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Review Article

Bridging the Gender Gap: Women Banking Agents as Catalysts of Rural Financial Inclusion

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Abstract

Background: Financial inclusion of women is widely recognized as a sine qua non for their social and economic empowerment. The initiative and impetus provided by the Pradhan Mantri Jan Dhan Yojana has played a transformative role by bringing 29 crore women into the ambit of formal financial systems. However, despite this progress, many of these accounts remain dormant, underscoring the necessity for efficient facilitation. **Objectives:** This article examines the role of women business correspondents in deepening financial inclusion and identifies the major determinants that significantly influence financial inclusion and its impact on the usage of banking services among women customers. **Methods:** The primary data for this study were collected through a structured questionnaire administered to women beneficiaries availing services from banking agents operating in selected districts of West Bengal. The data collected was analyzed using Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM) using standard statistical software. **Results:** The empirical findings demonstrate that factors like financial literacy, trust, word of mouth, and accessibility positively influence financial inclusion and their usage of banking services. **Conclusion:** The findings highlight the critical role of women banking agents in bridging last-mile gaps and connecting rural women with formal financial services and inducing the use of these systems for their thrift and credit requirements.

Keywords: *Financial Inclusion; Rural Economy; Rural Finance; Women Banking Agent*

Introduction

Financial inclusion is defined as providing access to a range of financial products and services for the poor and unbanked population. An effective financial system should be inclusive and readily accessible to a broad segment of the population, as this can significantly improve the financial well-being of underserved communities. Hannig and Jenson (2010) stated that the goal of financial inclusion is to integrate the unbanked population into the formal financial system, providing them with opportunities to access a range of financial services, including savings, transfers, payments, and insurance. Economic empowerment of women largely depends on having them included in the formal financial system and enabling them to access and use the system with trust and ease, ensuring reliable transfer of government benefits and enabling easy credit availability. It also refers to their ability to actively contribute to economic growth while ensuring that individuals' contributions are recognized and valued. Further, it involves equitable distribution of wealth and improved access to economic resources, thereby enhancing overall economic participation (OECD, 2011). Financial inclusion has been recognized as a critical enabler for achieving seven of the 17 Sustainable Development Goals (SDGs). The World Bank

believes that ensuring financial inclusion is key to reducing poverty and promoting economic growth. The financial inclusion initiatives, such as PMJDY, PMSBY, APY, and PMJJBY, have empowered poor and marginalized Indians to open zero-balance accounts and access affordable insurance protection and pension schemes (Barik & Sharma, 2019). These schemes have significantly addressed financial inclusion gaps among various population groups, resulting in a 55% increase in the proportion of women participating in financial services.

The Prime Minister Jan Dhan Yojana (PMJDY), which aimed at total financial inclusion of the Indian populace, has 51.32 crore beneficiaries, out of which 28.47 crore, i.e., 55.5%, are women beneficiaries (Ministry of Finance, 2024). The union minister of state for finance, Bhagwat Karad, said, "As of 06.12.2023, out of the total 10.34 crore inoperative PMJDY accounts, 4.93 crore accounts belong to women" (The Wire, 2023). The reasons for dormancy can be traced to the lack of comprehension of gender-based behavior about the usage of financial services and dearth in their financial literacy levels, doorstep access, trust in the facilitators and use of fintech, and inadequacy of brick-and-mortar bank branches.

To deal with this problem, the agency banking model in India was introduced in 2006 when the Reserve Bank of India (RBI) issued guidelines to allow banks to employ intermediaries to expand their outreach and promote financial inclusion using agents (RBI, 2006). Jaiswal and Dhar (2023) showed that the Business Correspondent (BC) model was an immediate success, and the number of BCs in India jumped up to 33,13,052 in 2021 from only 34,621 in 2010, and nearly one-third of these BCs were women. The spurt in the number of women BCs was necessary to tackle the gender gap in financial inclusion, as women, especially in the rural areas, are more at ease with female BCs. Women BCs can provide them banking services at the doorstep without any encumbrance that exists due to social and cultural taboos. Accordingly, the BC Sakhi (women banker friend) model, a women-focused alternative of the BC model, was tailored by NRLM (National Rural Livelihood Mission) and piloted in 7 states via special funds made available under the NRLP (National Rural Livelihood Project) in 2015-16. The reason behind appointing women as BCs was based on the fact that more than half of the PMJDY accounts were held by women in rural and semi-urban regions of India, and they would be better mentored and motivated by women banking agents. Today over a hundred thousand Bank Sakhis are operating as financial intermediaries for women in 20 states in India. These women BCs do not only offer ordinary deposit-withdrawal services through micro-ATMs and smartphones, but they also familiarize women customers with the advantages of digital financial transactions and also impart training on the use of digital payment platforms in vogue.

Literature Review

Financial literacy acts as a key factor in driving the demand for formal financial services and plays a significant role in determining the frequency of both formal and informal savings among individuals (Adetunji & David-West, 2019), which ultimately leads to financial inclusion. Financial literacy plays a crucial role for women, as it enables them to engage with the financial system and manage their finances independently, thereby enhancing their economic empowerment. Huston (2010) conducted a comprehensive review of financial literacy literature spanning a decade and defines financial literacy as the extent to which an individual comprehends and effectively applies information related to personal finance. Grohmann *et al.* (2018) conducted a cross-country study that revealed a significant positive impact of financial literacy on financial inclusion, especially among women in low-income countries. Similarly, Khan *et al.* (2022) emphasized that financial literacy greatly influences financial inclusion by empowering individuals with the knowledge and skills needed to make informed financial decisions. This improved understanding allows individuals to better navigate financial products and services, resulting in increased participation in the financial system.

Cognizance of financial instruments is a precursor to adoption, and the level of financial literacy among beneficiaries often shapes this awareness. Consequently, it becomes imperative to explore whether the financial literacy of women beneficiaries influences their inclusion in the formal financial system through engagement with women BCs.

H$_1$: Financial literacy levels have a significant influence on financial inclusion of women.

Access to financial services, whether through physical proximity to financial institutions or digital channels, plays a crucial role in promoting financial inclusion among women. Allen *et al.* (2016) analyzed global data on financial inclusion and identified physical access to financial institutions as a significant barrier, particularly for women in rural areas. Their study underscores the importance of mobile banking and other digital financial services in overcoming these obstacles and enhancing financial access for women. Similarly, it enables individuals to conduct financial transactions more efficiently and securely. Nearly 20% of the unbanked populations in developing countries stated distance to the financial service point as the main reason behind their exclusion from the formal system (Cámara & Tuesta, 2014). It is the improved access to financial services, marked by lower banking costs, increased proximity to bank branches, efficient customer support, and reduced documentation requirements for opening bank accounts, that results in financial inclusion. Therefore, we propose that the accessibility of women's BCs influences financial inclusion.

H$_2$: Accessibility of beneficiaries to women BCs have a significant influence on the financial inclusion of women.

Trust is one of the behavioral attributes in finance that is directly attributable to the risk perception of beneficiaries of a financial system. Zins and Weill (2016) explored the factors driving financial inclusion in Africa and discovered that trust in financial institutions is a crucial determinant of whether women engage with formal financial services. The study indicates that boosting transparency and enhancing customer service can foster trust, thereby improving financial inclusion for women. Trust plays a crucial role in influencing household participation in the financial sector. Demirgüç-Kunt *et al.* (2015) discovered that nearly 13% of unbanked adults cited a lack of trust in the formal banking system as the primary reason for not having a bank account. The degree of trust is pivotal in motivating individuals to engage in banking activities and is consequently positively linked to financial inclusion (Xu, 2020). Therefore, we propose that trust influences financial inclusion of women.

H$_3$: Trust in women BCs have a significant influence on the financial inclusion of women.

Word of Mouth (WOM) means the informal exchange of information, opinions, or recommendations between individuals, which influences the financial decisions of others, often leading to increased trust, awareness, or action. Since financial decisions are time and again perceived as being risky, recommendations from trusted BCs help condense perceived risk. Byoung-Hyoun Hwang (2023) provided compelling evidence that WOM importantly determines investment decisions; however, the information transmitted through WOM does not always help investors make better investment decisions.

Other researchers have found evidence of word of mouth significantly influencing financial inclusion among women, particularly in communities with limited access to formal financial education. Women often base their decisions to engage with financial services on the experiences and recommendations of their peers. Banerjee *et al.* (2013) studied the spread of microfinance through social networks and found that word of mouth is a powerful driver of financial inclusion for women, with women more likely to adopt financial products and services when recommended by trusted peers. Similarly, Bruhn and Love (2014) investigated the impact of social influence on access to finance in Mexico, revealing that word of mouth plays a crucial role in shaping women's decisions to engage with formal financial services. Further, word of mouth is crucial when delivering services to marginalized populations, as it is perceived as a highly credible information source with no direct association with the service provider. It plays a significant role in accelerating financial inclusion by attracting new customers from their social contacts (Ennew *et al.*, 2000). Therefore, we proposed that word of mouth influences financial inclusion of women.

**H$_4$: Word of mouth of women BCs have a significant influence on financial inclusion of women.**

Integrating women into the financial system enhances their likelihood of accessing and utilizing a range of banking services such as savings accounts, credit facilities, and insurance products. This increased

engagement not only broadens their financial choices but also plays a pivotal role in promoting their economic empowerment. Demirgüç-Kunt *et al.* (2013) examined the relationship between financial inclusion and women's use of banking services in developing countries. Their study found that financially included women are more likely to access services such as savings accounts and loans, positively impacting their financial stability and economic empowerment. The utilization of banking services tends to rise when the underserved and marginalized population gains access to formal financial services. The number of branches, ATMs, and POS centers attracts the individual to use financial services (Beck *et al.*, 2007), while the further use of accounts is associated with a more favorable environment for accessing financial services, characterized by lower account costs and greater proximity to financial intermediaries (Allen *et al.*, 2016). Therefore, we proposed that financial inclusion influences the banking service usage by women.

H5: Financial inclusion has a significant impact on banking service usage by women.

Methodology

The model proposed is grounded in the evidential support derived from literature reviews, field observations, and empirical studies. The multivariate statistical analysis using structural equation modeling has been used to analyze the structural relationship between measured variables and latent constructs to estimate the multiple and interrelated dependence in a single analysis.
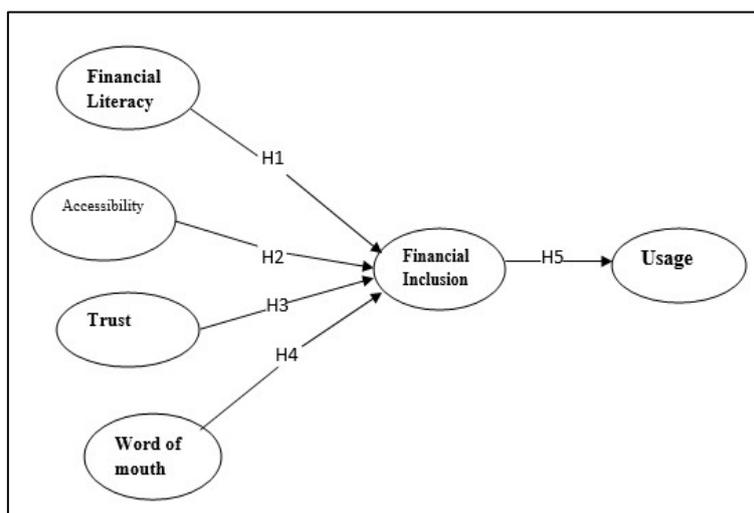
Figure 1: Proposed Model

The primary data for this study was collected through a structured questionnaire from women customers who were availing financial services from banking agents operating in various districts of Darjeeling, Kalimpong and Jalpaiguri in West Bengal, India. The districts in the state of West Bengal were chosen because of the large number of women beneficiaries in the rural and tea garden areas and the prevalence of women BCs over 25% of total BCs in the areas. The distribution of women BCs in these areas is shown in Table 1.

Table 1: Proportion of women BCs in the area of the study

Districts	Total BC agents	Women BC agents	Women BC agents (%)
Kalimpong	623	189	30.34
Darjeeling	1044	277	26.53
Jalpaiguri	1568	491	31.31
Total	**3235**	**957**	**29.58**

Source: Authors data compilation from banks website, BC registry and corporate BC officials

For the collection of data from the women bank customers, the convenience sampling technique was employed. The study was anchored on a five-point Likert scale, where a score of 1 indicated "Strongly

Disagree" and 5 represented "Strongly Agree". According to Hair *et al.* (2014), a sample size of 200 is considered modest for conducting structural equation modeling. Similarly, Nunnally (1967) recommended having at least 10 observations for each item under study. Thus, based on these suggestions, 287 filled-in questionnaires were collected from the respondents, out of which 23 questionnaires were rejected due to missing values, and finally 264 questionnaires were used for analysis in this study.

Results and Discussion

Table 2: KMO and Bartlett's test for sampling adequacy

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.859
Bartlett's Test of Sphericity	**Approx. Chi-Square**	3373.397
	Df	276
	Sig.	0.000

Exploratory Factor Analysis (EFA) has been employed based on the method followed by Davis (2016) for constructing a robust construct by utilizing various items, significantly aiding in the development of instruments and the validation of a questionnaire. The goal of factor analysis is to reduce a large set of variables into a smaller number of factors while preserving as much of the original information as possible (Hair *et al.*, 2010). The KMO value is 0.859, indicating sampling adequacy, and Bartlett's test of sphericity is also significant, as stated in Table 2.

The principal component method was used to extract factors and determine their retention by selecting those with eigenvalues greater than one, as indicated by the scree plot analysis. The results were further refined using orthogonal rotation with varimax to enhance the clarity of the factor structure.

**Table 3: Factor analysis results and reliability test**

Factors Name	Item	Item loading	Percentage of variance	Cumulative variance (%)	Cronbach's alpha
Banking Service Usage (USAG)	USAG1	0.794	29.65	29.65	0.857
	USAG4	0.767			
	USAG2	0.749			
	USAG3	0.687			
	USAG5	0.645			
Accessibility (ACCE)	ACCE4	0.816	11.85	41.50	0.871
	ACCE2	0.800			
	ACCE1	0.800			
	ACCE3	0.782			
Financial Literacy (FL)	FL4	0.814	9.17	50.67	0.835
	FL2	0.802			
	FL3	0.763			
	FL1	0.755			
Trust (TRUS)	TRUS1	0.957	6.99	57.66	0.935
	TRUS3	0.933			
	TRUS2	0.917			
Financial Inclusion (FINC)	FINC3	0.826	6.42	64.08	0.819
	FINC2	0.744			
	FINC4	0.737			
	FINC1	0.680			
Word of Mouth (WOM)	WOM3	0.796	6.09	70.17	0.800
	WOM4	0.790			
	WOM2	0.744			
	WOM1	0.716			

Source: Author's Calculation

Six factors are extracted from 24 observed variables with banking service usage explaining 29.65% variance, accessibility 11.85%, financial literacy 6.99%, financial inclusion 6.42%, and word of mouth 6.09%, with a total cumulative variance of 70.17%, which is beyond the 60% acceptable variance in

factor analysis (Hair *et al.*, 2010). Cronbach's alpha of all the constructs lies in the range of 0.800 to 0.935, indicating good reliability, as shown in Table 3.

The reliability and validity of the measurement model were tested. The composite reliability value for all constructs exceeded 0.7, the Average Variance Extracted (AVE) for each factor was greater than 0.5, and all factor loadings were above 0.6, satisfying both reliability and validity criteria as shown in Table 3.
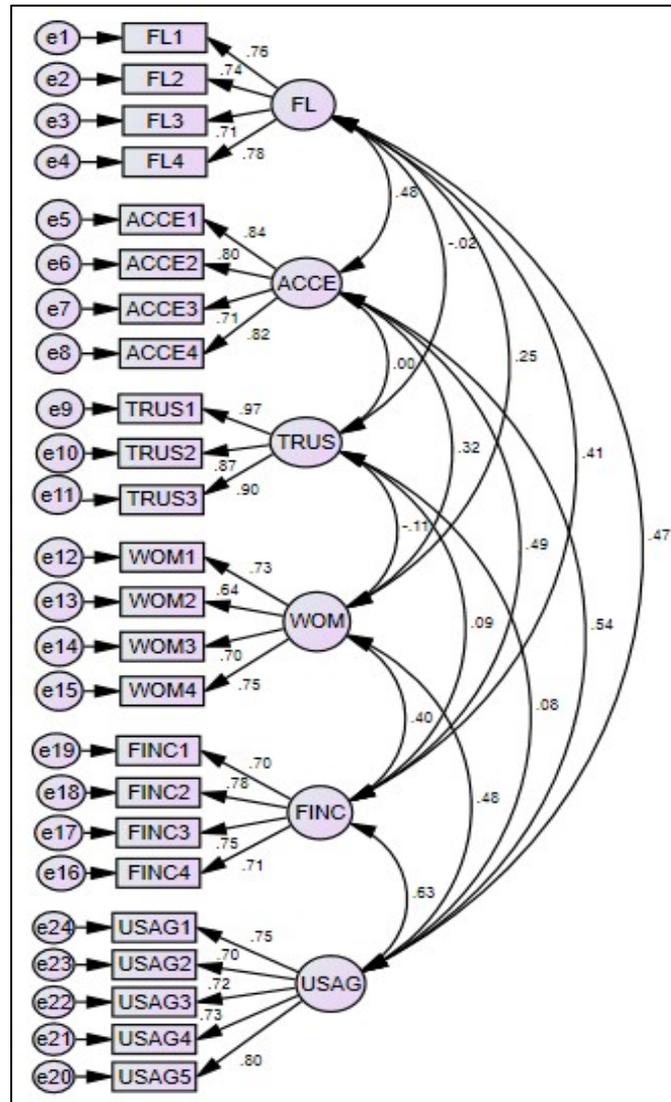
Figure 2: Measurement Model

Confirmatory Factor Analysis is used to validate the measurement model developed through Exploratory Factor Analysis. It verifies whether the identified factor structure fits the new population and ensures greater control over one-dimensionality and construct validity compared to EFA. CFA is conducted before Structural Equation Modeling (SEM) to assess how well-observed variables contribute to latent variables, focusing on the model's validity. Additionally, the measurement model, evaluated through CFA, helps establish the reliability and validity of the measuring instrument. Confirmatory factor analysis has been applied using AMOS for six first-order constructs to measure the model data fit. The empirical results are as follows: chi-square/degree of freedom = 1.636, Comparative Fit Index (CFI) = 0.953, Tucker and Lewis Index (TLI) = 0.945, and RMSEA = 0.04 (*p* = 0.00), indicating an acceptable model fit. Further, a validity check was conducted to ensure that the data collection instruments accurately measured what they were intended to measure. This process verifies the precision and relevance of the instruments used in the study (Saunders & Thornbill, 2003).

Table 4: Reliability and validity of measurement model

Construct	Label	Factor loading	CR	AVE
Financial Literacy (FL)	FL1	0.764	0.836	0.561
	FL2	0.744		
	FL3	0.707		
	FL4	0.780		
Accessibility (ACCE)	ACCE1	0.840	0.871	0.629
	ACCE2	0.802		
	ACCE3	0.708		
	ACCE4	0.816		
Trust (TRUS)	TRUS1	0.968	0.937	0.832
	TRUS2	0.868		
	TRUS3	0.897		
Word of Mouth (WOM)	WOM1	0.732	0.801	0.502
	WOM2	0.645		
	WOM3	0.699		
	WOM4	0.754		
Financial Inclusion (FINC)	FINC1	0.701	0.825	0.542
	FINC2	0.777		
	FINC3	0.751		
	FINC4	0.713		
Banking Service Usage (USAG)	USAG1	0.746	0.857	0.547
	USAG2	0.699		
	USAG3	0.723		
	USAG4	0.726		
	USAG5	0.799		

Source: Author's calculation

Table 4 presents the results of the measurement model, including factor loadings, Composite Reliability (CR), and Average Variance Extracted (AVE) for all constructs. The factor loadings largely exceed the recommended threshold of 0.70, with a few marginally acceptable values above 0.60, thereby indicating satisfactory indicator reliability (Hair *et al.*, 2010). These results suggest that the observed variables adequately represent their respective latent constructions. Further, the Composite Reliability (CR) values for all constructions are above 0.80 and exceed the recommended cut-off value of 0.70, confirming strong internal consistency reliability. Among the constructs, trust demonstrates the highest reliability with a CR of 0.937, whereas word of mouth reports the comparatively lowest, yet acceptable, reliability value with a CR of 0.801. In addition, the Average Variance Extracted (AVE) values for all constructs surpass the threshold of 0.50, indicating adequate convergent validity. Specifically, the AVE values are 0.561 for Financial Literacy, 0.629 for Accessibility, 0.832 for Trust, 0.502 for Word of Mouth, 0.542 for Financial Inclusion, and 0.547 for Banking Service Usage. These results indicate that each construct accounts for more than 50% of the variance in its respective indicators, thereby confirming adequate convergent validity. Overall, the results confirm that the measurement model demonstrates satisfactory indicator reliability, internal consistency reliability, and convergent validity, thereby justifying progression to structural equation modelling for hypothesis testing.

Table 5: Discriminant validity

Factors	FL	ACCE	TRUS	WOM	USAG	FINC
FL	0.749					
ACCE	0.475	0.793				
TRUS	-0.017	-0.003	0.912			
WOM	0.254	0.322	-0.113	0.709		
USAG	0.471	0.539	0.078	0.482	0.739	
FINC	0.405	0.490	0.090	0.405	0.627	0.736

Note: Diagonal in bold are the square root of the AVE of each construct and off-diagonal values are inter-construct correlations.

Further, a validity check was conducted to ensure that the data collection instruments accurately measured what they were intended to measure. This process verifies the precision and relevance of the instruments used in the study (Saunders & Thornbill, 2003). Discriminant validity assesses the degree to which factors are distinct and unrelated to each other. High discriminant validity ensures that a construct is distinct and accurately captures specific phenomena. It should account for more variance in its indicators than in those of other constructs. The obtained diagonal value of the square root of AVE for each construct exceeded the off-diagonal value, satisfying the discriminant validity as presented in Table 5.
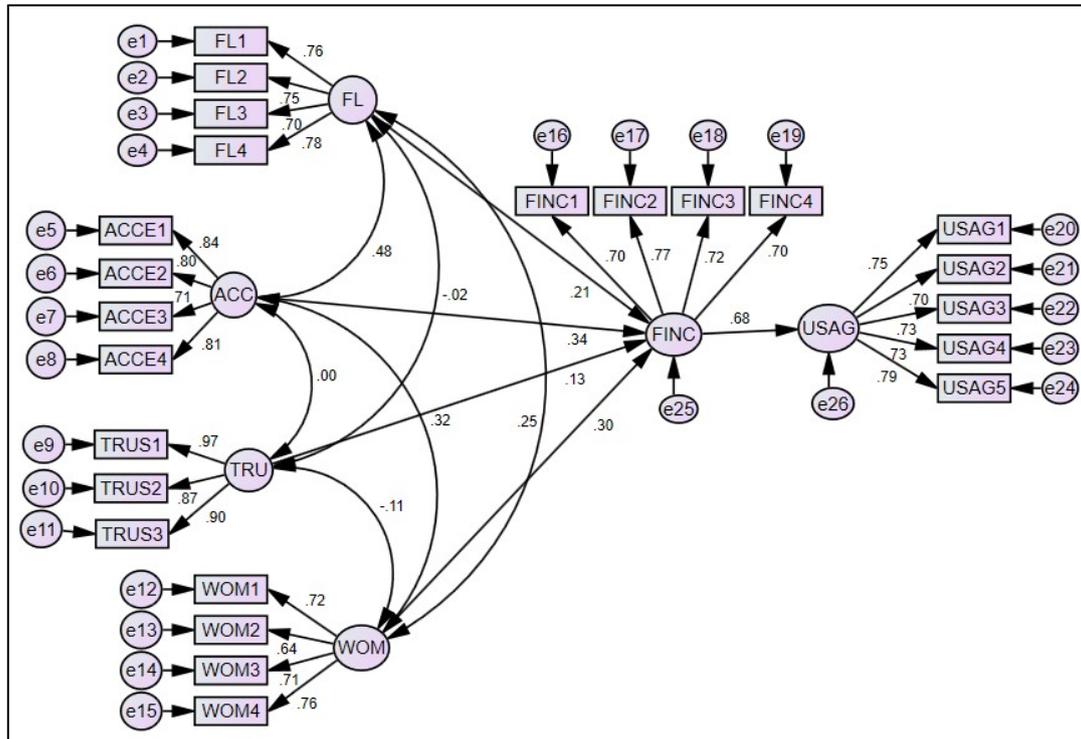

Figure 3: Standardized path coefficients

The assessment of the model shows that the goodness-of-fit statistic normed chi-square value is 1.762, which is below the recommended value of 3. Similarly, the value of absolute fit indices (GFI = 0.89 and RMSEA = 0.05) and incremental fit indices (CFI = 0.943, NFI = 0.88, and TLI = 0.94) have met the cut-off value recommended in earlier studies (Hair *et al.*, 2014). Therefore, the model fit meets the criteria necessary for an adequate fit with the data.

Table 6: Structural equation model results

Hypothesis	Relationship	Estimate	S.E.	*t*-value	*p*-value	Result
H1	FL → FINC	0.212	0.073	2.898	0.004	Accepted
H2	ACCE → FINC	0.294	0.065	4.496	0.000	Accepted
H3	TRUS → FINC	0.121	0.052	2.320	0.020	Accepted
H4	WOM → FINC	0.357	0.084	4.227	0.000	Accepted
H5	FINC → USAG	0.626	0.073	8.533	0.000	Accepted

Note: p-value is significant at 5% level

According to Table 6, the causal relationship of path coefficients is found to be statistically significant at the 5% significance level. Financial literacy is found to be an influencing factor of financial inclusion (H1: β = 0.212, *t* value = 2.898). Similarly, accessibility (H2: β = 0.294, *t* value = 4.496), trust (β = 0.121, *t* value = 2.320), and word of mouth (β = 0.357, *t* value = 4.227) are the influencing constructs of financial

inclusion. Further, financial inclusion influences usage of banking services of female customers significantly (β = 0.626, t value = 8.533), and the *p*-values are found significant at the 5% level of significance.

The study found that all the hypotheses framed are accepted and lead to the following inferences: The level of financial literacy among women positively impacts their financial inclusion. This suggests that when women are well-informed about various financial products and services, they are more likely to engage with and participate in the formal financial system. Lusardi and Mitchell (2014) also echoed this, arguing that financial literacy equips individuals to make sound financial decisions, facilitating greater participation in financial systems.

Accessibility to financial services plays a foundational role in empowering women economically and socially. Mabrouk *et al.* (2023) also found that increased access to financial services has significantly enhanced women's roles in economic decision-making and their overall economic development.

The trust of women beneficiaries in women BCs influences women's propensity to be included in the formal financial system. Ghosh and Vinod (2017) also found that women with higher trust in banks are more likely to access and use financial services, including savings accounts and credit. The study suggests that improving institutional trust can significantly promote financial inclusion for underserved groups.

Word of Mouth (WOM) among women BCs significantly influences women's absorption into the formal financial system. Chauhan (2021) also found that word of mouth significantly impacts women's financial inclusion by creating informal networks that facilitate information flow, especially for those who are unbanked or financially excluded.

Financial inclusion plays a crucial role in enhancing the use of formal financial systems, particularly for women, who increasingly leverage these services for savings and credit. Demirgüç-Kunt *et al.* (2018) found in their analysis of the Global Findex Database that a strong correlation exists between financial inclusion and the utilization of formal financial services.

Limitation

This study is geographically confined to three districts of West Bengal, i.e., Kalimpong, Darjeeling, and Jalpaiguri. As a result, the findings may not be fully generalizable to the entire region. Thus, a state-level empirical study would strengthen the external validity of the results and enhance their generalizability. Furthermore, although the study examines the direct relationships among the constructs, it does not incorporate a formal mediation analysis. Future research could address this limitation by employing mediation modeling to evaluate the indirect effects of the antecedent variables on banking service usage through financial inclusion, thereby providing a more comprehensive understanding of the underlying causal relationships.

Conclusion

Financial inclusion offers numerous benefits to impoverished households by providing opportunities to build savings, make investments, and access credit. The empirical results clearly point out that the engagement of women BC/Bank Sakhis has catalyzed the access and usage of the financial system by women. More women should be encouraged to join the certificate course for business correspondents run by the Indian Institute of Banking and Finance. Banks should strategically leverage Women Business Correspondents (BCs) to address both the demand and supply side challenges of financial inclusion. As local residents, these women are more approachable to the least educated and disadvantaged groups, making it easier for them to access financial services without needing to visit bank branches. The convenience of accessing banking services during extended hours encourages rural customers to use these services regularly, reducing their travel time and minimizing costs. These women can contribute to higher financial inclusion and build a profitable self-employment career for themselves. The BC-Sakhi model now needs to be compulsorily integrated into the NRLM program and made applicable to every state in India. A financially empowered woman is necessary to build resilience

for socio-political aberrations that still haunt millions of women in India. The findings underscore that women banking agents possess a distinct trust advantage and facilitate more effective communication, making them particularly accessible to female clients. This is especially significant in regions where social norms restrict interactions between women and male banking agents.

Conflict of Interest

The authors affirm that there are no conflicting objectives.

Acknowledgement

References

Adetunji, O. M., & David‑West, O. (2019). The Relative Impact of Income and Financial Literacy on Financial Inclusion in Nigeria. *Journal of International Development, 31*(4), 312–335. https://doi.org/10.1002/jid.3407

Allen, F., Demirguc-Kunt, A., Klapper, L., & Peria, M. S. M. (2016). The foundations of financial inclusion: Understanding ownership and use of formal accounts. *Journal of Financial Intermediation, 27*, 1-30. https://doi.org/10.1016/j.jfi.2015.12.003

Banerjee, A. V., Chandrasekhar, A. G., Duflo, E., & Jackson, M. O. (2013). The diffusion of microfinance. *Science, 341*(6144), 1236498. https://doi.org/10.1126/science.1236498

Barik, R., Sharma, P. (2019). Analyzing the progress and prospects of financial inclusion in India. *Journal of Public Affairs, 19*(4), e1948. https://doi.org/10.1002/pa.1948

Beck, T., Demirguc-Kunt, A., & Peria, M. S. M. (2007). Reaching out: Access to and use of banking services across countries. *Journal of Financial Economics*, *85*(1), 234-266. https://doi.org/10.1016/j.jfineco.2006.07.002

Bruhn, M., & Love, I. (2014). The real impact of improved access to finance: Evidence from Mexico. *The Journal of Finance, 69*(3), 1347-1376. https://doi.org/10.1111/jofi.12091

Cámara, N., & Tuesta, D. (2014). Measuring financial inclusion: A muldimensional index. *BBVA Research Paper,* (14/26). http://dx.doi.org/10.2139/ssrn.2634616

Chauhan, S. (2021). Social and financial efficiency: A study of Indian microfinance institutions. *IIM Kozhikode Society & Management Review, 10*(1), 31-43. https://doi.org/10.1177/2277975220953311

Davis, J. M. (2016). Toward a Capacity Framework for Useful Student Learning Outcomes Assessment in College Foreign Language Programs. *The Modern Language Journal, 100*(1), 377–399. https://doi.org/10.1111/modl.12319

Demirgüç-Kunt, A., Klapper, L. F., & Singer, D. (2013). Financial inclusion and legal discrimination against women: evidence from developing countries. *World Bank Policy Research Working Paper*, (6416). https://doi.org/10.1596/1813-9450-6416

Demirgüç-Kunt, A., Klapper, L. F., Singer, D., & Van Oudheusden, P. (2015). The global findex database 2014: Measuring financial inclusion around the world. *World Bank Policy Research Working Paper*, (7255). https://ssrn.com/abstract=2594973

Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). The Global Findex Database 2017: Measuring financial inclusion and opportunities to expand access to and use of financial services. *The World Bank Economic Review, 34*(Supplement), S2–S8. https://doi.org/10.1093/wber/lhz013

Ennew, C. T., Banerjee, A. K., & Li, D. (2000). Managing word of mouth communication: Empirical evidence from India. *International Journal of Bank Marketing, 18*(2), 75–83. https://doi.org/10.1108/02652320010322985

Ghosh, S., & Vinod, D. (2017). What constrains financial inclusion for women? Evidence from Indian micro data. *World Development, 92*, 60-81. https://doi.org/10.1016/j.worlddev.2016.11.011

Grohmann, A., Klühs, T., & Menkhoff, L. (2018). Does financial literacy improve financial inclusion? Cross country evidence. World Development, 111, 84-96. https://doi.org/10.1016/j.worlddev.2018.06.020

Hair, J. F., Black, W.C., Babin, B.J. and Anderson, R. E. (2010). *Multivariate Data Analysis*. Pearson Education Inc., New Delhi.

Hair, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review, 26*(2), 106–121. https://doi.org/10.1108/EBR-10-2013-0128

Hannig, A., & Jansen, S. (2010). *Financial inclusion and financial stability: Current policy issues* (No. 259). ADBI working paper. Tokyo: Asian Development Bank Institute. https://www.adb.org/sites/default/files/publication/156114/adbi-wp259.pdf

Huston, S. J. (2010). Measuring Financial Literacy. *Journal of Consumer Affairs, 44*(2), 296–316. https://doi.org/10.1111/j.1745-6606.2010.01170.x

Hwang, B. H. (2023). The impact of word-of-mouth communication on investors' decisions and asset prices. In *Handbook of financial decision making* (pp. 171-191). Edward Elgar Publishing. https://doi.org/10.4337/9781802204179.00018

Jaiswal, P. S., & Dhar, S. N. (2023). *Agency Banking in India: Operations, Viability and Impact with Cases.* Mittal Publications, New Delhi. https://mittalbooks.com/products/agency-banking-in-india-by-pintu-prasad-jaiswal-samirendra-nath-dhar

Khan, F., Siddiqui, M. A., & Imtiaz, S. (2022). Role of financial literacy in achieving financial inclusion: A review, synthesis and research agenda. *Cogent Business & Management, 9*(1), 2034236. https://doi.org/10.1080/23311975.2022.2034236

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

Mabrouk, F., Bousrih, J., Elhaj, M., Binsuwadan, J., & Alofaysan, H. (2023). Empowering women through digital financial inclusion: Comparative study before and after COVID-19. *Sustainability, 15*(12), 9154. https://doi.org/10.3390/su15129154

Ministry of Finance. (2024, August 28). *Pradhan Mantri Jan Dhan Yojana (PMJDY) – National Mission for Financial Inclusion — completes a decade of successful implementation*, Press information Bureau, Delhi. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2049231&reg=3&lang=2

Nunnally, J. C. (1967). Assessment of reliability. *Psychometric Theory*, 206-235. https://garfield.library.upenn.edu/classics1979/A1979HZ31300001.pdf

OECD. (2011). *Women's Economic Empowerment.* https://www.oecd.org/en/about/programmes/mena-oecd-competitiveness-programme/women-s-economic-empowerment.html

Reserve Bank of India (RBI). (2006, January 25). *Financial Inclusion by Extension of Banking Services– Use of Business Facilitators and Correspondents.* https://www.idbi.bank.in/pdf/fi/policy-rbi-circular-on-use-of-bf-bc.pdf

Saunders, M. and Thornhill, A. (2003). Organisational Justice, Trust and the Management of Change - An Exploration. *Personnel Review, 32*(3), 360-375. https://doi.org/10.1108/00483480310467660

The Wire (2023, December 20). *20% of Banks Accounts Opened Under Jan Dhan Yojana Are Inoperative: Finance Ministry.* https://thewire.in/banking/20-of-banks-accounts-opened-under-jan-dhan-yojana-are-inoperative-finance-ministry

Xu, X. (2020). Trust and financial inclusion: A cross-country study. *Finance Research Letters*, *35*, 101310. https://doi.org/10.1016/j.frl.2019.101310

Zins, A., & Weill, L. (2016). The determinants of financial inclusion in Africa. *Review of Development Finance, 6*(1), 46-57. https://doi.org/10.1016/j.rdf.2016.05.001