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Assessment of awareness among respondents towards Pradhan Mantri Jan Dhan Yojana: A study in Haryana

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ABSTRACT: Pradhan Mantri Jan Dhan Yojana (PMJDY) is one of the greatest financial inclusion scheme in India which was introduced in 2014 and intends to give everyone with access to banking, credit, insurance, and pension services. This study assesses respondents' knowledge of PMJDY in Haryana. A semi-structured questionnaire was employed to gather primary data from 500 participants across eight districts of Haryana along with secondary data from sources was then added. The questionnaire included demographic variables and thirty statements pertaining to awareness, measured on a five-point Likert scale. We utilized IBM SPSS-22 software to analyze the data through descriptive statistical approaches, reliability analysis, and factor analysis. The results indicated that the surveyee possessed a moderate to a high level of awareness regarding the benefits of PMJDY, particularly its zero-balance feature; however, knowledge deficiencies were observed concerning specific provisions such as the facility for overdraft and insurance. It is indicated by factor analysis that there are two significant components of awareness: "awareness about facilities" and "promotional amenities." The study is crucial for explaining the critical role of awareness in improving the success of financial inclusion. Integrating awareness campaigns and facilitating access to acquire information can assist PMJDY reach more individuals in rural and semi-urban locations. Policymakers, financial institutions and stakeholders working at the grassroots level can use these insights to come up with solid ideas to reduce knowledge gaps and make it easy for all individuals in Haryana to engaged in financial inclusion.

Key words: Awareness, Financial inclusion, Research, Policymaker

Since the economic liberalization begun in the 1990s, India's development plan has steadily focused strengthening the financial system and encouraging broader financial inclusion among the people (Kaur, 2018). In recent years, financial inclusion in India has progressed at a significantly faster pace, partly spurred by policy initiatives and supportive measures enacted by the Central Government and the Reserve Bank of India (Misra *et al.*, 2021). Financial inclusion refers to the process of enabling vulnerable and underprivileged individuals of society with access to formal credit services and fairly priced loans. In India, it plays a remarkable role in supporting equitable economic growth, particularly in a country distinguished by a large population, pronounced rural-urban inequality, and persisting socio-economic difficulties. Well-developed and resilient financial institutions form the backbone of economic prosperity and sustainable development (Joshi and Patil, 2025). Prior to the launch of the Pradhan Mantri Jan Dhan Yojana (PMJDY), various initiatives were done to connect the unbanked

individuals into the official banking system. Nevertheless, despite these efforts, a considerable minority of people especially those living in remote areas and underprivileged communities continued to stay outside the reach of formal financial services. Acknowledging the ongoing disparities and the necessity to enhance financial inclusion, central government initiated the scheme on 28 August 2014. Launched under the guidance of Prime Minister Narendra Modi, this initiative aims to provide universal access to banking services.

PMJDY is considered the biggest step in financial inclusion initiative in India, it had opened 12.54 crore accounts by January 2015, surpassing its original target of 7.5 crore accounts. The scheme's comprehensive monitoring mechanism, with committees at central, state, and district levels, assisted in making sure it was carried out as intended. The integrated approach emphasized the PMJDY scheme's cooperation with Direct Benefit Transfer (DBT) and social welfare initiatives, such

as Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) and Atal Pension Yojana (APY). This execution lowers the risk of leakages and improves the effectiveness of subsidy distribution. It is also noted that technology, such as mobile banking and US Rudimentary banking services accessible even on basic feature phones, has been a game-changer in extending financial services to underserved population (Nimbrayan *et al.*, 2018; Raghuwanshi, 2025). PMJDY is not just about opening bank accounts; it's about bringing the poor into the mainstream of economic progress, giving them dignity and opportunity (Narendra Modi, *Prime Minister of India (2014, Launch speech)*). The title “Jan Dhan” was selected via an online contest on the MyGov Platform, garnering over 6000 proposals from Indian residents and seven individuals were suggested “Jan Dhan Yojana” means people’s money scheme and the slogan for the scheme, “Mera Khata-Bhagya Vidhaatha”, refer as “my bank account - the creator of good fortune” (Dwivedi, 2022; Minakshi *et al.*, 2025). As per the official data published on the PMJDY portal, as of 28th January 2026, the scheme recorded a total of 57.52 crore beneficiaries across all types of banks in India. The PMJDY is act as a crucial step in India’s financial inclusion efforts. It also instrumental in supporting the United Nations Sustainable Development Goals (SDGs) are central to the 2030 roadmap for Sustainable Development. The scheme’s design and goals correlated with various SDGs, ensuring that India’s national policies align with global development priorities. SDG 1: No Poverty - By ensuring that every household have atleast one bank account and accounts can be opened at zero balance, PMJDY creates a safe place for savings. It also provides access to credit and connects users to other government welfare schemes through DBT. This helps in mitigating the dependence corrupt middlemen and on high-interest informal lenders and strengthens households’ capacity to handle financial shocks, aiding poverty reduction in rural and urban areas. SDG 5: Gender Equality - A large number of PMJDY beneficiaries are women, indicating the scheme’s commitment to boosting women’s economic power. SDG 8: Decent Work and Economic Growth - Access to formal financial

services is necessary for starting a business, especially in the micro, small and medium enterprise (MSME) sector (Pandey and Murugesan, 2025). PMJDY helps with business transactions, makes micro-credit available, and connects small entrepreneurs to the digital economy, which promotes job creation and inclusive growth. SDG 10: Reduced Inequalities - By focusing on the unbanked and underserved populations, including marginalized castes, tribes, and rural communities, PMJDY addresses barriers to financial access. SDG 16: Peace, Justice, and Strong Institutions - PMJDY encourages fairness and accountability in delivering welfare benefits to marginilized section of society with the help of financial inclusion, reducing waste and corruption. The PMJDY mainly focuses on six key pillars to promote financial inclusion in India. The first pillar ensures everyone can access banking services in all areas through bank branches or Business Correspondents. The second pillar gives each household a basic savings bank account and a RuPay debit card. The third pillar aims to improve financial literacy, helping individuals understand and use financial services. The fourth pillar provides access to credit through overdraft facilities. The fifth pillar supports micro-insurance by connecting beneficiaries with low-cost schemes like PMSBY and PMJJBY. The sixth pillar fosters pension coverage through the APY, focusing on workers in the unorganized sector (Patnaik *et al.*, 2015).

Despite its remarkable achievements, PMJDY faced significant challenges that hindered its full potential. The percentage of inoperative PMJDY accounts is 23 per cent (as on July, 2025) i.e., 130.4 million (Kumar, 2025). As per RBI guidelines, a savings as well as a current account should be treated as inoperative/dormant, if there are no customer-induced transactions in the account for over a period of two years (*Ministry of Finance, GOI, February 11, 2025*). Low financial literacy, particularly in remote and semi-urban regions, limits beneficiaries’ understanding of the scheme’s features, such as overdraft facilities and insurance benefits. Infrastructural constraints, including limited banking outlets and unreliable internet connectivity in remote regions, further exacerbate these issues. Regulatory

restrictions, especially strict Know Your Customer (KYC) requirements, frequently cause problems for low-income people who might not have the necessary paperwork or be unaware of formal procedures. These difficulties highlight how crucial it is to raise beneficiaries' awareness in order to fully utilize the benefits provided by the scheme. Given these worries, the current research was conducted to determine respondents' awareness of the Pradhan Mantri Jan Dhan Yojana scheme.

MATERIALS AND METHODS

The present research was carried out in eight districts of Haryana state and based on both primary and secondary data. The primary research was collected through a carefully designed questionnaire, whereas secondary research was collected from government record, official reports and published materials related to PMJDY. Area sampling technique was utilized to get proper representation of surveyee from diverse locations. A total of 500 PMJDY beneficiaries were chosen, as respondents for the research. The study was bifurcated into two parts. The first part was to gathered the socio-demographic details of the surveyee, such as age, gender, education qualification, occupation, income, and family structure. The second part was to measure awareness for PMJDY by incorporating thirty well-crafted statements encompassing different domains and answers were indicated on a five-point Likert scale from "Fully aware" to "Misunderstood." The information gathered was processed using IBM SPSS22 software. Descriptive statistics were utilized to analyze the awareness levels of respondents. Cronbach's Alpha was used to check for the internal consistency of the awareness items. Factor analysis was employed to ascertain the key dimensions of awareness among the respondents. To analyze the associations, the following null hypothesis was set: (i) there is no significant difference with respect to demographic variables of respondents with regard to their awareness about the scheme. The outcomes of these analyses generated informative input regarding the extent of awareness and the socio-demographic determinants that affect it in Haryana.

RESULTS AND DISCUSSION

The data in (Table 1) regarding the overall awareness of PMJDY among the respondents which resulted that in the district Ambala and Kaithal of northern region, majority of respondents had medium level of awareness (48.3%) and (45.5%), whereas in southern region, respondents from district Bhiwani had medium (63.0%) level of awareness and respondents from district Rewari had low (47.6%) level of awareness.

In the district (eastern region) Karnal, majority, 58.3 per cent of respondent had a medium awareness level, whereas in the district Panipat, 61.9 per cent of surveyee had a moderate level of awareness. In the western region, respondents from district Hisar had a medium 48.0 per cent level of awareness and respondents from district Fatehabad had a medium level of awareness. In the nut shell, respondents from districts Ambala, Kaithal, Bhiwani, Karnal, Panipat,

Table 1: Overall level of awareness of the PMJDY among the respondents

Category	Zones	District	f (%)
Low (74-85)	North	Ambala	32 (36.8)
Medium (86-96)			42 (48.3)
High (97-108)			13 (14.9)
Low (55 - 70)		Kaithal	9(40.9)
Medium (71 - 86)			10(45.5)
High (87 - 102)			3(13.6)
Low (62-72)	South	Bhiwani	29(29.0)
Medium (73-82)			63(63.0)
High (83-93)			8(8.0)
Low (55-72)		Rewari	40(47.6)
Medium (73-88)			33(39.3)
High (89- 106)			11(13.1)
Low (55-69)	East	Karnal	8(33.3)
Medium (70-84)			14(58.3)
High (85-99)			2(8.3)
Low (70-81)		Panipat	8 (12.7)
Medium (82-93)			39 (61.9)
High (94- 105)			16 (25.4)
Low (62-74)	West	Hisar	4(4.0)
Medium (75-86)			48(48.0)
High (87-99)			48(48.0)
Low (70-81)		Fatehabad	4(20.0)
Medium (82-93)			12(60.0)
High (94-105)			4(20.0)

Parenthesis shows percentage to their respective categories.

*Source -Primary data

Hisar and Fatehabad had a moderate awareness level whereas in only district Rewari respondents had low level of awareness.

KMO and Bartlett’s Test

According to (Table 2), the data is relevant for factor analysis with a Kaiser-Meyer-Olkin Measure of Sampling Adequacy score of 0.793 The Bartlett’s Test of Sphericity result is significant, and the p-value of .000 indicates that the connections between the variables are sufficiently large to support factor analysis.

Factor name and their Eigen values

Eight factors were extracted out of 30 items of respondents awareness level included in the questionnaire, which together explain 64.484 per cent of the total variance. The first factor describes 18.757 per cent of the variance, while the second explains 11.645 per cent as shown in (Table 3). These factors, as described in (Table 3), labelled as “awareness about facilities” and “promotional facilities”.

The first factor is named as “awareness about facilities” is considered by statements highlighting the insurance, overdraft facilities and slogan. The highest factor loading in this factor is 0.793 for statement awareness of the accidental insurance cover under PMJDY and the lowest factor loading in this factor is 0.615 for the statement aware of the overdraft facility available under PMJDY. Cronbach’s alpha value for this factor is 0.80, indicating high reliability. The total variance explained by the awareness about facilities is 18.757 percent. “Promotional facilities” is the second factor encompasses statements related to digital transactions and financial literacy programs. It also

demonstrates good reliability with Cronbach’s alpha value 0.78. The maximum factor loading of this factor is 0.770 for the item PMJDY, which promotes digital transactions. On the other side, the minimum factor loading of this factor, financial literacy programs under PMJDY, is 0.471 and total variance explained by this factor is 11.645 per cent which is lower compared to the first factor, highlighting the importance of promotional facilities to enhance the awareness level of respondents towards PMJDY.

The third factor “accessibility about schemes” includes awareness about Pradhan Mantri Suraksha Bima Yojana (PMSBY) and awareness about PMJDY accounts can be converted to regular savings accounts. It also demonstrates good reliability with Cronbach’s alpha value 0.74. Maximum factor loading of this factor is 0.829 for the item awareness that PMSBY available with PMJDY accounts. On the other side, minimum factor loading of this factor aware that PMJDY accounts can be converted to regular savings accounts is 0.541 and total variance explained by this factor is 10.494 per cent. The fourth factor “benefits under schemes” contains accounts accessibility, opening process, account handling kit and awareness about zero balance features. It also reveals good reliability with Cronbach’s alpha value 0.71. The maximum factor loading of this factor is 0.691 for the item PMJDY accounts are accessible at ATMs and bank branches. On the other side, minimum factor loading of this factor PMJDY accounts can be opened with zero balance is 0.376 and total variance explained by this factor is 5.727 per cent.

The fifth factor “direct Benefit transfers” contains awareness about accounts linked to government welfare schemes and subsidies. It also reveals good

Table 2: KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.793
Bartlett’s Test of Sphericity	Approx. Chi-Square	6281.824
	df	435
	Sig.	.000
Cronbach’s Alpha		0.737
No. of Items		30

Table 3: Factor name and their Eigen values

Factors Name	Statements	Factor Loading	Cronbach's Alpha	Percentage Variance	Cumulative Percentage	Eigen Value's
Awareness about facilities	I am aware of the accidental insurance cover under PMJDY	.793	0.80	18.757	18.757	5.627
	I know about the life insurance cover provided under PMJDY	.763				
	I am aware of the overdraft limit under PMJDY	.718				
	I know the slogan of PMJDY is "Mera Khata Bhagya Vidhata"	.641				
	I am aware of the overdraft facility available under PMJDY	.615				
Promotional Facilities	I know that PMJDY promotes digital transactions	.770	0.78	11.645	30.402	3.493
	I know PMJDY helps in availing loans	.767				
	I know that account holders receive attractive interest rates on deposits	.705				
	I know about the Jan Dhan Darshak app for PMJDY services	.544				
	I know about the financial literacy programs under PMJDY	.471				
Accessibility about schemes	I am aware that Pradhan Mantri Suraksha Bima Yojana (PMSBY) available with PMJDY accounts	.829	0.74	10.494	40.896	3.148
	I know PMJDY accounts can access Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY)	.725				
	I am aware that PMJDY accounts can be converted to regular savings accounts	.541				
Benefits under schemes	I know PMJDY accounts are accessible at ATMs and bank branches	.691	0.71	5.727	46.622	1.718
	I am aware about the opening process of PMJDY account	.665				
	I am aware of the benefits offered under PMJDY	.609				
	I know PMJDY helps in channeling subsidies and benefits to the rightful respondents	.540				
	I am aware that account holder receive passbook in a kit, literature on financial literacy and cheque book	.440				
	I am aware of the documents required to open a PMJDY account	.420				
	I am aware that PMJDY accounts can be opened with zero balance	.376				
	I know PMJDY offers a RuPay Debit Card	.298				
Direct Benefit Transfers	I am aware of Direct Benefit Transfer (DBT) under PMJDY	.806	0.73	5.129	51.752	1.539
	I know PMJDY accounts are linked to government welfare schemes	.756				
	I know that PMJDY accounts can receive subsidies directly from the Government	.646				
Rupay Debit card	I know about the benefits of using RuPay Debit Card	.833	0.69	4.904	56.656	1.471
	I know PMJDY offers a RuPay Debit Card	.798				

	I know the eligibility criteria for opening a PMJDY account	.444				
Privilege under scheme	I know that Swavalamban Scheme offers pension benefits to unorganized sector workers	.665	0.25	4.360	61.016	1.308
	I am aware that no collateral is required under PMJDY	.602				
Role of Business Correspondents	I am aware of the role of Business Correspondents (Bank Mitras) in PMJDY	.684	0.12	3.468	64.484	3.493
	I heard about the Pradhan Mantri Jan Dhan Yojana (PMJDY)	.473				

reliability with Cronbach's alpha value 0.73. Maximum factor loading of this factor is 0.806 for the item aware of DBT under PMJDY. On the other side, minimum factor loading of this factor for the item PMJDY accounts can receive subsidies directly from the Government is 0.646 and total variance explained by this factor is 5.129 per cent. Data further illustrated about the sixth factor "rupay debit card" which contains benefits of using rupay debit card and eligibility criteria for opening PMJDY account. It reveals average reliability with Cronbach's alpha value 0.69. Maximum factor loading of this factor is 0.833 for the item benefits of using RuPay Debit Card. On the other side, minimum factor loading of this factor for the item eligibility criteria for opening a PMJDY accounts is 0.444 and total variance explained by this factor is 4.904 per cent. The seventh factor "privilege under scheme" encloses statements like pension benefits and no collateral is required under PMJDY. It reveals poor reliability with Cronbach's alpha value 0.25. Maximum factor loading of this factor is 0.665 for the item Swavalamban Scheme offers pension benefits to unorganized sector workers Card. On the other side, minimum factor loading of this factor for the item no collateral is required under PMJDY is 0.602 and total variance explained by this factor is 4.360 per cent. Data illustrated about eight factor "role of business correspondents" which includes role of business correspondents (Bank Mitras) in PMJDY and heard about the Pradhan Mantri Jan Dhan Yojana (PMJDY). It reveals poor reliability with Cronbach's alpha value 0.12. Maximum factor loading of this factor is 0.684 for the item role of Business Correspondents (Bank Mitras) in PMJDY. On the other side, minimum factor loading of this factor for the item heard about the PMJDY is 0.473

and total variance explained by this factor is 3.468 per cent.

The intricate relationship between financial inclusion initiatives, current socioeconomic inequalities, and institutional mechanisms meant to partially close the financial divide is reflected in the implementation and development of PMJDY in India. In addition to addressing the long-standing problem of the unbanked population, the program aims to draw attention to more general issues with accessibility, financial literacy, and the long-term viability of prudent financial practices. The study provides useful insights for policymakers, banking institutions, and development practitioners by critically examining participation and usage patterns and placing the inclusion of marginalized groups within their larger socio-economic context. In addition to highlighting PMJDY's revolutionary role in advancing fair access to financial services, the study draws attention to the ongoing need for increased awareness, capacity building, and creative solutions to guarantee population financial empowerment and promote inclusive economic development. Found two important factors: awareness about facilities and promotional facilities which required more attention. In district Ambala majority 48.3 per cent of surveyee had a moderate level of awareness (86-96 range) while in district Kaithal, the pattern was similar, majority of respondents (45.5%) fell into the medium range (71-86 range). The similar results reported by Kurussiveettil and Kanniammal (2024) noted that while literacy boosts awareness among beneficiaries, many still stayed at the medium awareness level. Only a small group reached high awareness. Studies by Kingsly and Sivamurugan in Tamil Nadu showed

that although PMJDY customers generally understood the scheme, they lacked the financial literacy to grasp its details fully.

CONCLUSION

The intent of the research endeavor is to investigate the awareness of Haryana's PMJDY beneficiaries. Due to inconvenience or illiteracy, beneficiaries are still not fully aware of all of PMJDY's facilities. The results showed that while beneficiaries are aware of PMJDY features like ATMs and the role of bank mitras, or business correspondents, they are not as aware of features like no collateral requirements, the ability to receive DBT subsidies directly, eligibility requirements, etc. The study finds that greater financial inclusion has been warmly welcomed by PMJDY beneficiaries, mostly as a result of better access to government welfare transfers and banking services. Awareness among people serves an essential role in ascertaining the utilization of bank account for savings, credit and insurance. The only way to attain 100% awareness is to inculcate financial literacy in the beneficiaries for the optimal use of bank accounts for credit, insurance, and savings etc. Village-level institutionalization is required. Greater awareness and consequently financial literacy would ultimately lead to increased usage of the formal monetary system and ultimately improve economic stability. Accessibility, trust in banks and socio-economic status are also relevant to determine how successful PMJDY has been achieving its goals. A clear and in-depth understanding of these features is crucial for governing bodies to make policies and credit institutions seeking to expand financial inclusion and enhance long-term financial stability at the grassroot level.

REFERENCES

- Dwivedi, P. K. (2022). Pradhan Mantri Jan-Dhan Yojana (PMJDY): A step towards financial inclusion in India. *Research Journal of Humanities and Social Sciences*, 13(4): 247-252.
- Joshi, T. M. and Patil, A. B. (2025). Trends and Impacts of Financial Inclusion and Social Security Schemes in India: A Case Study of the Bank of Maharashtra. *International Journal of Science and Research*, 14(4):2090-2096.
- Kaur, H. (2018). Twenty-Five Years of Liberalisation. *Research Review Journal*, 3(12): 1296-1298.
- Kingsly, L. M. J., and Sivamurugan, C. (2022). A study on the awareness of individual, social, and financial aspects among PMJDY customers in Tamil Nadu. *International Journal of Health Sciences*, 6(Special Issue).
- Kumar, H. (2025, September 8). Public-sector banks close 1.5 million inoperative accounts under PMJDY (PDF). *India Media Monitor*, <https://indiamediamonitor.in/2025/9/9/Mumbai/6c9f0e51-2abd-4a72-b01c-dd6f3ec661b8.pdf>
- Kurussiveettil, R., and Kanniammal, K. (2024). Impact of literacy on Pradhan Mantri Jan Dhan Yojana awareness and financial inclusion: Evidence from Scheduled Tribes of Kerala. *South India Journal of Social Sciences*, 22(3): 277-286
- Minakshi, Goyal, M., Chaudhary, K., Rahul and Singh, D. (2025). Digital, direct, and inclusive: PMJDY's transformative impact in India. *International Journal of Research in Management*, 7(2): 1081–1083. <https://doi.org/10.33545/26648792.2025.v7.i21.569>
- Misra, A., Sharma, R. and Karmakar, A. (2021). Financial inclusion for inclusive growth in India: A case of Pradhan Mantri Jan Dhan Yojana (PMJDY). *Webology*, 18(2): 2434-2441.
- Ministry of Finance, Government of India, February 11, 2025. https://sansad.in/getFile/annex/267/AU883_DOFaU1.pdf?source=pqars
- Nimbrayan, A., Sharma, M., & Kumar, S. (2018). PradhanMantri Jan DhanYojana: The world's largest financial inclusion initiative. *International Journal of Management Studies*, 5(7): 1–9.
- Pandey, A. and Murugesan, R. (2025). Effectiveness

- analysis of largest financial inclusion schemes in India. *Global Business and Economics Review*, 32(1): 88-108.
- Patnaik, B. C. M., Satpathy, I. and Supkar, A. C. (2015). Pradhan Mantri Jan Dhan Yojna (PMJDY)—a new direction for mainstreaming the financially excluded. *National Journal of Management (IJM)*, 6(2): 31-42.
- Prime Minister of India. (2014, August 28). PradhanMantri Jan DhanYojana. <https://www.pmindia.gov.in>
- Raghuwanshi, R. (2025). India's Financial Inclusion: Development, Policies, Advancements, and Prospects, *Journal of Frontiers in Multidisciplinary Research*, 6(1): 152-158. <https://doi.org/10.54660/>

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