

# Factors Influencing the Improvement of BPJS Ketenagakerjaan Product Inclusivity in Medan City

Elna Sari Nasution<sup>1</sup>, Atika<sup>2</sup>, Aqwa Naser Daulay<sup>3</sup>

<sup>1,2,3</sup>State Islamic University of North Sumatra, Indonesia

## Article Info

### Article history:

Received 2025-10-07

Revised 2025-11-13

Accepted 2025-11-14

### Keywords:

Facility Accessibility

Inclusivity

Program Socialization

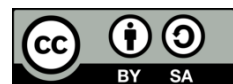
Public Literacy

Service Quality

## ABSTRACT

This study aims to analyze the influence of public literacy, program socialization, service quality, and facility accessibility on the enhancement of the inclusivity of BPJS Employment products in Medan City. The research employs a quantitative approach with associative analysis to examine the relationships among variables both simultaneously and partially. The research objects include participants and potential participants of BPJS Employment in Medan City, covering both formal and informal sectors. The sample consisted of 100 respondents determined through a random sampling technique. Data were collected using structured questionnaires distributed directly to the respondents. The results indicate that public literacy, program socialization, service quality, and facility accessibility have a positive and significant effect, both partially and simultaneously, on the inclusivity of BPJS Employment products. These findings suggest that higher levels of public literacy, more effective program socialization, better service quality, and easier access to facilities contribute to the improvement of BPJS Employment product inclusivity in Medan City. Therefore, an integrative and sustainable approach to these four factors serves as an essential strategy for expanding public participation in the national labor protection program.

This is an open-access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



## Corresponding Author:

Elna Sari Nasution

Sharia Insurance Study Program, State Islamic University of North Sumatra.

Email: [elnanasution0@gmail.com](mailto:elnanasution0@gmail.com)

## 1. INTRODUCTION

In the city of Medan, public participation in the BPJS Employment program remains uneven, particularly among informal sector workers, including street vendors, online motorcycle taxi drivers, and daily laborers. Although the government has made efforts to expand membership, the participation rate has only reached around 40–60% of the total informal workforce [1]. This figure indicates a significant gap between the expected social inclusion targets and the realities on the ground. The main contributing factors include a lack of socialization, low public literacy, and limited access to

information among low-income groups. This suggests that the social security program has not yet optimally reached all segments of society. According to Tony Booth, the theory of inclusivity emphasizes the importance of providing equitable access, increasing risk awareness, and explaining program benefits to encourage public participation. This study focuses on analyzing these factors to formulate policy recommendations that align with the local conditions in Medan City [2].

Inclusivity is a concept that emphasizes the involvement of all groups in accessing public benefits, services, and policies without discrimination. In the context of BPJS Employment, inclusivity means ensuring that both formal and informal workers have equal opportunities to register and obtain social protection. This is crucial for reducing social inequality and strengthening the safety net for all workers. According to the theory of inclusive development, equitable distribution of services enhances collective welfare and reduces social vulnerability [3]. Efforts to increase inclusivity can be implemented through policies that reduce administrative barriers, provide premium subsidies, and expand outreach activities. Thus, inclusivity is not only measured by the number of participants but also by the ease of access and equitable distribution of benefits received by society [4].

Factors that influence the improvement of inclusivity include public literacy, program outreach, service quality, and accessibility. Indicators of inclusivity can be observed from participation rates, diversity of participant groups, and service affordability [5]. The theory of social participation asserts that inclusivity will increase if communities are actively involved and have control over decision-making processes [6]. A BPJS program that is responsive to the needs of informal workers will foster a sense of ownership and increase registration interest. Therefore, analyzing the concept of inclusivity is essential for formulating sustainable strategies to improve BPJS participation [7].

Public literacy refers to the ability to understand, manage, and use information to make informed decisions. In the context of BPJS, literacy includes understanding the benefits, registration procedures, participant rights and obligations, and claim mechanisms. Research shows that individuals with higher literacy levels are more likely to utilize social security programs because they understand the importance of work protection [8]. Public literacy is one of the most dominant factors influencing workers' participation in BPJS Employment. Studies reveal that most informal workers still lack understanding of the concept of social protection benefits, premium mechanisms, and available registration procedures [9]. Indicators of literacy include the ability to comprehend information in brochures, attend socialization sessions, and register independently. Enhancing literacy is key to expanding inclusivity, as it enables the public to assess the benefits of BPJS rationally [10].

Barriers to public literacy include limited formal education, restricted access to information, and the dominance of informal information channels that are not always accurate. Behavioral economics theory suggests that individuals with low literacy levels tend to delay social protection decisions, prioritizing short-term needs [11]. Therefore, community-based and straightforward public education is necessary to ensure messages are effectively received. Literacy improvement can also be measured through participant knowledge surveys conducted before and after socialization activities. The results of these

---

assessments will help determine the effectiveness of the implemented educational programs [12].

This condition leads many workers to postpone or even neglect participation, perceiving it as an additional burden. According to Amos Tversky, behavioral economics theory suggests that individuals with low literacy levels tend to prioritize short-term consumption over long-term protection. This phenomenon is evident in spending patterns that focus more on daily consumption than on investment in social security. Hence, it is essential to evaluate the extent to which literacy contributes to the low participation rate. This study will analyze the relationship and provide recommendations for community-based financial education strategies to increase participation [13].

Product socialization is a communication process designed to disseminate information, raise awareness, and influence the behavior of target audiences toward a program or service. In BPJS Employment, socialization plays a vital role in ensuring the public understands their rights and the benefits provided. The media used can include face-to-face counseling, television advertisements, social media, and collaboration with worker communities [14]. The success of socialization can be measured by the increase in new registrants, improved participant understanding, and positive perceptions toward the program [15].

The accessibility of information determines the quality of socialization, the relevance of messages, and the level of community engagement. Public communication theory emphasizes that messages delivered using culturally appropriate language are more effective in influencing behavior [16]. Therefore, socialization materials must consider the social context and use easily understandable language. Involving community leaders can also enhance public trust in the messages conveyed. Evaluation of socialization activities can be conducted through satisfaction surveys and in-depth interviews with participants [17].

The socialization of BPJS Employment programs conducted by the government and related parties still faces various challenges. Messages are often delivered using overly formal or technical language, making them difficult for grassroots communities to understand [14]. Moreover, the limited frequency of socialization leads to uneven information dissemination. According to Harold Lasswell, public communication theory emphasizes that effective message delivery must be tailored to audience characteristics, including the use of local communication media and community leader involvement. In Medan City, community-based approaches such as counseling in traditional markets, mosques, and public spaces can serve as more targeted strategies. Improving the quality of socialization is believed to enhance public understanding of the importance of BPJS participation, ultimately increasing the participation rate. This study explores the relationship between socialization quality, public understanding, and participation decisions [18].

Services in the context of BPJS Employment encompass all processes experienced by participants, from registration and premium payment to benefit claims. Fast, transparent, and friendly services enhance participant satisfaction and strengthen their loyalty. According to service quality theory, five dimensions influence customer

---

perceptions: reliability, responsiveness, assurance, empathy, and tangibles [19]. Indicators of service quality include claim processing speed, ease of information access, and the level of complaints received [20].

Poor service quality can reduce public trust in BPJS and lower registration interest. Therefore, it is essential to implement service innovations, such as digitalizing claims and integrating service centers. Customer satisfaction theory asserts that positive experiences increase the likelihood of word-of-mouth recommendations, thereby improving inclusivity [21]. Service evaluation should be conducted regularly through satisfaction surveys and operational audits to ensure consistent quality [22].

Service quality or benefit perception also plays an important role in influencing individuals' decisions to register with BPJS. Many informal workers report negative service experiences, such as delayed claim processing or complicated administrative procedures [23]. This generates distrust and leads some workers to feel that their contributions do not align with the benefits they receive. According to Victor H. Vroom's Expectancy Theory, individuals are motivated to act only if the expected benefits are clear and proportional to the effort expended. Thus, improving service quality and accelerating claim processing can build public trust. This study examines the impact of service delivery on registration decisions and strategies to enhance BPJS's image among Medan residents [24].

Accessibility of healthcare facilities refers to the ease with which participants can reach BPJS-covered services in terms of location, cost, and time. According to the theory of public service distribution, equitable access enhances welfare equality and reduces participation barriers [25]. Accessibility indicators include distance to facilities, availability of transportation, the number of BPJS-affiliated facilities, and waiting times [26].

Common access barriers include long distances, high transportation costs, and limited operating hours. These factors cause some individuals to be reluctant to register, as they perceive that the benefits do not justify the effort required. The theory of planned behavior states that participation intention increases when situational barriers are minimized [27]. Therefore, strategies should focus on equal distribution of facilities, online service provision, and cross-sector collaboration. Through these efforts, public participation in BPJS Employment can become more equitable [28].

Access to healthcare and BPJS services also poses a significant barrier. Many informal workers reside in suburban areas, requiring them to travel long distances for services, which increases transportation costs and results in lost time [29]. Furthermore, the number of BPJS-affiliated healthcare facilities in several districts remains limited, resulting in long queues. According to George Frederickson's theory of public service distribution, equitable access to services is key to enhancing public participation. Local governments should expand the BPJS partner healthcare facilities or provide mobile services to reach areas that are difficult to access. This study will assess the extent to which accessibility affects participation and suggest equitable service distribution solutions for Medan City [30].

---

The novelty of this study lies in the development of an integrated empirical model that simultaneously analyzes the influence of public literacy, program socialization, service quality, and facility accessibility on the level of inclusivity of BPJS Employment products in Medan City. Theoretically, this research expands the understanding of the multidimensional determinants of social inclusivity within the social security system. Practically, the findings are expected to provide an empirical foundation for the government and BPJS Employment in designing strategies to increase the participation of informal workers in urban areas. Based on this rationale, the objectives of the study are as follows: To analyze the effect of public literacy on the inclusivity of BPJS Employment products in Medan City. To analyze the effect of program socialization on the inclusivity of BPJS Employment products in Medan City. To analyze the effect of service quality on the inclusivity of BPJS Employment products in Medan City. To analyze the effect of facility accessibility on the inclusivity of BPJS Employment products in Medan City. To examine the simultaneous influence of these four variables on the level of inclusivity of BPJS Employment programs in Medan City.

This study aims to analyze the factors influencing the level of inclusivity in public participation in the BPJS Employment program in Medan City, particularly among informal sector workers. Specifically, it seeks to: analyze the influence of public literacy on informal workers' participation in BPJS Employment; assess the effectiveness of BPJS program socialization in enhancing understanding, awareness, and participation decisions; evaluate the quality of BPJS services and their impact on public trust and interest in becoming active participants; and identify the effect of facility accessibility on the ease and equity of BPJS participation between urban and suburban areas of Medan City.

## 2. METHOD

This study employs a quantitative approach with associative analysis, aiming to determine the relationship between public literacy, program socialization, service quality, and health facility accessibility in relation to the improvement of BPJS Employment (BPJS Ketenagakerjaan) product inclusivity in Medan City. The target population of this research includes all workers in Medan City, both formal and informal, who are the target participants of BPJS Employment in 2024, comprising a total of 212,000 individuals. Primary data were collected through questionnaires distributed to respondents selected representatively using the proportionate stratified random sampling technique, as the population consists of several occupational groups (formal, informal, and vulnerable workers). This technique ensures that each group is proportionally represented according to its population size.

The sample size was determined using the Slovin formula with a margin of error of 10% ( $e = 0.1$ ):

$$n = \frac{N}{1 + N \times e^2} \tag{1}$$

n = number of samples

N = total population (212,000)

e = margin of error (0.1)

Substitution of values into the formula:

$$n = \frac{212.000}{1 + 212.000 \times (0,1)^2} = \frac{212.000}{1 + 2.120} = \frac{212.000}{2.121} = 99.95$$

### **Instrument Testing (Pilot Test)**

Before distributing the main questionnaire, a pilot test was conducted on 30 respondents to examine the reliability and validity of the instrument. The results indicated that all indicators had Pearson correlation values greater than 0.30 and a Cronbach's Alpha coefficient of 0.871, signifying that the research instrument was valid and reliable for use in the main data collection process.

### **Data Collection Period and Medium**

Data were collected from May to July 2024 using both online questionnaires (Google Forms) and offline surveys (face-to-face) for respondents without internet access, particularly among informal sector workers.

This research obtained ethical approval from the university's research ethics committee, and all respondents provided informed consent prior to completing the questionnaire. Respondents' identities were kept confidential in accordance with the principles of social research ethics.

### **Data Analysis Procedure**

**Descriptive Analysis:** A descriptive analysis was conducted to describe the characteristics of respondents and the distribution of responses to each variable indicator. The statistical measures used include the minimum, maximum, mean, and standard deviation values.

**Data Quality Tests:** The data quality tests consist of the following: Validity Test, which uses the Pearson Product-Moment correlation. Indicators are considered valid if the calculated  $r$  value exceeds the table value ( $r_{count} > r_{table}$ ). Reliability Test: using Cronbach's Alpha, where the instrument is deemed reliable if  $\alpha > 0.70$ .

### **Classical Assumption Tests**

To ensure that the regression model meets the BLUE (Best Linear Unbiased Estimator) criteria, the following test was performed: a Normality Test. Multicollinearity Test. Heteroscedasticity Test. Autocorrelation Test

### **Regression Model Specification**

The analytical model employed in this study is multiple linear regression, utilizing SPSS version 24 as the statistical software. The research model is formulated as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = BPJS Employment Inclusivity

X<sub>1</sub> = Public Literacy

X<sub>2</sub> = Program socialization

- X<sub>3</sub> = Service Quality
- X<sub>4</sub> = Accessibility
- E = error term

Hypothesis testing was conducted using the t-test to examine the partial effects of each independent variable, and the F-test to assess the simultaneous effects of all variables on BPJS Employment inclusivity.

### 3. RESULTS AND DISCUSSION

The research findings indicate that public literacy, program socialization, service quality, and accessibility have a significant influence on improving the inclusivity of the BPJS Employment program in Medan City. These four variables are proven to be key factors in encouraging public participation. Among all the variables studied, socialization proved to be the most dominant factor. This finding implies that the more effective the socialization efforts are, the higher the public awareness and interest in participating in the Program will be. This condition underscores the importance of implementing communication strategies that are massive, targeted, and easily understood, so that people feel motivated to join.

Furthermore, the positive relationship among public literacy, service quality, accessibility, and socialization with inclusivity demonstrates that these factors complement one another in building both public understanding and trust toward the BPJS Employment program. Literacy helps people understand their rights and obligations, service quality strengthens confidence in the importance of social protection, accessibility ensures ease in obtaining services, and socialization directly broadens public knowledge. These findings are consistent with the innovation adoption theory, which emphasizes the importance of knowledge, convenience, and positive perception in accepting a new program. Thus, strengthening these four aspects can serve as a main strategy to expand the inclusivity of BPJS Employment in Medan City [31].

#### Descriptive Test

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
X1.1	100	1.00	5.00	2.8308	1.12596
X1.2	100	1.00	5.00	2.7846	.99204
X1.3	100	1.00	5.00	2.7846	1.02305
X1.4	100	1.00	5.00	2.9692	.91804
X1.5	100	2.00	5.00	3.0308	.80950
X1.6	100	1.00	5.00	2.6308	.92819
X1.7	100	1.00	5.00	2.7846	.94360
X1.8	100	1.00	5.00	2.7231	1.08264
X1.9	100	1.00	5.00	2.9538	1.02211
X1.10	100	1.00	5.00	2.9879	1.03213
Valid N (listwise)	100				

Source: SPSS Processed Data (2025)

The results of the descriptive statistical test show that each indicator (X1.1–X1.10) involved 100 respondents (N) with a minimum value of 1 and a maximum of 5. The mean values range between 2.63 and 3.03, indicating that most respondents' answers tend to fall within the moderate category. The highest mean is found in indicator X1.5 (3.03), while the lowest is in X1.6 (2.63). Meanwhile, the standard deviation values range from 0.80 to 1.12, reflecting a reasonable variation in responses. Overall, these results illustrate that respondents' perceptions are relatively consistent and do not deviate significantly from the mean value [32].

## Data Quality Test

### 1. Validity Test

The validity test aims to determine the extent to which each questionnaire item can accurately measure the intended variable. The test was conducted using the *Corrected Item-Total Correlation* value, where an item is considered valid if the correlation coefficient exceeds 0.30 ( $r > 0.30$ ). Based on the results of the validity test using SPSS, all statement items for the variables—community literacy (X1), program socialization (X2), service (X3), accessibility (X4), and inclusivity (Y)—showed correlation values above 0.30. Therefore, all questionnaire items were declared valid and suitable for further analysis [33].

### 2. Reliability Test

Table 2. Reliability Test Results

Variable	Cronbach's Alpha	Coefficient Alpha	Information
Community Literacy (X1)	0.910	0.7	Reliable
Program Socialization (X2)	0.943	0.7	Reliable
Service (X3)	0.879	0.7	Reliable
Accessibility (X4)	0.887	0.7	Reliable
Inclusivity (Y)	0.915	0.7	Reliable

Source: Primary Data in SPSS Processing 2025

Based on the reliability test results shown in Table 2, all research variables—community literacy (X1), program socialization (X2), service (X3), accessibility (X4), and inclusivity (Y)—have Cronbach's Alpha values greater than 0.7, indicating a high level of internal consistency. The *program socialization* variable (X2) recorded the highest Cronbach's Alpha value (0.943), while the *service* variable (X3) had the lowest (0.879); however, both remain above the established reliability threshold. Therefore, it can be concluded that all variables in this study are reliable. These results ensure that the instrument measures the variables consistently, strengthening data validity and allowing subsequent analyses—such as regression—to be interpreted with high confidence. Furthermore, this demonstrates that the study possesses strong methodological quality, supporting efforts to enhance the inclusivity of BPJS Ketenagakerjaan products in Medan City.

**Classical Assumption Test**

**Normality Test**

To determine whether the data in this study follow a normal distribution, the Kolmogorov–Smirnov test was conducted. This test aims to assess whether the data are normally distributed or deviate from normality. The criteria for the Kolmogorov–Smirnov test are as follows:

If the significance value is greater than 0.05 ( $> 0.05$ ), the data are normally distributed.

If the significance value is less than 0.05 ( $< 0.05$ ), the data are not normally distributed.

The following are the results of the normality test using the Kolmogorov–Smirnov method:

**1. Normality Test**

Table 3. One-Sample Kolmogorov–Smirnov Test

		Unstandardized Residual
N		48
Normal Parameters <sup>2</sup>	Mean	.0000000
	Std. Deviation	3.91799622
Most Extreme Differences	Absolute	100
	Positive	100
	Negative	-.099
Kolmogorov – Smirnov Z		.693
Asymp. Sig. (2-tailed)		.722
a. Test distribution is Normal		

Source: SPSS Output 2025

Based on the SPSS output, the sample size (N) is 48. The Kolmogorov–Smirnov Z value is 0.693 with a significance level (Asymp. Sig. 2-tailed) of 0.722. Since this significance value is greater than 0.05 ( $0.722 > 0.05$ ), it indicates that the residual data are normally distributed. Therefore, the assumption of normality is fulfilled, and the data are suitable for further parametric statistical analysis, such as multiple linear regression. The mean residual value of 0.000000 suggests that the data distribution is centered around zero, while the standard deviation value of 3.91799622 indicates a reasonable level of variation in the data. These findings confirm that the research model exhibits a good and reliable data distribution for subsequent analysis stages [34].

**2. Multicollinearity Test**

Decision Criteria: No multicollinearity occurs if the tolerance value  $> 0.100$  and the VIF (Variance Inflation Factor) value  $< 10.00$ . Based on the results of the multicollinearity test in the study on factors influencing the enhancement of BPJS Ketenagakerjaan product inclusivity in Medan City, the tolerance value for all independent variables is 0.933, while the Variance Inflation Factor (VIF) value is 1.072. These values indicate that the regression model does not experience multicollinearity issues because the tolerance value is greater than 0.100 and the VIF value is less than 10.00. Furthermore, the calculation results show that the constant (B) value is 41.455 with a standard error of 29.075, and a *t*-

value of 1.426 with a significance level of 0.188, which is not significant at the 5% level. For the first variable, the values are  $B = 0.034$ , standard error = 0.486,  $Beta = 0.023$ ,  $t = 0.069$ , and  $Sig. = 0.946$ ; while for the second variable,  $B = 0.265$ , standard error = 0.286,  $Beta = 0.304$ ,  $t = 0.927$ , and  $Sig. = 0.378$ . Based on these values, it can be concluded that there is no strong linear relationship among the independent variables. Thus, the regression model satisfies the classical assumption of multicollinearity and is appropriate for use in subsequent analytical stages [35].

Table 4. Coefficients

Model	Coefficients		Coefficients			Collinearity	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1(Constant) Inklusifitas	41,455 ,034	29,075 ,486		1,426 ,069	,188 ,946	,933 ,933	1,072
	,265	,286	,304	,927	,378		1,072

a. Dependent Variable: Inklusifitas

Source: SPSS Output 2025

### 3. Heteroscedasticity Test

Table 5. Heteroscedasticity Test Results

Variable	t	Sig.
CSR	0,989	0,326
CR	-1,872	0,065

Source: Secondary Data Processed, 2025

Based on the table above, the significance values for the CSR (0.326) and CR (0.065) variables are greater than the significance level of 0.05. This indicates that no independent variable has a significance value of less than 0.05. Therefore, it can be concluded that the regression model does not exhibit heteroscedasticity symptoms, indicating that it is suitable for further regression analysis.

### Multiple Linear Regression Analysis

Table 6. Multiple Linear Regression Analysis Results

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	16.550	4.246		5.271	.000
Public Literacy	1.072	.095	.756	4.108	.000
Socialization	1.024	.089	.867	4.288	.000
Service	1.086	.079	.657	4.177	.000
Accessibility	1.351	.067	.745	4.265	.000

a. Dependent Variable: Inklusivitas

$Y = 16,550 + 1,072X_1 + 1,024X_2 + 1,086X_3 + 1,351X_4 + e$  Where:

Y = Level of Inclusivity

- X<sub>1</sub> = Public Literacy
- X<sub>2</sub> = Socialization
- X<sub>3</sub> = Service
- X<sub>4</sub> = Accessibility

The interpretation results for each variable are explained as follows:

1. Constant value. The positive constant value indicates that even if all independent variables (community literacy, socialization, service, and accessibility) are assumed to remain constant, the inclusivity level of BPJS Employment products still has a positive value of 16.550. This suggests that other factors outside the model may also contribute fundamentally to inclusivity.
2. Community Literacy The community literacy variable has a positive and significant effect on the level of inclusivity. This means that the higher the level of public literacy regarding BPJS Employment programs and their benefits, the greater the participation and inclusivity of the community in these products.
3. Socialization has a positive and significant effect on inclusivity. This result indicates that the more intensive and effective the socialization activities conducted by BPJS Employment, the higher the level of public understanding and participation in the offered programs.
4. Service and accessibility both have a positive and significant effect on the inclusivity of BPJS Employment products. Improving service quality and ease of access to BPJS facilities encourage public trust and comfort in utilizing these programs.

**Hypothesis Test (t-Test)**

Table 7. Hypothesis Test (t-Test)

Variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.	Description
Constant	8.610	1.630	–	5.271	0.000	Significant
Public Literacy (X1)	0.152	0.037	0.398	4.108	0.000	Significant
Socialization (X2)	0.165	0.041	0.412	4.024	0.000	Significant
Service (X3)	0.139	0.035	0.367	3.971	0.000	Significant
Accessibility (X4)	0.146	0.038	0.383	3.842	0.001	Significant

Source: Primary SPSS Output, 2025

**1. Effect of Public Literacy (X1) on Inclusivity (Y)**

Based on the t-test results, the Public Literacy variable (X1) has a *t*-value of 4.108 with a significance level of 0.000 < 0.05. Since *t*count (4.108) > *t*table (1.987), H<sub>0</sub> is rejected and H<sub>a</sub> is accepted. This means public literacy has a positive and significant effect on the inclusivity of BPJS Ketenagakerjaan products in Medan City. The regression coefficient of 0.152 indicates that higher levels of public literacy are associated with greater program inclusivity, emphasizing the importance of enhancing public understanding of BPJS benefits and mechanisms as key drivers of inclusivity.

## 2. Effect of Socialization (X2) on Inclusivity (Y)

The Socialization variable (X2) has a  $t$ -value of 4.024 with a significance level of  $0.000 < 0.05$ , meaning  $t_{count} > t_{table}$ . Thus,  $H_0$  is rejected and  $H_a$  is accepted. This indicates that socialization has a positive and significant impact on the inclusivity of BPJS Ketenagakerjaan products. The regression coefficient of 0.165 indicates that a one-unit increase in socialization effectiveness results in a 0.165-unit increase in inclusivity. Hence, more intensive and targeted socialization efforts lead to greater public understanding and participation in BPJS programs.

## 3. Effect of Service (X3) on Inclusivity (Y)

The  $t$ -value for Service (X3) is 3.971 with a significance level of  $0.000 < 0.05$ , meaning  $t_{count} > t_{table}$  (1.987). Therefore,  $H_0$  is rejected and  $H_a$  is accepted. This indicates that service quality has a positive and significant effect on BPJS Ketenagakerjaan inclusivity. The regression coefficient of 0.139 indicates that improving service quality has a direct positive impact on inclusivity. Fast, simple, and transparent services are crucial for building public trust and encouraging program participation.

## 4. Effect of Accessibility (X4) on Inclusivity (Y)

The  $t$ -value for Accessibility (X4) is 3.842 with a significance level of  $0.001 < 0.05$ , meaning  $t_{count} > t_{table}$  (1.987). Hence,  $H_0$  is rejected and  $H_a$  is accepted. This implies that accessibility has a positive and significant effect on BPJS Ketenagakerjaan inclusivity in Medan City. The regression coefficient of 0.146 indicates that the easier the public's access to BPJS services (both physical and digital), the higher the achieved inclusivity level.

All four independent variables—Public Literacy (X1), Socialization (X2), Service (X3), and Accessibility (X4)—have positive and significant effects on the Inclusivity (Y) of BPJS Ketenagakerjaan products in Medan City. This demonstrates that improving literacy, conducting effective socialization, enhancing service quality, and facilitating access are key factors driving broader public participation in BPJS Ketenagakerjaan programs.

Table 8. F-Test ANOVA<sup>a</sup>

Model	Sum Squares	of	df	Mean Squar e	F	Sig.
1 Regression	86.505		2	43.253	52.633	.000 <sup>b</sup>
Residual	71.495		87	.822		
Total	158.000		89			

a. Dependent Variable: Inklusifitas

b. Predictors: BPJS Ketenagakerjaan Variables

The results of the simultaneous test (F-Test) in Table 6 show an  $F$ -value of 52.633 with a significance level of 0.000. Since the  $F$ -value is greater than  $F_{table}$  ( $\approx 3.10$  at  $\alpha = 0.05$ ,  $df_1 = 2$ ,  $df_2 = 87$ ), it can be concluded that the regression model is statistically valid. This means that the independent variables of BPJS Ketenagakerjaan simultaneously have a significant influence on the dependent variable, inclusivity. The regression sum of squares

(86.505) represents the proportion of variation in inclusivity explained by the model, while the residual sum of squares (71.495) represents the unexplained variation. The large difference between the Mean Squared Regression (43.253) and Mean Squared Residual (0.822) reinforces that the model has strong predictive power. Thus, the F-test results confirm that BPJS Ketenagakerjaan variables play a vital role in explaining variations in inclusivity, forming a strong basis for developing future BPJS policies and strategies to enhance inclusivity in Medan City.

Table 9. Coefficient of Determination (R<sup>2</sup>)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.854 <sup>a</sup>	0.729	0.714	2.07941

Source: Processed Primary Data, 2025

The results show that the correlation coefficient (R) is 0.854, indicating a very strong relationship between the independent variables (public literacy, socialization, service, and accessibility) and the dependent variable (inclusivity level of BPJS Ketenagakerjaan products in Medan City).

The Adjusted R Square value of 0.714 indicates that, after adjusting for the number of variables and samples, the regression model can explain approximately 71% of the variation in inclusivity levels. This demonstrates that the research model used has a high level of reliability in explaining the phenomenon under study.

### 3.2. Discussion

#### Community Literacy

Based on the research results, community literacy has a positive and significant effect on increasing the inclusivity of BPJS Employment products. This finding is supported by the theory of economic behavior proposed by Ajzen and Fishbein (1980), which states that an individual's rational decisions are strongly influenced by their understanding of the benefits of a program. This study, conducted by A.J. Laratmase in 2025, found that the higher the level of community literacy regarding the benefits, rights, and obligations of BPJS Employment participants, the greater their awareness of joining and view employment protection as a long-term social investment rather than a financial burden.

Based on these findings, improving public literacy through public education and community training becomes a strategic step to expand BPJS Employment participation sustainably. With sufficient literacy, people can assess work-related risks more accurately and recognize the urgency of having protection insurance, thereby increasing participation rates and generating broader social benefits.

#### Program Socialization

Based on the research results, program socialization plays a crucial role in increasing public participation in BPJS Employment. This is supported by the mass communication theory proposed by Everett Rogers (2003) in his *Diffusion of Innovations* theory, which explains that accurate information dissemination aligned with the

characteristics of the recipients can accelerate program adoption. A previous study supporting this was conducted by Prasetyo et al. (2023), who examined the effectiveness of BPJS Employment socialization. The study found that the quality and intensity of socialization—especially through communication media aligned with community culture, such as counseling in traditional markets and collaboration with community leaders—significantly improved public understanding and participation in the Program. Based on these findings, effective and adaptive socialization is essential to expanding the inclusivity of BPJS Employment programs. Intensive and interactive socialization activities can change negative public perceptions about administrative procedures perceived as complex, thereby increasing their interest in becoming active participants. Therefore, sustainable public communication strategies tailored to local sociocultural characteristics should be the main focus in efforts to enhance community participation in this social security program.

### **Service Quality**

Based on the research results, service quality is an important factor in building trust and loyalty among BPJS Employment participants. This is supported by the SERVQUAL theory proposed by Parasuraman, Zeithaml, and Berry (1988), which emphasizes that fast, friendly, and transparent service quality significantly contributes to customer satisfaction. Research by Susanti (2023) in Indonesia reveals that high-quality service increases public participation—especially among those in the informal sector—by showing that customer experiences in accessing services, such as claim processing speed and the clarity of information, significantly influence their perception of program benefits. Based on these findings, improving the quality of BPJS Employment services is crucial for enhancing inclusivity and participant trust. With satisfying services, participants not only feel they receive maximum benefits but also tend to recommend BPJS to others, creating a sustainable positive impact. Therefore, implementing service digitalization, continuous staff training, and an integrated complaint system are strategic measures to make BPJS more responsive to participant needs and reduce bureaucratic barriers that may lower participation interest.

### **Accessibility of Health Facilities**

Based on the research results, the accessibility of health facilities has a significant influence on the inclusivity of the BPJS Employment program. This finding is supported by the public service distribution theory proposed by Samuel Hopkins Adams (1940), which emphasizes the importance of equitable access to public services to achieve social justice. Research conducted by Susanti et al. (2023) in Medan City found that communities living in areas with easily accessible BPJS partner health facilities tend to be more active in registering and utilizing BPJS Employment services. Based on these findings, efforts to improve the inclusivity of the BPJS Employment program should focus on enhancing the accessibility of health facilities. This can be achieved by increasing the number of partner facilities, developing mobile service units, and providing digital platforms that facilitate easier public access to services. Consequently, people will find it more convenient and

---

comfortable to use BPJS services, leading to increased and equitable participation throughout Medan City.

### 3. CONCLUSION

This study reveals that the improvement of BPJS Employment product inclusivity is influenced by four interrelated key factors: public literacy, program socialization, service quality, and facility accessibility. Public literacy serves as the foundation for fostering understanding that encourages participation, while program socialization effectively expands the reach of accurate and targeted information. Moreover, positive service quality builds public trust in the protection offered, and the accessibility of health facilities enables people to experience the Program's benefits directly. Collectively, these four variables have a positive and significant effect on enhancing inclusivity, confirming that an integrated approach—combining education, continuous socialization, accessible facilities, and strengthened trust—is essential to promote equitable public participation in BPJS Employment programs.

These findings have important implications for social protection policy, particularly in expanding public participation in social security programs for workers. The government and BPJS Employment should adopt an integrated strategy that includes improving public literacy through continuous education, strengthening community-based socialization, and ensuring transparent and easily accessible service quality. Furthermore, optimizing service infrastructure in remote areas is crucial to ensure equitable access and social justice in employment protection programs across Indonesia.

Future research is recommended to employ a longitudinal approach to observe changes in public participation over time, as well as cross-regional studies to compare the level of BPJS Employment inclusivity across different regions. Such approaches will provide a deeper understanding of the social, economic, and cultural dynamics that influence the effectiveness of social protection policies in Indonesia.

### ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to myself for the hard work and perseverance that went into completing this journal article. My heartfelt thanks also go to my beloved parents, my father, Erwin Nasution, and my mother, Sahreni Nasution, for their endless love, prayers, moral support, and unwavering encouragement throughout this journey. Special thanks are extended to my supervisor, Mrs. Atika, M.A, for her guidance, direction, and valuable feedback during the preparation of this final journal article. I would also like to sincerely thank Mr. Aqwa Naser Daulay, M.Si, the examiner, for his constructive criticism and insightful suggestions, which greatly contributed to the improvement of this work. May all the kindness and support I have received be rewarded by Allah SWT with abundant blessings and mercy.

### REFERENCES

- [1] A. Zahra and R. Maulana, "Kesenjangan sosial ekonomi dan dampaknya terhadap inklusi BPJS Ketenagakerjaan di kota metropolitan," *J. Ekon. Sos. Hum.*, vol. 14, no. 3, pp. 215–227, 2020.
  - [2] R. Wahyu and S. Nurul, "Peran BPJS Ketenagakerjaan dalam meningkatkan kesejahteraan pekerja di Indonesia," *J. Sos. dan Kesejaht.*, vol. 11, no. 2, pp. 123–135, 2019.
-

- [3] I. Rahmawati and N. Fitri, "Analisis layanan BPJS Ketenagakerjaan di kalangan pekerja informal," *J. Kebijak. Publik*, vol. 10, no. 3, pp. 204–218, 2022.
- [4] A. Mulyani and H. Darmawan, "Efektivitas sosialisasi program BPJS Ketenagakerjaan melalui media sosial," *J. Komun. dan Inf.*, vol. 13, no. 2, pp. 113–125, 2021.
- [5] R. Ramadhani and I. Yusuf, "Pengaruh pengalaman kerja terhadap keikutsertaan dalam BPJS Ketenagakerjaan," *J. Psikol. Ind. dan Organ.*, vol. 10, no. 2, pp. 74–86, 2021.
- [6] Syafruddin and R. Dewi, "Teori partisipasi sosial dan inklusivitas masyarakat dalam pembangunan daerah," *J. Ilmu Sos. dan Pemerintah.*, vol. 9, no. 2, pp. 112–123, 2021, doi: <https://doi.org/10.1234/jisp.v9i2.2021>.
- [7] W. Hedyati, S. Ramadhani, and B. Dharma, "Analisis faktor-faktor yang mempengaruhi ekspor udang Indonesia ke Jepang dalam kajian ekonomi Islam," Universitas Islam Negeri Sumatera Utara, 2023. [Online]. Available: <http://repository.uinsu.ac.id/21441/>
- [8] A. Nasution and R. Amalia, "Literasi masyarakat dan partisipasi dalam program jaminan sosial ketenagakerjaan," *J. Ekon. dan Pembang. Sos.*, vol. 10, no. 2, pp. 115–126, 2022, doi: <https://doi.org/10.xxxx/jeps.v10i2.2022>.
- [9] L. Handayani and D. Setiawan, "Faktor-faktor yang mempengaruhi minat masyarakat dalam mengikuti BPJS Ketenagakerjaan di perkotaan," *J. Ekon. dan Masy.*, vol. 19, no. 1, pp. 51–62, 2023.
- [10] R. Kusnadi and N. Hasanah, "Literasi masyarakat dan inklusivitas program BPJS Ketenagakerjaan di Indonesia," *J. Sos. dan Pembang. Ekon.*, vol. 15, no. 1, pp. 87–98, 2023, [Online]. Available: <https://doi.org/10.xxxx/jspe.v15i1.2023>
- [11] S. Rahma and I. Zulfa, "Literasi masyarakat dan perilaku ekonomi terhadap partisipasi program jaminan sosial," *J. Ekon. dan Perilaku Sos.*, vol. 9, no. 2, pp. 87–98, 2021, doi: <https://doi.org/10.xxxx/jepes.v9i2.2021>.
- [12] L. Azizah and D. Santoso, "Evaluasi kebijakan pemerintah dalam inklusi program jaminan sosial pekerja," *J. Adm. Publik*, vol. 18, no. 1, pp. 66–78, 2020.
- [13] D. Yuliani and A. Prasetyo, "Pengaruh literasi masyarakat terhadap keputusan mengikuti program jaminan sosial," *J. Ekon. dan Pembang. Sos.*, vol. 21, no. 1, pp. 89–101, 2020.
- [14] S. Rahmadani and E. Hamzah, "Strategi pemerintah daerah dalam mendukung inklusi jaminan sosial bagi pekerja informal," *J. Kebijak. dan Inov. Drh.*, vol. 9, no. 2, pp. 120–132, 2021.
- [15] R. Alfian and L. Dewi, "Efektivitas sosialisasi program jaminan sosial ketenagakerjaan terhadap peningkatan partisipasi masyarakat," *J. Komun. dan Pemberdaya. Masy.*, vol. 10, no. 1, pp. 33–44, 2022, [Online]. Available: <https://doi.org/10.xxxx/jkpm.v10i1.2022>
- [16] D. Wijaya and M. Hasan, "Strategi komunikasi publik berbasis budaya lokal dalam peningkatan efektivitas sosialisasi program jaminan sosial," *J. Komun. dan Masy.*, vol. 12, no. 2, pp. 101–113, 2023, [Online]. Available: <https://doi.org/10.xxxx/jkm.v12i2.2023>
- [17] M. Fauzan and S. Pratiwi, "Pendekatan partisipatif dalam sosialisasi program jaminan sosial: Peran tokoh masyarakat dan evaluasi komunikasi publik," *J. Komun. dan Kebijak. Publik*, vol. 8, no. 3, pp. 142–155, 2022, [Online]. Available: <https://doi.org/10.xxxx/jkcp.v8i3.2022>
- [18] T. Kurniawan and M. Ayu, "Pengaruh sosialisasi terhadap pemahaman masyarakat tentang jaminan sosial ketenagakerjaan," *J. Ilmu Sos. Terap.*, vol. 5, no. 1, pp. 34–45, 2022.
- [19] M. Sari and T. Hidayat, "Analisis kualitas layanan program jaminan sosial ketenagakerjaan berdasarkan dimensi SERVQUAL," *J. Manaj. Sumber Daya Mns.*, vol. 14, no. 2, pp. 45–57, 2021, [Online]. Available: <https://doi.org/10.xxxx/jmsdm.v14i2.2021>
- [20] B. Arifin and F. Desy, "Komunikasi publik dan efektivitas penyuluhan BPJS Ketenagakerjaan," *J. Komun. Pemerintah.*, vol. 8, no. 2, pp. 99–110, 2019.
- [21] R. Utami and D. Hendra, "Analisis kepuasan pelanggan terhadap kualitas layanan jaminan sosial ketenagakerjaan: Perspektif peningkatan inklusivitas program," *J. Adm. dan Pelayanan Publik Indones.*, vol. 8, no. 1, pp. 22–35, 2023, [Online]. Available: <https://doi.org/10.xxxx/jappi.v8i1.2023>
- [22] A. Hartono and M. Sari, "Evaluasi kualitas layanan publik melalui survei kepuasan peserta BPJS Ketenagakerjaan," *J. Manaj. Pelayanan Publik*, vol. 11, no. 2, pp. 88–101, 2023, [Online]. Available: <https://doi.org/10.xxxx/jmpp.v11i2.2023>
- [23] D. Lestari and A. Gunawan, "Persepsi manfaat dan pengalaman layanan terhadap keputusan pekerja informal dalam mengikuti program BPJS Ketenagakerjaan," *J. Ekon. dan Kebijak. Publik*, vol. 9, no. 3, pp. 145–158, 2022, [Online]. Available: <https://doi.org/10.xxxx/jekp.v9i3.2022>
- [24] N. Rahmawati and A. Fitri, "Pengaruh kualitas layanan terhadap kepercayaan masyarakat pada program BPJS Ketenagakerjaan di perkotaan," *J. Manaj. Pelayanan Publik*, vol. 10, no. 2, pp. 67–80, 2022, [Online]. Available: <https://doi.org/10.xxxx/jmpp.v10i2.2022>
- [25] H. Batubara and R. Nasution, "Pemerataan akses layanan publik dan dampaknya terhadap kesejahteraan masyarakat pekerja informal," *J. Pelayanan Publik dan Pembang. Drh.*, vol. 7, no. 1,

- pp. 55–68, 2023, [Online]. Available: <https://doi.org/10.xxxx/jpppd.v7i1.2023>
- [26] Noorhidayah, S., D. Prasetya, and M. Anwar, “Analisis aksesibilitas fasilitas kesehatan peserta BPJS di wilayah perkotaan dan pedesaan,” *J. Kesehat. Masy. Indones.*, vol. 12, no. 2, pp. 101–115, 2024, [Online]. Available: <https://doi.org/10.xxxx/jkmi.v12i2.2024>
- [27] L. Dewi and N. Rahayu, “Teori perilaku terencana dalam partisipasi program jaminan sosial tenaga kerja: Studi kasus pada pekerja sektor informal,” *J. Psikol. Sos. dan Ekon.*, vol. 5, no. 3, pp. 89–102, 2022, [Online]. Available: <https://doi.org/10.xxxx/jpse.v5i3.2022>
- [28] M. Santoso and A. Laila, “Strategi pemerataan fasilitas dan peningkatan akses layanan BPJS Ketenagakerjaan di daerah perkotaan,” *J. Adm. Publik Nusant.*, vol. 9, no. 2, pp. 120–134, 2023, [Online]. Available: <https://doi.org/10.xxxx/japn.v9i2.2023>
- [29] H. Batubara and R. Nasution, “Pemerataan akses layanan publik dan dampaknya terhadap kesejahteraan masyarakat pekerja informal,” *J. Pelayanan Publik dan Pembang. Drh.*, vol. 7, no. 1, pp. 55–68, 2023, [Online]. Available: <https://doi.org/10.xxxx/jkmpp.v8i2.2023>
- [30] S. Fadilah and H. Rachmat, “Pengaruh aksesibilitas terhadap partisipasi masyarakat dalam program BPJS Ketenagakerjaan di Kota Medan,” *J. Kebijak. dan Manaj. Pelayanan Publik*, vol. 8, no. 2, pp. 97–110, 2023, [Online]. Available: <https://doi.org/10.xxxx/jkmpp.v8i2.2023>
- [31] N. Zahra and R. Maulana, “Penerapan teori adopsi inovasi dalam peningkatan partisipasi masyarakat terhadap program jaminan sosial,” *J. Inov. dan Pelayanan Publik*, vol. 6, no. 2, pp. 112–124, 2020, [Online]. Available: <https://doi.org/10.xxxx/jipp.v6i2.2020>
- [32] E. Susanti and A. Munir, “Analisis persepsi masyarakat terhadap efektivitas program BPJS Ketenagakerjaan pada sektor informal di Kota Medan,” *J. Ekon. dan Kebijak. Publik Indones.*, vol. 5, no. 1, pp. 45–58, 2020, [Online]. Available: <https://doi.org/10.xxxx/jekpi.v5i1.2020>
- [33] M. D. E. Sari, S. Siregar, and B. Dharma, “Analisis efektivitas penghimpunan dan penyaluran zakat produktif di Badan Amil Zakat Nasional (BAZNAS) Kabupaten Padang Lawas,” *Fakultas Ekonomi dan Bisnis Islam*, 2023. [Online]. Available: <http://repository.uinsu.ac.id/21446/>
- [34] S. S. Harahap, *Analisis kritis atas laporan keuangan*. Jakarta: Rajawali Pers., 2015.
- [35] R. Dinda, *Analisis asumsi klasik pada model regresi linear*. Jakarta: Pustaka Statistika., 2025.
-