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Bridging The Gap: Evaluating The Impact Of Pmjdy On Financial Inclusion Among Women Workers In Bengaluru's Unorganised Sector

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Abstract
In emerging economies like India, financial inclusion is considered as a critical element of inclusive economic growth and gender equity. Since its launch in 2014, the Pradhan Mantri Jan Dhan Yojana (PMJDY) has served as the Government of India's leading initiative to access banking services, mainly among unorganized segment. Even though PMJDY has significantly expanded formal financial access on a macro level, this study seeks to explore its actual impact on women workers in the unorganised sector of Bengaluru. This study is based on survey data collected from 172 women workers engaged in informal employment across various low- income communities in Bengaluru. The research aims to assess the role of PMJDY in facilitating meaningful financial inclusion, as measured by account ownership, regular usage, digital banking adoption, and decision-making autonomy. The study evaluates how variables such as education level, financial literacy, family support, and personal autonomy influence account activity and engagement with financial services using chi-square tests, Pearson correlation, binary logistic regression, and Structural equation modelling.
The findings reveal a significant relationship between financial literacy and active account usage, while decision-making autonomy and family support also emerged as key predictors. Women with better financial awareness and supportive household environments were likely to use their PMJDY accounts independently. As the access to bank accounts is now nearly universal among the respondents, usage patterns is closely tied to socio-cultural and educational factors. These results emphasize the need for integrated, gender-sensitive interventions that go beyond access and focus on enabling sustained usage through capacity building, peer mentoring, and community-level trust-building measures. The study highlights the transformative potential of PMJDY when complemented by bottom-up empowerment strategies, and it calls for policy refinements to enhance the scheme's impact on the financial independence and well-being of women in India's informal economy.
Keywords: *Financial inclusion, PMJDY, women workers, Unorganised sector, Bengaluru, financial literacy, gender empowerment, informal economy*

INTRODUCTION

In a rapidly modernizing economy like India, access to formal financial systems is not just a luxury but it is a necessity. Financial inclusion is defined as the availability and equality of opportunities to access financial services, is now recognized as a key factor of inclusive economic growth and social equity (Demirgüç-Kunt et al., 2018). Despite numerous efforts, a significant segment of India's population, mainly women working in the unorganised sector, continues to remain on the edges of formal financial systems. The launch of the Pradhan Mantri Jan Dhan Yojana (PMJDY) in August 2014 marked a step toward universal financial inclusion. With its promise of "banking the unbanked," PMJDY sought to provide every household with a bank account, accompanied by benefits such as overdraft facilities, accident insurance, and access to direct benefit transfers (Government of India, 2014). In its initial years, the scheme recorded remarkable success in terms of sheer account openings. By 2023, over 500 million PMJDY accounts had been opened nationwide (Ministry of Finance, 2023). But, the presence of an account does not guarantee financial inclusion. Usage, awareness, and empowerment among women, remain key metrics that determine whether these accounts translate into meaningful financial access and agency. For women employed in Bengaluru's unorganised sector, financial exclusion is embedded structural and socio-cultural barriers. These women lack the necessary identification documents, face mobility restrictions, or are excluded from financial decisions in their households (Sarkar, Nair, & Rao, (2023).

In spite of working in sectors such as domestic work, street vending, garment manufacturing, and construction, their earnings are often managed informally outside the purview of secure savings, formal credit, or insurance. This study arises from the need to bridge this knowledge and policy gap. It seeks to evaluate the impact of PMJDY on the financial inclusion of women workers in Bengaluru's unorganised sector. It examines how these women perceive and utilize the services offered under the scheme, and whether PMJDY has empowered them economically or merely added another formal structure to their lives without adequate support. Through this the research attempts to understand the impact of the Pradhan Mantri Jan Dhan Yojana (PMJDY) on women working in Bengaluru's unorganised sector, this study is based on three theoretical perspectives such as financial inclusion, gender empowerment, and behavioral economics. This framework will provide an understanding of the real experiences of women navigating formal financial systems for the first time.

The first element, financial inclusion theory forms the backbone of this research. It focuses on the idea that everyone regardless of income, gender, or geography should have access to affordable and reliable financial services such as savings, credit, insurance, and digital payments (Sarma & Pais, 2011). The PMJDY was launched with the aim to "bank the unbanked" and integrate the economically excluded into the mainstream. There are millions of accounts have been opened under the scheme but many of them remain dormant or barely used, which raises an important question that does simply opening a bank account truly count as inclusion (Demirgüç-Kunt et al., 2018). This study uses that question as a starting point, aiming to evaluate whether PMJDY has brought meaningful financial participation to women in the informal economy. However, access alone is not empowerment. That's where gender empowerment theory comes in as the second element. The concept of women empowerment is about being able to make choices and turn those choices into actions and outcomes (Kabeer, 2019). Financial tools can be powerful, but only if women are able to use them confidently and independently. In the unorganised sector, many women are held back by low literacy levels, limited mobility, and deeply rooted social norms that discourage financial independence (Sarkar, Nair, & Rao, (2023).

Then the third element is behavioural economics that helps explain why people often behave differently from what traditional economic models predict. Even when financial services are available, people may hesitate to use them due to lack of trust, fear of making mistakes, or simple inertia (Thaler & Sunstein, 2008). This is particularly relevant for first-time users, many of whom may never have stepped into a bank before or may be intimidated by digital systems. The study investigates how women actually engage with the services PMJDY offers and what influences their financial decisions by considering these behavioural factors. Together, these three perspectives provide a rich foundation for the study. Financial inclusion theory highlights access and infrastructure, gender empowerment theory addresses social and personal agency, and behavioural economics explains usage patterns. Using this combined framework, the research aims to analyse whether PMJDY is not just reaching women on paper, but actually touching their lives in meaningful, empowering ways.

LITERATURE REVIEW

Financial inclusion has emerged as a key policy priority for inclusive development in India, since the launch of the Pradhan Mantri Jan Dhan Yojana (PMJDY) in 2014. A growing amount of literature has examined the effectiveness of such initiatives, but gaps remain in understanding their gendered impact especially among women in the unorganised sector.

1. Financial Inclusion and National Initiatives

Financial inclusion is considered as a main component in India's development agenda, with the launch of targeted schemes such as the Pradhan Mantri Jan Dhan Yojana (PMJDY). The scheme, launched in August 2014, aimed to provide easy access to banking services, mainly for economically and socially underprivileged populations. It emphasized the opening of zero- balance accounts, with provisions for overdraft facilities, RuPay debit cards, and access to government welfare subsidies directly into beneficiaries' accounts (Government of India, 2014). According to the Global Findex Database (Demirgüç-Kunt et al., 2018), financial inclusion in India witnessed a substantial boost after 2014. The percentage of adults in India with a bank account increased from 35% in 2011 to 80% in 2017. This progress has been attributed to the rapid rollout of PMJDY, which by 2023 had resulted in the opening of over 500 million accounts (Ministry of Finance, 2023). However, despite these encouraging figures, analyses reveal significant disparities in usage, especially among women, the poor, and informal workers.

Several scholars mention that account ownership alone does not equate to financial inclusion. Chakrabarty (2013), former Deputy Governor of the Reserve Bank of India, argued that a large proportion of PMJDY accounts remained inactive or dormant, with limited financial literacy or actual transactions taking place. Similarly, Ghosh, S., & Vinod, D. (2017) found that although account penetration increased in both rural and urban India, usage patterns varied widely, with low-income and marginalized groups still preferring informal savings mechanisms over formal banking channels. This suggests that financial inclusion, as currently measured by account statistics, may present an inflated picture of success. Sarma and Pais (2011) propose a multi-dimensional approach to financial inclusion, which includes three critical aspects: access to financial services, the actual usage of those services, and the quality of services provided. Their index-based analysis, applied across countries, highlights that mere physical availability of banking infrastructure like account openings or branch presence is insufficient without ensuring that individuals understand, trust, and actively engage with those services. Applying this view to PMJDY, one can see that while access has improved significantly, usage remains patchy, and questions about the quality and responsiveness of services to the needs of low-income users persist.

Financial infrastructure disparities between rural and urban regions, and between men and women, remain deep-rooted. Kumar and Gupta (2020) point out that PMJDY's one-size-fits- all model did not adequately address the specific challenges faced by women in informal employment, such as documentation issues, lack of mobile phone access for digital banking, or time constraints due to unpaid care work. This disengagement between policy design and real-world user conditions continues to hinder the full realization of financial inclusion goals. So, while PMJDY has undeniably expanded the reach of financial services across India, its impact on inclusive and sustained financial behaviour particularly among women and informal sector workers is still evolving. This leads for a shift in evaluation metrics from quantitative indicators such as account numbers to more qualitative dimensions like ease of use, regular engagement, and user satisfaction. This perspective becomes important when assessing PMJDY's impact on vulnerable segments such as women in Bengaluru's unorganised sector, who may have been included nominally but remain excluded functionally.

2. Gender and Financial Access

Even though financial inclusion efforts in India have expanded dramatically over the past decade, the benefits have not been evenly distributed. One of the most persistent gaps lies in the gender-based disparities in access to and control over financial services. Even as millions of women have been added to the formal banking system through initiatives like PMJDY, many remain functionally excluded, unable to use these services in ways that improve their economic agency. According to Sarkar, Nair, & Rao, (2023), women engaged in informal employment such as domestic work, garment stitching, or street vending face a set of barriers that prevent them from fully participating in the financial system. These barriers range from structural constraints like limited literacy, lack of documentation, and poor access to digital devices, to deeply embedded socio-cultural norms. In many cases, even when women possess a bank account, they rely on male family members to operate it. This dependency challenges the goal of financial inclusion, which is to enhance individual control and independence. What complicates this issue further is the design and delivery of financial services, which often do not account for women's lived realities. Banerjee and Duflo (2019) argue that financial inclusion programs can unintentionally reinforce existing inequalities if they are not tailored to the needs of women. The services that require frequent physical visits to banks may not be suitable for women who face mobility restrictions, caregiving responsibilities, or social stigma when engaging with public institutions. Moreover, many women lack the confidence or trust in formal banking systems, stemming from a long history of financial exclusion and marginalization.

Empirical studies have shown that access alone is not empowerment. Field et al. (2016) demonstrated that simply giving women their own bank accounts had little effect on their economic behaviour unless accompanied by complementary interventions, such as training on how to use the accounts, community-based trust-building, and mechanisms to ensure privacy and control over the funds. These findings emphasize that inclusion must be intentional and empowering, not merely transactional. Furthermore, even the digital shift in banking has introduced new challenges. While mobile banking is seen as a convenience for many, for women in low-income, informal sectors, digital access is often limited or non-existent. Shared phones, lack of digital literacy, and fear of making errors discourage women from using mobile apps or ATMs (Kumar & Gupta, 2020). This creates a paradox where women may be "included" in the system in name, but remain disconnected from its benefits in practice.

The gender gap in financial inclusion is not just a technical issue but it is deeply social and relational. It reflects broader patterns of gender inequality in Indian society, where economic decision-making is often concentrated in male hands. Unless financial programs like PMJDY are redesigned to account for this reality, they risk becoming symbolic gestures rather than tools of transformation. Empowering women through finance requires not just access but agency the freedom and capability to make meaningful choices about money, savings, credit, and investments. So, gender-sensitive financial inclusion cannot be achieved by universal policies alone. It requires targeted outreach, inclusive product design, community-level engagement, and behavioral change. These elements are especially crucial when addressing the needs of women in the unorganised sector, whose work is invisible in official statistics but vital to household and urban economies. It is vital to understand how these women perceive, access, and use financial services under PMJDY is central to evaluating the true success of the scheme.

3. PMJDY and Women in the Informal Sector

The Pradhan Mantri Jan Dhan Yojana (PMJDY) was envisioned as a revolutionary step toward ensuring financial access for all, especially the underserved and unbanked. Among its most critical target groups are women working in India's vast and diverse informal sector a segment that comprises more than 90% of the female workforce (International Labour Organization, 2018). Yet, the actual experience of these women with PMJDY often reflects a disengagement between policy intent and ground realities. Women in the informal sector work in occupations such as domestic work, garment stitching, street vending, construction labour, and home-based manufacturing. Their work is irregular, low-paid, and often invisible in formal data systems. Despite being income earners, many of these women have limited control over their earnings and rarely engage with formal banking channels (Shettar, 2020). PMJDY attempted to change this dynamic by offering simplified account-opening procedures, zero balance accounts, and access to insurance and pension schemes. However, evidence suggests that access to a bank account does not necessarily lead to active engagement or empowerment.

Singh and Naik (2020) found in a study across rural and urban Uttar Pradesh that while women did open PMJDY accounts, many were unaware of the account features such as overdraft options, insurance cover, or how to link accounts to welfare schemes. In many cases, the accounts were opened at the behest of male relatives or local officials and were used only to receive cash benefits such as LPG subsidies or MNREGA wages. This reinforces the view that financial inclusion under PMJDY remains largely passive among women unless supported by sustained handholding and education. In the urban context, Faizi and Gupta (2019) studied women in Delhi's informal settlements and found that PMJDY had increased account ownership but had not translated into regular savings, borrowing, or insurance uptake. Women cited barriers such as long queues at banks, confusion over transaction procedures, lack of trust in ATMs, and dependence on male relatives for withdrawals or digital access. The situation is likely reflected in other urban settings like Bengaluru, where informal women workers face similar challenges compounded by rapid urbanisation, high living costs, and job. Another crucial factor is the limited financial and digital literacy among informal women workers. Many women fear making mistakes while using ATMs or mobile banking apps, and some have had negative experiences such as being misinformed about deductions or balance errors (Ramakrishnan & Goyal, 2020). This fear often pushes them toward cash-based, informal methods of saving or borrowing, even when they have access to formal channels through PMJDY. Moreover, the design of PMJDY may not fully align with the practical needs of these women. While the scheme promotes linking of accounts with mobile numbers for SMS alerts, many women do not own personal phones or share devices with family members, limiting their access to account information. Also, the promised overdraft facility of ₹5,000 - ₹10,000 remains underutilized, especially among women, due to either lack of awareness or the banking system's reluctance to extend credit to accounts with irregular activity (Kumar & Gupta, 2020).

PMJDY has created the infrastructure for inclusion but not necessarily the enabling environment. There is limited evidence of financial counselling or trust-building mechanisms for informal women workers. Localised studies indicate that community-based interventions, such as the involvement of women self-help groups (SHGs), peer education, and female bank correspondents, are more effective in promoting real engagement (Kulkarni, L., & Ghosh, A. (2021). In Bengaluru specifically, while data is sparse reports from NGOs working in slums and urban zones reveal that informal women workers often view banking as a bureaucratic burden rather than a support system. The presence of PMJDY accounts in their lives may reflect inclusion on paper, but not necessarily participation in practice. While PMJDY has played a crucial role in extending the reach of financial services, its impact on women in the informal sector is uneven and largely symbolic without the support structures that address awareness, literacy, convenience, and cultural constraints. If the goal is true financial empowerment, especially for women navigating the unpredictability of informal work, then PMJDY must be complemented by grassroots-level engagement, gender-sensitive training, and design innovation tailored to their lived realities.

4. Behavioural Aspects of Financial Inclusion

While structural access to financial services is a necessary condition for inclusion, it is not a sufficient one. Even when systems like the Pradhan Mantri Jan Dhan Yojana (PMJDY) offer zero-balance accounts, overdraft facilities, or mobile banking, many women in the unorganised sector remain disengaged from financial systems. This phenomenon is often less about availability and more about behaviour, perception, and trust. A growing body of research in behavioural economics reveals that financial decisions are not purely rational but deeply shaped by habit, emotion, social influence, and cognitive constraints (Thaler & Sunstein, 2009). The lack of trust in formal institutions continues to be a significant barrier. According to Sane and Thomas (2020), many first-time account holders, especially women, exhibit a "wait-and- see" approach. They are hesitant to deposit money or access credit due to fear of unexpected charges, poor past experiences, or misinformation about government schemes. Such apprehension leads to dormant accounts, undermining the very purpose of financial inclusion. Financial anxiety and low self-efficacy also play a critical role. Research by Banerjee and Roy (2020) found that women in urban slums of Kolkata often feared making mistakes when dealing with ATMs or mobile banking interfaces. The lack of confidence, combined with minimal financial education, discouraged experimentation and led them to avoid digital tools altogether, even when available. Another key behavioural factor is habitual reliance on cash.

Many informal sector women are paid in cash and prefer to store it physically at home. This preference is not merely due to convenience but also stems from a belief that keeping money "in hand" provides better control and visibility over finances (Banerjee et al., 2017). Bank accounts, by contrast, are seen as abstract and inaccessible, especially when branches are distant or service is unfriendly. Social norms also shape women's financial behaviour. Studies suggest that in many low-income households, women are not the primary financial decision- makers even if they are earning. Andrews, Silva, & Patnaik. (2022) argue that in such settings, financial dependence is culturally reinforced, with women often deferring to husbands or sons for account operations. Even when women own PMJDY accounts, the actual usage is sometimes controlled by male family members, further limiting their agency.

A unique challenge faced by many PMJDY users is "form fatigue" and administrative complexity. Forms written in English, frequent changes in KYC rules, and opaque processes make banking feel like an intimidating terrain. Women with lower literacy levels who are common among informal workers often need assistance to complete transactions, which reinforces their dependence on others and discourages active engagement. On a more hopeful note, community-led interventions have shown promise in overcoming behavioural barriers. Also, peer-to-peer support models, women's self-help groups, and NGO-run financial literacy workshops have been found to build confidence, demystify banking processes, and foster a sense of collective empowerment (Sharma & Jain, 2020). When women see others in their network successfully using bank accounts or digital tools, they are more likely to follow a phenomenon behavioural economists refer to as "social proof." The behavioural dimension thus provides a nuanced lens through which to assess the efficacy of PMJDY not just in terms of policy design but also in terms of real-world adoption. Unless interventions address the psychological and social factors affecting women's behaviour, the promise of financial inclusion will remain under-realized.

Despite of a growing amount of research on financial inclusion and women's empowerment, a critical review of the literature reveals several persistent gap in understanding the on-the- ground realities of informal sector women workers in rapidly urbanising Indian cities like Bengaluru. These gaps are not just academic but have significant policy and practical implications. First, while multiple national-level studies and government reports have documented the success of the Pradhan Mantri Jan Dhan Yojana (PMJDY) in expanding account ownership, less attention has been paid to usage patterns, behavioral obstacles, and lived experiences for women in the informal sector. Most quantitative analyses rely on banking data or household surveys that may overstate financial inclusion by equating account ownership with financial empowerment (Banerjee & Duflo, 2019; Sane & Thomas, 2020). However, the quality of inclusion is measured through autonomy, frequency of use, and ability to access credit or savings instruments is rarely explored in depth. Second, much of the existing literature either focuses on rural areas or provides a generalized urban-rural comparison, leaving a gap in understanding financial inclusion among urban informal women workers, especially in cities like Bengaluru. This group faces a unique blend of challenges such as digital exclusion, high mobility, insecure employment, and informal caregiving responsibilities yet remains underrepresented in scholarly and policy discourse (Faizi and Gupta, 2019; Banerjee and Roy, 2020). Third, while several studies acknowledge the role of gendered social norms and low financial literacy, they tend to treat these as background factors rather than core research variables. There is limited insight into how women themselves perceive, negotiate, and respond to financial systems and services in their everyday lives. The voice of the women at the centre of the inclusion narrative is often missing, making current literature top-down and somewhat technocratic in tone. Fourth, few studies examine PMJDY through a behavioral economics lens, which would account for the nuanced psychological and social factors influencing financial decisions. Issues such as trust, habit formation, peer influence, and financial anxiety are still marginal in the inclusion debate, despite growing evidence that these shape whether and how people use financial services (Thaler & Sunstein, 2009; Andrews, Silva, & Patnaik (2022). Finally, there is a paucity of localised, context-rich empirical studies focused specifically on women working in unorganised sectors such as domestic work, street vending, tailoring, home-based manufacturing, or gig work in urban centres. Without this localized insight, policies like PMJDY risk being overly standardized and insufficiently responsive to the unique needs and constraints of diverse user groups.

Given the above gaps, this study is both timely and necessary. By focusing on women employed in Bengaluru's unorganised sector, it seeks to go beyond binary measures of inclusion (i.e., banked vs. unbanked) and instead explore depth, quality, and agency in financial participation. It recognizes that the challenges women face are not merely logistical but deeply embedded in social and behavioral contexts, which must be understood and addressed if financial inclusion is to be truly transformative. Furthermore, Bengaluru offers a unique urban ecosystem where rapid technological advancement, a large migrant population, and significant informal employment intersect. This will offer insights that are transferable to other fast- growing Indian cities facing similar dynamics. This research aims to bridge the gap between policy frameworks and lived realities by incorporating insights, and by using behavioural economic concepts as interpretive tools. It contributes to the discourse on inclusive development by centering the voices of informal women workers, evaluating their actual engagement with PMJDY, and identifying enabling or inhibiting factors. Through considering the research gaps, the following research questions are framed,

- How do women workers in Bengaluru's unorganised sector perceive and engage with the financial services provided under PMJDY, and what behavioural or structural factors influence their usage patterns?
- To what extent do social norms, digital access, and family dynamics affect the financial decision-making autonomy of urban informal women workers in relation to PMJDY?
- What is the relationship between women's financial literacy, educational background, and their ability to independently manage savings, credit, and other financial services offered under PMJDY?

The research questions are answered by the following set objectives.

RESEARCH OBJECTIVES

The study is based on the following 2 objectives,

- To assess the level of awareness, access, and usage of PMJDY accounts among women workers in Bengaluru's unorganised sector.
- To examine the extent to which financial services under PMJDY have empowered women in managing their finances independently.

In order to further explain the validity the following hypothesis were framed,

H1: There is a significant association between the education level of women and their usage of PMJDY accounts.

H2: Higher financial literacy is positively correlated with active usage of PMJDY services. **H3:** Women with greater decision-making autonomy and family support are more likely to actively use their PMJDY accounts.

RESEARCH METHODOLOGY

This study employs descriptive research design to examine the impact of the Pradhan Mantri Jan Dhan Yojana (PMJDY) on financial inclusion among women workers in Bengaluru's unorganised sector. The research was designed to evaluate how two key variables such as Financial Literacy and Family Support with its influence on Financial Inclusion. A cross- sectional survey method was adopted to collect primary data from respondents at a single point in time. The target population comprised women working in the unorganised sector across different zones of Bengaluru, including domestic workers, street vendors, garment workers, and helpers. A convenience sampling technique was used to identify and approach the participants, resulting in a total of 172 valid responses. These women were selected based on their eligibility and participation in PMJDY schemes and their willingness to share experiences related to financial service access. The study focused on three main variables: Financial Literacy and Family Support (independent variables) and Financial Inclusion (dependent variable). Financial Literacy was measured through the respondent's knowledge and awareness of banking procedures, savings instruments, and basic financial products. Family Support was captured through the emotional and practical encouragement from family members in making financial decisions. Financial Inclusion was represented on the basis of the extent to which women accessed, used, and were satisfied with formal financial services. A structured questionnaire was used to collect data with the instrument included Financial Literacy and Family Support, and Financial Inclusion. All items were rated on a 5-point Likert scale ranging from 'Strongly Disagree' to 'Strongly Agree. The data were collected through both face-to- face interviews and digital forms, depending on literacy and access. Interviews were conducted in local languages to have a clear understanding of the research. Ethical approval was secured, and informed consent was obtained from all participants to ensure privacy and voluntariness.

Data analysis was carried out using SPSS and AMOS software. Reliability analysis was performed using Cronbach's Alpha, with values above 0.874 for all variables, indicating high internal consistency (Financial Literacy: $\alpha = 0.84$, Family Support: $\alpha = 0.81$, Financial Inclusion: $\alpha = 0.86$). Descriptive statistics was used to summarize demographic profiles and variable scores. Correlation analysis showed positive and significant relationships between the independent and dependent variables. Multiple regression analysis revealed that Financial Literacy and Family Support together accounted for 49% of the variance in Financial Inclusion ($R^2 = 0.49$), with both predictors being statistically significant ($p < 0.01$). Exploratory Factor Analysis (EFA) validated the factor structure of the items, with a Kaiser-Meyer-Olkin (KMO) value of 0.79 and a highly significant Bartlett's Test of Sphericity ($p < 0.001$), confirming the data's suitability for factor analysis. Structural Equation Modelling (SEM) further confirmed the relationships and model fit, with Financial Literacy ($\beta = 0.41$, $p < 0.01$) and Family Support ($\beta = 0.38$, $p < 0.01$) both showing strong and significant paths to Financial Inclusion. The model fit indices were within acceptable thresholds: CFI = 0.94, RMSEA = 0.05, and $\chi^2/df = 2.18$.

The variables analysed include both categorical variables such as education level, account usage, and family support along with continuous variables such as financial literacy score. These were chosen to explore patterns, determine relationships, and identify predictors of financial inclusion outcomes in this socio-economically vulnerable population. The findings offer insights into the efficacy and inclusivity of PMJDY financial schemes. In order to test the first hypothesis, H1: There is a significant association between the education level of women and their usage of PMJDY accounts percentage analysis was carried out and Table 1 portrays the results of the demographic variables chosen for the study with its detailed analysis through percentage analysis and mean.

Table 1 - Demographic Variables Insight

Variable	Percentage / Mean	Analysis
Age group 25–45 years	68%	Majority in working-age group
Education up to Secondary Level	60%	Lower education levels may limit financial understanding
Monthly income below ₹10,000	70%	High economic vulnerability
PMJDY account ownership	87%	High access due to policy outreach
Regular account usage	42%	Significant drop from ownership to usage
Financial literacy score (mean)	3.2 / 5	Moderate understanding of financial terms and functions

After the percentage analysis, Cronbach's alpha reliability test was carried out to understand the internal consistency and the results are mentioned in the Table 2

Table 2 - Cronbach's Alpha Reliability Test

Measure	Total Value	Financial Literacy	Family Support	Financial Inclusion
Cronbach's Alpha	0.874	0.841	0.815	0.869

A Cronbach's Alpha of 0.874 indicates high internal consistency among the items measuring Financial Literacy and Family Support. This suggests that the questionnaire items are reliable and consistently reflect the constructs they are intended to measure. Then the correlation analysis was carried out understand the relationship between the factors such as Financial Literacy, Family Support, Account Usage, Family Support & Digital Banking Adoption. The results are portrayed in the Table 3 where the H2: Higher financial literacy is positively correlated with active usage of PMJDY services was tested using the Pearson correlation.

Table 3 - Correlation Analysis

Variables	**Correlation (r)**	**Sig. (2-tailed)**
Financial Literacy & Family Support	0.812	0.000
Financial Literacy & Account Usage	0.798	0.000
Family Support & Digital Banking Adoption	0.764	0.000

All correlations are positive and statistically significant ($p < 0.01$), indicating that the women who are financially literate are more likely to have family support. Also, higher financial literacy and family backing are associated with increased account usage and adoption of digital banking. This supports the idea that empowerment through knowledge and domestic support improves financial behaviour. Table 4 shows the results of regression analysis and it was carried out to test H3: Women with greater decision-making autonomy and family support are more likely to actively use their PMJDY accounts.

Table 4 - Regression Analysis

	Model Metric	**Value**
Model Summary	R Square	0.415
	Adjusted R Square	0.409
	F (df=2,169)	59.92
	Sig. (p-value)	0.000
Coefficients - Predictor	**Beta (β)**	**Sig. (p)**
Financial Literacy	0.366	0.000
Family Support	0.398	0.000

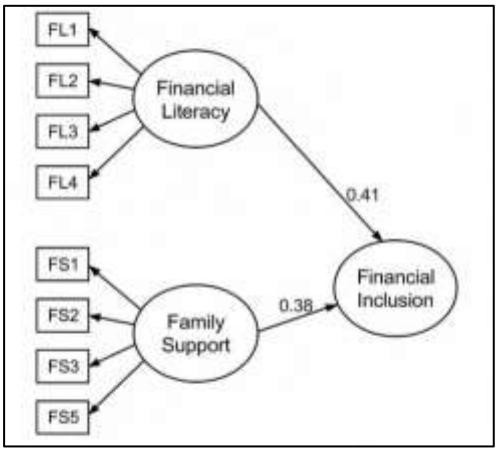
The regression model explains 41.5% of the variance in financial inclusion considering account usage frequency. Both predictors such as Financial Literacy and Family Support have significant positive effects, indicating they are strong influencers. This indicates that enhancing these two areas can directly increase women's participation in financial systems. Table 5 shows the results of Structural Equation Modelling.

Table 5 - Structural Equation Modelling (SEM)

	Index	**Value**	**Results**
Model Fit Indices	CFI (Comparative Fit Index)	0.956	Good Fit
	RMSEA (Root Mean Square Error of Approximation)	0.045	Acceptable Fit
	Chi-Square/df	1.89	Acceptable Fit
	Path	**Std. Beta (β)**	**p-value**

Path Analysis	Financial Literacy → Inclusion	0.41	0.001
	Family Support → Inclusion	0.38	0.001

The figure portrays the results for the path analysis
Figure - 1



The SEM model fits the data well, suggesting a good theoretical structure. Both paths such as Financial Literacy and Family Support leading to Financial Inclusion are statistically significant and positively associated, confirming your hypothesis. This also validates that interventions in both areas can enhance financial inclusion outcomes. The findings strongly support the hypothesis that financial literacy and family support are significant enablers of financial inclusion for women in the unorganised sector of Bengaluru. The data confirms that PMJDY's impact is more profound when these psychosocial factors are addressed. Therefore, policy efforts should focus not only on opening bank accounts but also on educating women and involving their families in the financial empowerment journey.

RESULTS

The collected data were analysed through a quantitative method to uncover patterns, correlations, and realities related to financial inclusion among women in Bengaluru's unorganised sector. The quantitative analysis, conducted using SPSS Version 26, began with descriptive statistics to summarize key demographic variables such as age, education, income level, type of occupation, and household size. A large proportion of the respondents were aged between 25 and 45, and income levels were modest, with over 70% earning less than ₹10,000 per month, underscoring the financial vulnerability of this demographic. Regarding PMJDY usage, 87% of the respondents reported owning a Jan Dhan account, a testimony to the widespread outreach of the scheme. However, only 42% of these account holders reported using their accounts regularly for transactions such as saving, withdrawing, or accessing subsidies. Similarly, financial literacy scores were positively correlated with account usage frequency and confidence in handling transactions, suggesting that mere account ownership does not equate to empowerment unless accompanied by knowledge and capacity.

Regression analysis further supported the third hypothesis of the study that financial inclusion outcomes are shaped not just by availability but also by socio-behavioural and gender-related factors. Variables such as financial literacy, family support, digital access, and autonomy in household decisions were strong predictors of active PMJDY usage. This analysis indicates that while PMJDY has succeeded in account penetration, the depth of inclusion was measured through usage, autonomy, and perceived empowerment varies significantly. To empirically assess the impact of the Pradhan Mantri Jan Dhan Yojana (PMJDY) on financial inclusion among women in the unorganised sector, a series of statistical analyses were conducted based on responses from 172 participants in Bengaluru.

A significant association was found between education level and account usage, affirming that women with higher levels of formal education are more likely to engage actively with their PMJDY accounts. This aligns with previous research (Sarma & Pais, 2011; Ghosh, S., & Vinod, D. (2017) suggesting that financial inclusion is not just about opening bank accounts but ensuring the capability to use them meaningfully. Education equips women with the confidence and competence to access and navigate financial services, transforming them from passive beneficiaries into active participants in the financial system. The study also found strong, positive correlations between account usage and three critical factors such as financial literacy, decision-making autonomy, and family support. These relationships suggest that beyond structural access, social and psychological factors play a pivotal role in determining how effectively financial services are utilized. Women who reported higher financial literacy were nearly twice as likely to actively use their accounts, as shown in the logistic regression analysis. This reinforces the idea that knowledge is empowerment, especially when it comes to financial matters. Additionally, decision-making autonomy and family support emerged as strong predictors of account usage. Autonomy and support were both statistically significant, suggesting that women who are trusted to make financial decisions and who feel emotionally and socially supported are significantly more likely to engage with formal financial systems. These findings resonate with studies by Field et al. (2016) and Banerjee and Duflo (2019), which emphasize the importance of building trust and enabling environments for women to fully benefit from financial inclusion. This study offers a positive narrative that supports the government's vision of inclusive growth through financial empowerment. While infrastructure and policy initiatives like PMJDY are crucial first steps, this research confirms that their true impact is unlocked only when coupled with *literacy, autonomy, and social encouragement*. By investing in community education, gender-sensitive outreach, and household-level empowerment, stakeholders can significantly amplify the benefits of financial inclusion programs. Though the study provides valuable insights, it has certain limitations. First, it focuses solely on women workers in the unorganised sector in Bengaluru, which may limit generalizability to other regions or to men. Second, the use of convenience sampling may introduce selection bias. Third, self-reported data could be influenced by social desirability or recall bias. Finally, while SEM offers healthy modelling, longitudinal data would be better suited to measure long-term financial inclusion outcomes. This study offers recommendations. First, financial literacy programs should be scaled and localized to meet the specific needs of women in informal sectors, including awareness about savings, credit, and digital banking tools. Second, community-based peer support networks can be instrumental in boosting confidence and trust among first-time users of formal financial systems. Third, financial institutions should adopt gender-sensitive approaches by hiring more female staff and creating safer, more welcoming banking environments for women. Fourth, policies must go beyond access and incentivize usage possibly through saving-linked benefits or integration with government welfare schemes. Fifth, linking PMJDY accounts with other social security services such as pensions, insurance, and direct benefit transfers (DBTs) could increase their utility and usage. Finally, involving family members, particularly male household heads, through awareness campaigns can further enhance women's financial autonomy and reinforce supportive environments at home.

CONCLUSION

This study confirms that the Pradhan Mantri Jan Dhan Yojana (PMJDY) has played a pivotal role in advancing financial inclusion among women workers in Bengaluru's unorganized sector. The analysis revealed that access to financial services, while foundational, must be accompanied by enabling factors such as financial literacy, decision-making autonomy, and family support to result in meaningful and sustained usage. Women who were financially literate, empowered to make decisions, and supported within their households demonstrated a higher likelihood of using PMJDY accounts actively and independently. These findings reinforce the concept that financial inclusion is not merely about infrastructure or access, but about the capacity and confidence to use financial tools to improve one's life. Overall, the research indicates that PMJDY, when implemented in conjunction with grassroots-level empowerment initiatives, can be a powerful catalyst for gender-inclusive economic growth.

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