

An Analysis of Impact of the Government Schemes for Women's Health to achieve Sustainable Development.

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Abstract: Women's health is a fundamental pillar of sustainable development and inclusive socio-economic progress in India. The Government of India and the state governments have launched several welfare and health-oriented schemes aimed at improving maternal health, nutrition and reproductive healthcare for women. This empirical study examines the impact of selected schemes in uplifting the status of women in terms of health. Primary data was collected from a sample of 400 women respondents across selected rural regions of Lucknow district through semi-structured questionnaires and personal interviews. The findings indicate that there is a significant impact of selected schemes in uplifting the status of women in terms of health in U.P.

Keywords: Women's Health, Sustainable Development, Government Health Schemes, Maternal Healthcare, Healthcare Accessibility, Sustainable Development Goals (SDGs), Inclusive Growth and India.

I. INTRODUCTION

Sustainable development is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (*Brundtland & Khalid, 1987*)". This is a holistic approach that strikes a balance between social inclusion, environmental sustainability, and economic growth is what this approach is. This idea recognises the interdependence of these three pillars and promotes the idea of long-term planning in order to guarantee equity amongst different generations (*Mensah, 2019*).

In its practical application, sustainable development entails the pursuit of goals such as the "elimination of poverty", the "reduction of inequality", the "promotion of responsible consumption and production", and the "fight against climate change". These aims are all encompassed in the Sustainable Development Goals (SDGs) that have been established by the United Nations (*Georgeson & Maslin, 2018*).

Sustainable Development Goals (SDGs) that are proposed in the 2030 Agenda for Sustainable Development are as follows: the elimination of poverty, the promotion of gender equality, the preservation of the environment, and the progress of economic development (*Raszkowski & Bartniczak, 2019*). In contrast to the "Millennium Development Goals (MDGs)", the Sustainable Development Goals (SDGs) place an emphasis on an integrated approach to sustainable development that takes into consideration economic, social, and environmental elements. "Leaving No One Behind" and the elimination of inequities and discrimination are the focal points of the Sustainable Development Goals (SDGs), which are universal, inclusive, and linked.

Originally a component of the 2030 Agenda for Sustainable Development, the Sustainable Development Goals (SDGs) were approved by the General Assembly of the United Nations in September of 2015. This comprehensive approach for attaining worldwide progress in economic development, social equity, and environmental sustainability by the year 2030 is outlined by these seventeen goals, which are interconnected with one another (*Agbedahin, 2019*).

In recognition of the fact that sustainability is multi-faceted, the Sustainable Development Goals (SDGs) address difficulties across three primary pillars (*Bak, 2024*) . Table 1.1 below describes the 3 primary pillars or dimensions of Sustainable Development.

Table 1.1: Classification of Sustainable Development Goals (SDGs) under Sustainability Dimensions

Sustainability Dimension	Related SDGs	SDG Focus Areas
Economic Sustainability	SDG8	‘Decent Work and Economic Growth’
	SDG9	‘Industry, Innovation, and Infrastructure’
	SDG12	‘Responsible Consumption and Production’
Social Sustainability	SDG1	‘No Poverty’
	SDG2	‘Zero Hunger’
	SDG3	‘Good Health and Well-being’
	SDG4	‘Quality Education’
	SDG5	‘Gender Equality’
	SDG10	‘Reduced Inequalities’
	SDG16	‘Peace, Justice, and Strong Institutions’
Environmental Sustainability	SDG6	‘Clean Water and Sanitation’
	SDG7	‘Affordable and Clean Energy’
	SDG11	‘Sustainable Cities and Communities’
	SDG13	‘Climate Action’
	SDG14	‘Life Below Water’
	SDG15	‘Life on Land’

As women make up half of the world's population they have an impact on economic growth, social stability, and environmental sustainability and therefore, gender equality and the welfare of women are essential components in the process of achieving sustainable development.

Women's welfare remains critical component of sustainable development, especially in India, where socio-economic disparities continue to hinder the progress of marginalized communities. To address these challenges, the Indian government has introduced various schemes focused on health, education, women welfare, and employment. Through targeted interventions, these schemes seek to reduce gender disparities, promote social inclusion, and contribute to sustainable national development (*NITI Aayog, 2023*).

Health is a fundamental pillar of women's welfare, particularly in a country where maternal mortality, healthcare accessibility, and disease prevention remain significant challenges. To address these issues, the government has launched several schemes, including the Pradhan Mantri Jan Arogya Yojana (Ayushman Bharat Yojana) and Pradhan Mantri Matritva Vandana Yojana (*Prajapati et al., 2022*). The health schemes ensure that women receive necessary maternal care and health coverage, thereby improving overall family well-being.

II. Objectives of Study

This paper is based on the following objectives:

- To understand the present status of women's health in U.P.
- To explore the impact of selected schemes in uplifting the status of women in terms of health in U.P.
- To assess the deficiencies and the constraints experienced by the beneficiaries under the selected schemes.

III. Review of Literature

For better understanding the different schemes in relation to sustainable development the below mention literature has been reviewed:

Amarender Reddy A., Sarkar Anindita, Radhika Rani Ch, Das Abhipsita, C Papi Reddy and Vajrala Sneha Anjani (2024) India's efforts to address poverty and inequality are indeed critical in the global pursuit of Sustainable Development Goals (SDGs). With a population of over 1.4 billion, the country's ability to implement development schemes effectively has a profound impact on achieving SDG targets, not only domestically but globally as well.

According to empirical research (**Bala, 2024**) welfare programs that are well implemented have the potential to greatly improve the quality of life of women and contribute to the advancement of sustainable development.

Mishra, Avantika (2023) women's empowerment plays a pivotal role in achieving sustainable development. "By promoting gender equality and providing women with equal access to education, healthcare, and economic opportunities, societies can experience comprehensive progress". When women are empowered, they contribute significantly to the workforce, enhance family welfare, and drive social change.

Singh, Reena (2021) in her descriptive study reviewed government initiatives for women's development, including education, health, and financial assistance. She found that while schemes have improved women's access to resources, gaps in awareness and social misconceptions hinder empowerment. The study recommends better outreach and capacity building to improve impact and accessibility.

According to (Falcao et al., 2015), who investigated government programs aimed at improving the health of women, programs such as the Janani Suraksha Yojana have been successful in lowering the rates of maternal death; nevertheless, these programs have difficulties in terms of accessibility and logistics in rural regions.

Sekher et al., n.d. discussed and presented the impact of Pradhan Mantri Matritva Vandana Yojana (PMMVY) for the improvement of accessibility of health facilities for mothers and further found that it has become ineffective due to “bureaucratic red tape and delays in disbursement of funds”.

By concentrating on gender-responsive budgeting, (Dyakova, 2017) showed that states that invest more in programs that help women do better in terms of SDG 3 (Good Health and Well-being) and SDG 5 (Gender Equality).

Jagannath & Chakravarthy (2025) examined the effects of the Pradhan Mantri Matritva Vandana Yojana (PMMVY) on mother and child health and concluded that, although the program has enhanced institutional deliveries, its full potential is hindered by delayed cash release and a lack of knowledge among recipients.

Shukla et al., 2023 examined Pradhan Mantri Matritva Vandana Yojana (PMMVY) and found that delayed financial assistance and lack of awareness among rural women remain major obstacles.

In another (P. K. Ghosh et al., 2018) study, analysed Janani Suraksha Yojana (JSY) and found that while institutional deliveries have increased, poor infrastructure in rural healthcare facilities remains a critical challenge.

IV. Research Methodology

This section describes the methodology opted for the research:

- **Research Design**

The Research Design of the study is descriptive analysis as it investigates the various government schemes effectiveness and implementation in the Lucknow region of Uttar Pradesh. In addition to this, it is analytical in nature because it assesses the efficiency and influence of these selected schemes in terms of improving the overall standing of women within the society. The present research will also identify the challenges that beneficiaries have experienced under the various schemes that have been chosen.

As a result of the difficulty involved in evaluating schemes, a research strategy that utilises a combination of approaches integrating a mixed-methods approach that utilizes both qualitative and quantitative data is utilised in order to improve the reliability as well as validity of the findings.

- **Samples in the Study**

Data collection was done in Lucknow district's two blocks (Malihabad Block and Mall Block) and from each block two villages (Bhadeshwar Mau and Hamirapur Villages from Malihabad Block, Nabi Panah and Saleh Nagar from Mall Block) were selected.

- **Sampling Technique**

In this study, the sampling technique employed is “Convenience Sampling, which falls under the category of non-probability sampling methods”. Convenience sampling is chosen primarily

due to the practical considerations associated with data collection within the Lucknow region. This method is effective for gathering data from readily accessible and willing participants.

- **Sample Size**

The sample size was calculated by the Cochran formula, which is widely used when the population size is large or unknown.

Sample Size: $n_0 = ((1.96)^2 * 0.34 * 0.66) / (.05)^2 = 344.8$

Therefore, a sample size of 400 (100 respondents from each village) were chosen in order to increase the representativeness of samples and minimize the error in the analysis.

- **Sampling Units:**

The study was conducted in four villages within two blocks of Lucknow district:

1. Malihabad Block:	2. Mall Block:
Village 1: Bhadeshwar Mau (100 respondents)	Village 3: Nabi Panah (100 respondents)
Village 2: Hamirapur (100 respondents)	Village 4: Saleh Nagar (100 respondents)

- **Data Collection**

- **Primary Data Collection:** The primary data has been collected through semi-structured questionnaires and personal interviews with selected respondents.
- **Secondary Data:** The secondary data has been collected from the government reports, policy documents and published literature related to the selected schemes. The data is also gathered from national and international conference papers. The relevant studies are summarized under the review of related literature section.

- **Hypothesis Development**

For the testing of the hypothesis on Women's health the following two schemes are selected:

- **Pradhan Mantri Jan Arogya Yojana (PMJAY)**
- **Pradhan Mantri Matru Vandana Yojana (PMMVY)**

Women's Health Schemes

The “**Pradhan Mantri Jan Arogya Yojana (PMJAY)**”, also known as Ayushman Bharat Yojana, is one of the largest healthcare initiatives globally, launched in 2018. It aims to provide health insurance coverage of up to INR 5 lakh per family per year for secondary and tertiary hospitalization (*Pandey & Dilip, 2023*). This scheme primarily targets economically vulnerable families, offering them financial protection against high healthcare costs. One of the most significant aspects of PMJAY is its cashless and paperless healthcare service delivery through a network of empanelled hospitals across India. Covering over 1,350 medical packages, it ensures comprehensive healthcare for conditions requiring hospitalization. Additionally, the portability feature allows beneficiaries to access treatment at any listed hospital across the country, making healthcare universally accessible for the poor and underprivileged. The scheme's emphasis on covering the entire family without a cap on the number of members further enhances its inclusivity (*Campbell, 2020*).

The “**Pradhan Mantri Matritva Vandana Yojana (PMMVY)**”, launched in 2017, focuses on the welfare of pregnant and lactating women. As part of the government's effort to reduce

maternal and infant mortality, this scheme provides financial assistance of INR 5,000 to pregnant women in three instalments, linked to antenatal care, institutional delivery, and child vaccination(*Mehta et al., 2023*). By promoting safe motherhood practices, PMMVY aims to ensure better maternal health and nutrition, thereby addressing high-risk pregnancies. The scheme adopts a Direct Benefit Transfer (DBT) approach, which minimizes delays and ensures transparency. It has significantly improved maternal healthcare access, particularly among women from economically weaker sections.

The following hypotheses have been formulated for the study:

Hypothesis:

H₀₁: There is no significant impact of selected schemes in uplifting the status of women in terms of health in U.P.

H₁₁: There is a significant impact of selected schemes in uplifting the status of women in terms of health in U.P.

• **Analysis and Interpretation of Data**

The collected data will be analysed using relevant statistical and analytical tools to determine the role of the selected schemes. The study will employ:

- **Graphs and Tables:** for presentation of data.
- **Mean, Median, Mode and Standard Deviation:** for describing the data.
- **Correlation Analysis:** To measure the degree of relation between government schemes and women welfare, education, health and employment status.
- **Regression Analysis:** To identify the cause-and-effect relationships between scheme implementation and its impact on women welfare, education, health and employment status.
- **ANOVA (Analysis of Variance):** To compare the means of different aspects of scheme implementation and their outcomes.

V. Analysis and Interpretation

Number of Beneficiaries under each selected scheme

The Table 1.2 shows the number of beneficiaries for each selected scheme under health.

Table 1.2 Number of Beneficiaries

Scheme Name (Health)	Frequency	Percent	Valid Percent	Cumulative Percent
None	164	41.0	41.0	41.0
PMJAY	91	22.75	22.75	63.75
PMMVY	145	36.25	36.25	100.0
Total	400	100.0	100.0	

The above data have been depicted in the form of a Bar Chart and a Pie Diagram. The Figure 1.1 shows the number of beneficiaries under each selected scheme (Health) in the form of a Bar Chart.

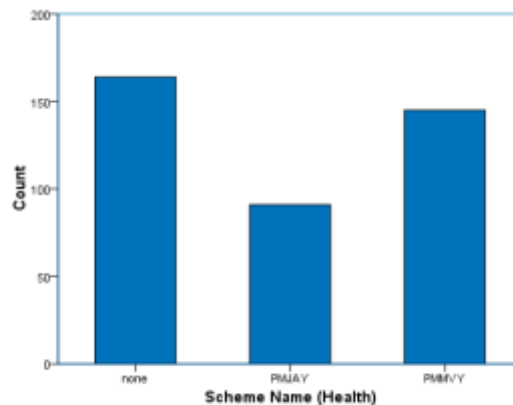


Figure 1.1 Beneficiaries of PMJAY and PMMVY

The Figure 1.2 shows the number of beneficiaries under each selected scheme (Health) in the form of a Pie Diagram.

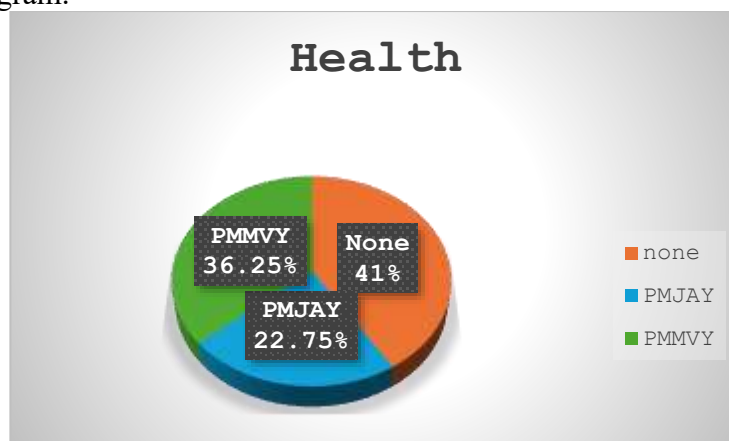


Figure 1.2 Beneficiaries of PMJAY and PMMVY

Correlation

The Correlation has been calculated between the dependent variables (impact on beneficiary, effectiveness and accessibility of the health-related schemes) and independent variables (demographic factors i.e. age, educational qualification and employment status of the beneficiaries). The Table 1.3 shows the correlation matrix of the hypothesis:

Table 1.3 Correlation Matrix

		Correlations		
		Impact on Beneficiary (Heath)	Effectiveness of the scheme (Health)	Accessibility Rating (Health)
Age	Pearson Correlation	-.394**	-.349**	-.413**
	Sig. (2-tailed)	.000	.000	.000
Educational Qualification	Pearson Correlation	.170**	.250**	.216**
	Sig. (2-tailed)	.001	.000	.000
Employment Status	Pearson Correlation	-.003	-.029	-.009
	Sig. (2-tailed)	.956	.557	.863

**. Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=400

The Table 1.3 represents the correlational matrix between the health-related schemes and dependent variables- impact, effectiveness and accessibility among the beneficiaries based on their age, educational qualification and employment. The **negative correlation ($r = -0.394$, $p < .001$)** was found between age and impact of the schemes which states that participants who avail the benefits perceive are mainly young age respondents. However, age has also got **negative correlation with both Effectiveness (-0.349 , $p < .001$) and Accessibility of the schemes (-0.413 , $p < .001$)**. This predicts that respondents are experiencing less impact, effectiveness and accessibility of the health-related schemes with their increasing age because of the outreach barriers. The young respondents are mainly availing the schemes.

A positive correlation is found between educational qualification and the dependent variables- impact ($r = 0.170$), effectiveness ($r = 0.250$) and accessibility ($r = 0.216$) on the health-related schemes which explicitly predicts that women of young age who are educated tend to avail the benefits of the scheme and another variable of **employment status has weak and non-significant correlation with the dependent variables-impact ($r = -0.003$), effectiveness ($r = -0.029$) and accessibility ($r = -0.009$)** on the health-related schemes which explicitly predicts that employment status of the women do not have any relation with the availing of the schemes.

Result

In the above analysis, the correlation was found significant at the 0.01 level (2-tailed) between the Dependent variables (impact, effectiveness and accessibility of the health-related schemes) and the Independent variables (Age and Educational Qualification of the beneficiaries of the scheme). There was no significant correlation found between employment status of the beneficiaries and DVs. Hence, with due consideration to this empirical analysis **the null hypothesis H_{01} i.e. There is no significant impact of selected schemes in uplifting the status of women in terms of Health in U.P is rejected and alternate hypothesis H_{11} i.e. There is a significant impact of selected schemes in uplifting the status of women in terms of Health in U.P is accepted.**

Model Summary I

The Table 1.4 shows the **Model summary between Dependent Variable (DV) Impact on the beneficiaries of the health-related schemes and Independent Variables (IV) Age of beneficiary and Educational Qualification.**

Table 1.4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.408 ^a	.166	.162	1.240
a. Predictors: (Constant), Educational Qualification, Age				

The regression model summary offers the relationship between combine effect of predictor variables which is demographic details (age and educational qualification) has an effect on the Dependent Variable (DV) that is- Impact on the beneficiaries of the health-related schemes. The **R value of 0.408** indicates a **moderate positive correlation** between the predictors and the dependent variable. The **R Square value of .166** implies that only **16.6% of the variation** in the dependent variable (impact of the scheme) is explained by these two predictors- age and

educational qualification. With the value of the **Adjusted R Square value (0.162)**, which is adjusts for the predictors as well as the respondent's samples is found to predict that model is statistically valid and subsequently offers a consistent explanatory power. The **Standard Error of the Estimate is 1.240**, predicts the moderate level of accuracy of the findings. It is clear that there is influence of age and educational qualification on the perceived impact of the scheme on beneficiaries. This attributes a very small portion of the variance present in the model summary.

(a) ANOVA^a

The Table 1.5 shows ANOVA analysis between the following variables:

- a. Dependent Variable: Impact on Beneficiary (Health)
- b. Predictors or Independent Variable: (Constant), Educational Qualification, Age

Table 1.5 ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	121.605	2	60.802	39.567	.000 ^b
Residual	610.073	397	1.537		
Total	731.678	399			

a. Dependent Variable: Impact on Beneficiary (Health)

b. Predictors: (Constant), Educational Qualification, Age

ANOVA was administered in order to understand the composite level of both the dependent variable- impact on the respondents on the independent variables or the predictors- educational qualifications as well as the age of the beneficiaries. The results obtained through the analysis of the variance clearly indicate that model is statistically significant with the **regression value as 121.605, residual value as 610.073 and the total accounts for 731.678. The F ratio (39.567, 2df) is significant at 0.000 level.** Since, the obtained F ratio is significant ($p < .001$) predicts that both the dependent variables significantly contribute to the perceived impact of the health-related schemes. The findings also suggest that health-related schemes should be tailored according to the women's different age groups and with varied educational background. **Therefore, impact of the scheme is significantly influenced by the age and education of the beneficiaries.**

(b) Coefficients^a

The Table 1.6 shows Coefficients Table between Dependent Variable: Impact on Beneficiary (Health) and Independent Variables Age and Educational Qualification.

Table 1.6 Coefficients Table

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	4.195	.270		15.566	.000
Age	-.044	.005	-.376	-8.083	.000
Educational Qualification	.156	.069	.105	2.256	.025
a. Dependent Variable: Impact on Beneficiary (Health)					

The coefficient table 1.6 provides a robust analysis of the impact of the schemes through predator variables- age and educational qualification. As discussed in Table 1.6 both the

independent variables are statistically significant in predicting the impact of the schemes on the respondents who have availed it. The coefficient value for age ($B = -0.044$, $t = -8.083$, $p < 0.001$) is negative which indicates that women having old age perceive the schemes do not significantly contribute in improving their health standards. The obtained result can be attributed to many factors like accessibility of the scheme or chronic diseases in which interventions are less responsive. Whereas, the other independent variable that is educational qualification significantly as well as positively ($B = 0.156$, $t = 2.256$, $p = 0.025$) contributes to the respondent's perception of impact. This finding indicates that women with good educational background are comparatively more aware of the possible benefits of the schemes.

With the obtained constant value of regression model ($B = 4.195$, $p < 0.001$) indicates that baseline perception of the impact on health-related schemes by the beneficiaries when all predictors are held constant, is significantly positive.

The standardized coefficients further observe the relative position of the predictors, with age (-0.376) emphasizing the stronger effect compared to educational qualification (0.105). This suggests that while education enhances perceived impact, age-related barriers may more substantially diminish it. The statistically significant p -values (all < 0.05) confirm the strength of the model and predict that observed relationship is not due. **Therefore, alternate hypothesis H₁₁ is empirically accepted and supported.** However, findings clearly indicate that policy implication can be more impactful if all the diversified segments of demographic details are covered such as older age as well as women with low level of education.

Model Summary II

The following table 1.7 shows the **Model summary between Dependent Variable (DV) effectiveness of the health-related schemes and Independent Variables (IV) Age of beneficiary and Educational Qualification.**

Table 1.7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.399 ^a	.159	.155	1.337

a. Predictors: (Constant), Educational Qualification, Age

The regression model summary offers the relationship between combine effect of dependent variable-effectiveness of the scheme independent variable that is educational qualification as well as age. The **R value of 0.399** indicates a **moderate positive correlation** between the predictors and the dependent variable. The R Square value of 0.159 implies that approximately 15.9% of the variation in the dependent variable is explained by the model which means that although relationship exists between the predictor variable and the dependent variable but with modest strength only. With the value of the Adjusted R Square value of 0.155, it becomes clear that all the predictors used explain only a small portion of the variance present in the model summary. Since, the explanatory power of the model is limited therefore, it is clear that variations related to age can influence perceived impact of the health-related scheme. In Correlation Matrix also the negative correlation was observed ($r = -0.147$, $p < 0.01$) is supported with this finding. Consequently, it can be said women with more age may find schemes less accessible in comparison to other age respondents who are young. The standard error of the estimate (1.337) further recommends some degree of inconsistency in the predictions of the independent variables on the dependent variables. The obtained R^2 value indicates that overall regression is statistically significant suggesting that educational qualifications and age modestly contribute to the improvement of women's perception of

effectiveness of health schemes. But the low R^2 value specifies that other factors existing beyond the age and qualification also play an important role.

(a) ANOVA^a

The following Table 1.8 shows ANOVA analysis between the following variable:

- a. Dependent Variable: effectiveness of the health-related schemes
- b. Predictors or Independent Variable: (Constant), Educational Qualification, Age

Table 1.8 ANOVA analysis

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	134.011	2	67.005	37.486	.000 ^b
	Residual	709.629	397	1.787		
	Total	843.640	399			

a. Dependent Variable: Effectiveness of the scheme (Health)

b. Predictors: (Constant), Educational Qualification, Age

ANOVA was calculated in order to comprehend the compound level of both the dependent variable- effectiveness of the scheme perceived by the beneficiaries. The independent variables or the predictors are- educational qualifications as well as the age of the beneficiaries. The results obtained through the robust analysis of the variances clearly indicate that model is statistically significant with the regression value as 134.011, residual value as 709.629 and the total accounts for 843.640. The F ratio (37.486, 2df) is significant at 0.000 level. Since, the obtained F ratio is significant ($p < .001$) predicts that both the dependent variables significantly contribute to the effectiveness of the health-related schemes. The model summary indicates a modest explanatory power; the ANOVA results confirm the reliability of the model in predicting outcomes significantly better than random chance. The findings also suggest that health-related schemes should be tailored according to the women's different age groups and with varied educational background. Since, impact of the scheme is significantly influenced by the age and education of the beneficiaries therefore null hypothesis H_{01} is rejected and alternate hypothesis H_{11} is accepted.

(b) Coefficients^a

The Table 1.9 shows Coefficients Table between Dependent Variable: Effectiveness of the schemes (Health) and Independent Variables age and educational qualification.

Table 1.9 Coefficients Table

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	3.448	.291		11.862	.000
	Age	-.039	.006	-.315	-6.743	.000
	Educational Qualification	.312	.075	.195	4.181	.000
a. Dependent Variable: Effectiveness of the scheme (Health)						

The coefficient Table 1.9 additionally explains that influence of age and educational qualification on the perceived effectiveness of health-related schemes. The detailed analysis reveals that both the independent variables- age and education qualification meaningfully

contributes to the outcome, with p-values less than 0.001, indicating strong statistical significance. The unstandardized coefficient for age is -0.039, showcases the negative relationship. It predicts that age and perception of effectiveness of the health-related schemes are inversely related. The respondents with older age are not able to positively perceive the effectiveness of the age may be because of outreach barriers. Whereas, educational qualification has a positive relationship with the perception of effectiveness of the health-related schemes with the obtained coefficient (0.312). This data contributes to the understanding that as the beneficiaries who have higher education perceive the effectiveness of the scheme possibly due to their understanding about the utility and related information of the selected schemes.

These results support alternative hypothesis (H_{11}) is accepted, by confirming that educational qualification enhances, while age negatively relates with the perceived effectiveness of health initiatives opted by the government.

Model Summary III

The following table 1.10 shows the **Model summary between Dependent Variable (DV) accessibility of government schemes and Independent Variables (IV) Age of beneficiary and Educational Qualification.**

Table 1.10 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.438 ^a	.192	.188	1.270
a. Predictors: (Constant), Educational Qualification, Age				

The model summary offers understanding into the explanatory power of the regression analysis conducted to examine the influence of age and educational qualification on a given outcome that is dependent variable the accessibility of government schemes. The obtained R value (0.438) indicates a moderate positive correlation between the independent variables (age and educational qualification) and the dependent variable the accessibility of the health-related schemes. The R Square value (0.192) predicts that only 19.2% of the variance in the accessibility of the scheme is manifested by the model. This signifies only the modest enhancement in explanatory power. However, with the adjusted R Square (0.188) scores the model is reliable; the scores of standard errors of the estimate (1.270) reflect observed values fall from the regression line. Hence, the result indicates that age and education are significant predictors and contribute moderately to explaining the variability in outcomes.

(a) ANOVA^a

The following Table 1.11 shows ANOVA analysis between the following variables:

a. Dependent Variable: Accessibility of the health-related schemes

b. Predictors or Independent Variable: (Constant), Educational Qualification, Age

Table 1.11 ANOVA Analysis

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	152.196	2	76.098	47.175	.000 ^b
Residual	640.402	397	1.613		
Total	792.597	399			

a. Dependent Variable: Accessibility Rating (Health)
b. Predictors: (Constant), Educational Qualification, Age

ANOVA provides a statistical insight in comprehending the overall significance of regression analysis. It examines the impact of age and educational qualification of the beneficiaries (independent variable) on the accessibility of health schemes (dependent variable). The results obtained through the vigorous investigation of the variances which clearly indicates that model is statistically significant with the regression value as 152.196, residual value as 640.402 and the total accounts for 792.597. This breakdown indicates that a substantial proportion of the difference in the accessibility rating can be credited to the independent variables included in the model.

The F ratio (47.175, 2df) is significant at 0.001 level. Since, the obtained F ratio is significant ($p < .001$) predicts that both the dependent variables significantly contribute to the accessibility of the health-related schemes. The model summary indicates a modest explanatory power that is to say, the regression model as a whole is significant; the ANOVA results confirm the reliability of the model in predicting outcomes significantly better than random chance. The findings also suggest that health-related schemes should be tailored according to the women's different age groups and with varied educational background. Since, accessibility of the scheme is significantly influenced by the age and education of the beneficiaries therefore null hypothesis H_{01} is rejected and alternate hypothesis H_{11} is accepted.

The possible reasons for respondents to not able to have the accessibility of the schemes can be difference in awareness level as well as the mobility.

(b) Coefficients^a

The Table 1.12 shows Coefficients Table between Dependent Variable: Accessibility of the schemes (Health) and Independent Variables: Age and Educational Qualification.

Table 1.12 Coefficients Table

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.154	.276		15.042	.000
	Age	-.047	.006	-.387	-8.448	.000
	Educational Qualification	.231	.071	.149	3.256	.001
a. Dependent Variable: Accessibility Rating (Health)						

The Coefficient Table 1.12 gives a thorough explanation of how age and educational qualification independently affect the accessibility rating of health schemes for women. The observed constant value (4.154 $p < .001$) elicits the baseline level of accessibility of the scheme when the predictors or the IVs are assumed at zero, which helps in framing the reference point for regression equation. The value for age predictor (-0.047 $p < .001$) indicates a statistically significant negative relationship between age and accessibility of the schemes. For every one-year increase in age, the accessibility rating decreases by 0.047 units, assuming educational qualification remains constant. This is further supported by the standardized beta coefficient of -0.387, which suggests that age has a strong negative influence on accessibility perceptions.

The coefficient value obtained for educational qualification (0.231 $p = .001$), shows a positive and statistically significant relationship with accessibility. This means that with each higher

level of education, the perceived accessibility of health schemes improves by 0.231 units, controlling for age. The standardized beta of 0.149 indicates a moderate positive influence.

The possible reasons as discussed in previous explanations also, that respondents of older age are conceivably be experiencing the generational challenges, outreach barriers, lack of digital literacy as well as mobility issues in comparison to younger ones. Whereas, education plays a critical part, in enhancing responsiveness as well as understanding of the accessibility of the schemes.

In conclusion, the above outcomes predict that age negatively, whereas education positively influences the impact, effectiveness as well as accessibility of the health schemes. Hence, demographic factors play a significant role in utilizing the schemes among the beneficiaries.

Constraints and Deficiencies:

The health-related schemes have not been successfully utilized because of many factors conferred by the respondents. The following constraints were shared by the beneficiaries:

- Human resource shortage,
- Bureaucratic delays,
- Corruption,
- Infrastructural limitation,
- Cultural barriers and
- Lack of awareness regarding schemes,
- Health literacy,
- Transportation issues,
- Age, education and financial burden.

VI. Conclusion

Women's health is essential for achieving sustainable development and socio-economic progress in India. The findings of this study show that there is a significant impact of selected schemes in uplifting the status of women in terms of health in U.P. The findings also suggest that health-related schemes should be tailored according to the women's different age groups and with varied educational background. As the above outcomes predict that age negatively, whereas education positively influences the impact, effectiveness as well as accessibility of the health schemes. Hence, demographic factors play a significant role in utilizing the schemes among the beneficiaries. The possible reasons for this is that respondents of older age are conceivably be experiencing the generational challenges, outreach barriers, lack of digital literacy as well as mobility issues in comparison to younger ones. Whereas, education plays a critical part, in enhancing responsiveness as well as understanding of the accessibility of the schemes.

To bridge these gaps, it is essential to adopt a multi-pronged approach that includes community engagement, digital inclusion, and administrative reforms. Developing locally tailored outreach strategies, simplifying bureaucratic procedures, and enhancing financial and digital literacy among beneficiaries will significantly improve scheme utilization and outcomes.

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