantly restricts their ability to make informed financial decisions, aligning with prior evidence that low levels of financial literacy constrain inclusion and usage of financial services in developing contexts (Grohmann et al., 2018; Lyons & Kass-Hanna, 2021).

Moreover, the study found that a striking 94.3% of rural women recognized the potential benefits of digital finance, indicating widespread awareness of its transformative potential. However, this optimism is tempered by the fact that 88.5% of respondents reported feeling unsafe using digital financial services. These perceptions of insecurity stemming from fear of fraud, data breaches, and distrust of financial institutions represent a significant psychological barrier to adoption. Similar patterns have been observed in studies by Adegbite and Machethe (2020) and Rahman and Khatun (2024), which highlight that trust deficits and perceived risk remain critical deterrents to digital financial participation among women in low-income rural settings.

Additionally, the finding that peer trust and social networks significantly influence DFS adoption aligns closely with Chirwa and Manjolo (2023) who report that peer effects in Malawi were stronger predictors of digital finance uptake than handset ownership alone. This similarity suggests a cross-country pattern in which community-level trust and diffusion processes rather than only individual access to devices shape adoption among rural women. The implication is that interventions emphasizing community-led demonstrations and trusted agent networks may be more effective than device distribution alone (Chirwa & Manjolo, 2023).

Furthermore, our results that perceived usefulness is necessary but insufficient without perceived safety reflect experimental evidence from Heath & Riley (2024) showing that increasing women's use of mobile money raised both comfort and behavioral control only when accompanied by clear usage support and reliable service mechanisms. Taken together, these studies indicate that adoption pathways require both functional benefits (usefulness) and risk-reduction mechanisms (trust, complaint resolution) to translate into sustained usage and empowerment.

The study further establishes a significant positive association between rural women's perspectives and their level of financial inclusion. Women with more positive perceptions toward financial systems exhibited higher rates of access to, and usage of, formal financial services. This finding empirically supports the Vulnerable Group Theory (VGT) (Von Pischke, 1991; Ozili, 2025), which posits that attitudinal and psychological barriers such as fear, distrust, and perceived inadequacy reinforce structural and socio-economic disadvantages. In the Kenyan rural context, such barriers manifest as both structural exclusion (limited access, poor infrastructure) and self-exclusion (voluntary withdrawal due to fear or distrust).

The link between perception and inclusion underscores that psychological dimensions are as critical as structural ones in shaping women's financial behavior. A woman who perceives digital finance as risky or unfamiliar is unlikely to engage, regardless of availability or affordability. Conversely, building positive perceptions through gender-sensitive education and transparent service delivery can unlock latent demand. This observation resonates with the arguments of UN Women (2019) and FAO (2024), who emphasize that addressing trust and confidence deficits is central to achieving inclusive financial ecosystems.

Overall, the findings suggest that achieving effective financial inclusion among rural women in Kenya requires a multi-dimensional approach one that not only expands access to financial services but also strengthens financial capability, mitigates security concerns, and intentionally cultivates positive perceptions toward formal financial systems. This integrated perspective reinforces the need for inclusive, trust-driven, and context-specific financial literacy interventions to ensure that digital finance becomes not merely accessible but truly empowering for rural women.

CONCLUSION AND RECOMMENDATION

This paper demonstrates that rural women's perceptions critically shape their engagement with formal and digital financial services. Positive attitudes toward financial systems significantly increase adoption and consistent usage, while negative perceptions rooted in distrust, fear of fraud, and perceived insecurity lead to voluntary self-exclusion, even when access exists. These findings affirm the Vulnerable Group Theory (VGT), which posits that psychological and attitudinal barriers exacerbate structural disadvantages and deepen exclusion. Within Kenya's rural context, addressing women's perceptions through trust-building, gender-sensitive financial literacy, and effective consumer protection emerges as a prerequisite for sustainable inclusion.

The study further reveals that access alone is insufficient to guarantee active participation. Many rural women experience insecurity and skepticism toward digital finance, reinforcing the need for confidence-building interventions. To mitigate this, financial service providers and policymakers should design context-specific interventions based on local needs assessments, promote transparent communication about data and fund protection, and implement targeted financial education programs to empower rural women as informed, confident users of digital finance.

The study therefore recommends that financial service providers should conduct local needs assessments to understand region-specific barriers, cultural norms, and economic conditions, allowing for the tailoring of intervention strategies. To build confidence and trust, financial institutions should implement targeted interventions and awareness campaigns. These initiatives should not only educate rural women on security measures but also provide clear, transparent information on how digital platforms protect their funds and personal data.

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