

# Educational Attainment and Women Empowerment among Schedule Caste Communities in West Bengal: A Comparative Study of Cooch Behar and Murshidabad Districts

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**Abstract:** *The present study investigates the nexus between educational attainment and women empowerment among Scheduled Caste (SC) communities in West Bengal, with a specific focus on two contrasting districts—Cooch Behar (Koch Bihar) and Murshidabad. Employing a descriptive-analytical survey design with a multi-stage stratified random sampling technique, the study collected primary data from 200 SC women (100 from each district) through a structured interview schedule and a validated empowerment index. The study examined women's empowerment across four dimensions: social, economic, educational, and political. Statistical analyses, including one-way ANOVA, Pearson correlation, independent samples t-test, and multiple regression, were applied to test three null hypotheses. Results revealed statistically significant differences in empowerment levels across educational attainment groups ( $F = 63.29, p < .001$ ), a strong positive correlation between educational attainment and the composite empowerment index ( $r = .693, p < .001$ ), and a significant predictive influence of educational attainment on decision-making ability ( $\beta = .512, t = 7.93, p < .001$ ). Findings underscore the transformative role of education in dismantling caste-based socio-economic barriers and highlight notable inter-district disparities. The study situates its findings within the framework of constitutional provisions (Articles 14, 15, 17, 21, 46), the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act 1989 (amended 2015, 2018), and state welfare programmes including Kanyashree Prakalpa, Rupashree Prakalpa, and Sabooj Sathi, to recommend context-specific policy interventions for accelerating SC women's empowerment in West Bengal.*

**Keywords:** Educational attainment; Women empowerment; Scheduled Caste; West Bengal; Cooch Behar; Murshidabad; Decision-making; Social empowerment; Kanyashree; Caste discrimination; Constitutional provisions; SC/ST Act

## I. INTRODUCTION

Women empowerment constitutes a foundational pillar of sustainable human development, and its intersectionality with caste-based social stratification renders the discourse profoundly complex within the Indian context. Scheduled Caste (SC) women occupy the lowest rung of a historically stratified social order, experiencing simultaneous marginalisation on the axes of gender, caste, class, and educational access (Thorat & Attewell, 2020). West Bengal, a state that prides itself on a legacy of progressive social reform—from Raja Rammohan Roy's widow remarriage campaign to the Left Front's land reforms—continues to grapple with the structural subordination of its Dalit female population. As per the Census of India 2011, Scheduled Castes constitute 23.51 per cent of West Bengal's total population, making it the state with the highest SC proportion in the country (Registrar General of India, 2011). Yet, disaggregated data consistently reveal that SC women in the state suffer from lower literacy rates, constrained economic agency, restricted participation in governance, and pervasive social exclusion.

Education is widely recognised as the most potent instrument for breaking the intergenerational cycle of deprivation (Sen, 1999). The National Education Policy 2020 (NEP 2020) reaffirms this by explicitly directing resources towards Socially and Economically Disadvantaged Groups (SEDGs), a category that prominently includes SC girls and women. In West Bengal, flagship schemes such as Kanyashree Prakalpa, Sabooj Sathi, and Sikshashree have specifically targeted the educational retention and completion of girls from marginalised communities (Government of West Bengal, 2022). Yet, the translation of educational access into substantive empowerment—economic independence, political participation, and autonomous decision-making—remains inadequate and varies considerably across districts. Districts such as Cooch Behar in the north and Murshidabad in central West Bengal present distinct socio-economic landscapes. Cooch Behar, with a large Rajbangshi SC population, has relatively higher access to government schemes, while Murshidabad, predominantly rural and economically backward, records higher rates of female school dropout and early marriage (DISE, 2022; NFHS-5, 2021). Comparing these two districts thus provides a powerful lens for analysing how structural context mediates the relationship between educational attainment and women's empowerment. The present study is anchored in Kabeer's (1999) three-dimensional framework of resources, agency, and achievements, operationalised through the four dimensions of social, economic, educational, and political empowerment. It tests three rigorously formulated null hypotheses using robust statistical tools and situates findings within the legislative and policy architecture governing SC welfare in India.

### **1.1. The Emergence of Study**

The researcher's sustained engagement with grassroots community education programmes in the Jalpaiguri–Cooch Behar corridor and field visits to rural pockets of Murshidabad prompted this inquiry. Interactions with SC women in Self-Help Groups (SHGs), Mahila Samitis, and non-governmental literacy drives consistently revealed a paradox: women who had received secondary or higher secondary education exhibited markedly different agency in household decision-making, economic participation, and community leadership, as compared to their less-educated counterparts. This experiential reality, reinforced by a preliminary review of secondary data from NFHS-5 (2021) and UDISE+ (2022-23), catalysed the current systematic investigation. The study seeks to generate empirical evidence that can guide both state and district-level policy interventions for the substantive empowerment of SC women in West Bengal.

## **II. REVIEW OF RELATED LITERATURE**

Tamang and Chettri (2026) found a robust pooled effect size ( $d = 0.74$ ) for the relationship between secondary and higher education and composite women's empowerment scores among marginalised communities. The study specifically highlighted that each additional year of schooling beyond primary level was associated with a 12–18% increase in women's economic agency and a 9–15% improvement in community-level political participation. The authors underscored the role of conditional cash transfer (CCT) schemes—analogue to India's Kanyashree Prakalpa—in sustaining female enrollment, and recommended that governments design intersectional policy frameworks that simultaneously address caste, class, and gender barriers to education.

Mondal and Ghosh (2025) conducted a rigorous district-level quantitative analysis of UDISE+ (2022–23) and state-level scheme data to assess the impact of Kanyashree Prakalpa on SC/ST female enrollment, retention, and empowerment outcomes across 23 districts of West Bengal. Their findings confirmed that districts with higher Kanyashree beneficiary density demonstrated statistically significant improvements in secondary school completion rates among SC girls ( $\beta = 0.63$ ,  $p < .001$ ). The study also found significant positive associations between scheme participation and delayed marriage, reduced maternal mortality, and enhanced civic awareness. Cooch Behar emerged as a high-performing district due to relatively robust implementation infrastructure, while Murshidabad showed moderate gains constrained by poverty and patriarchal social norms—a finding that corroborates the comparative design of the present study.

Khanna and Singh (2023) analysed panel data from the India Human Development Survey (IHDS-II) to examine the cumulative disadvantages experienced by Dalit women in accessing and utilising educational opportunities. The study

demonstrated that SC women who completed secondary education were 2.4 times more likely to participate in economic activities outside the household, and 1.8 times more likely to exercise independent decision-making in marriage, fertility, and financial matters, compared to those with no formal education. The authors argued that intersectional policy design—rather than single-axis interventions—was essential for converting educational access into measurable empowerment outcomes. This finding directly informs the multi-dimensional empowerment framework adopted in the present study.

Roy, Bose, and Chakraborty (2022) conducted a mixed-methods study involving 280 SC women across four districts of rural West Bengal—including Cooch Behar—using structured questionnaires supplemented by in-depth interviews. Their research identified a significant discrepancy between formal literacy rates and functional empowerment among SC women, concluding that literacy alone was insufficient without access to vocational training, economic assets, and social networks. The study found that participation in SHGs and government-sponsored skill development programmes mediated the relationship between education and economic empowerment. The authors advocated for community-based education models that integrate life-skills training, legal literacy, and financial inclusion for SC women, a recommendation that the current study examines through the lens of programme awareness and utilisation.

Sarkar and Das (2021) examined the relationship between educational attainment and political participation—including voting behaviour, membership in Panchayati Raj Institutions (PRIs), and political awareness—among 320 SC women in seven districts of West Bengal. Using logistic regression, the study found that SC women who had completed secondary education were 3.1 times more likely to contest or vote in local body elections and were significantly more aware of their constitutional rights under Articles 243D and 330 of the Constitution. The authors highlighted that the West Bengal government's reservation of 50% seats for women in PRIs had created structural opportunities, but educational deprivation prevented many SC women from effectively utilising these provisions. This study provides a critical backdrop for the political empowerment dimension examined in the present research.

### **2.3. Research Gap**

A critical review of the above literature reveals that while research has examined either the impact of specific schemes (Mondal & Ghosh, 2025; Roy et al., 2022) or individual empowerment dimensions (Sarkar & Das, 2021), there is a marked paucity of studies that simultaneously examine all four dimensions of empowerment—social, economic, educational, and political—in relation to educational attainment among SC women using a comparative district-level design within West Bengal. Internationally, meta-analytic evidence (Tamang & Chettri, 2026) and intersectional analyses (Khanna & Singh, 2023) have established the theoretical framework, but empirically grounded, district-specific comparative studies that test multiple hypotheses using mixed statistical methods and situate findings within the state's specific constitutional and policy architecture remain scarce. The present study directly addresses this gap.

## **III. STATEMENT OF THE PROBLEM**

Despite West Bengal's significant SC population (23.51% of total population; Census, 2011), the status of SC women in the state continues to be characterised by low educational attainment, restricted economic participation, and minimal political engagement. While several welfare schemes have been operationalised—including Kanyashree Prakalpa, Rupashree Prakalpa, the SC Scholarship Programme, and Sabooj Sathi—the empirical linkage between women's educational attainment and their resultant empowerment across social, economic, educational, and political dimensions remains inadequately examined at the district level. Furthermore, significant intra-state disparities exist between economically developed districts like Cooch Behar and historically backward districts like Murshidabad, yet these disparities have not been rigorously analysed in the context of educational empowerment. This study, therefore, investigates the problem: To what extent does educational attainment determine the empowerment status of Scheduled Caste women in West Bengal, and how does this relationship vary across the contrasting districts of Cooch Behar and Murshidabad?

#### **IV. SIGNIFICANCE OF THE STUDY**

The present study holds significance at theoretical, empirical, and policy levels. Theoretically, it extends Kabeer's (1999) agency-resources-achievement framework and Bourdieu's concept of cultural capital by applying them to the unique socio-caste context of SC women in West Bengal. Empirically, it generates primary data from 200 SC women across two contrasting districts, offering location-specific insights that are rare in existing scholarship. At the policy level, the study provides evidence-based recommendations for strengthening the implementation of constitutional provisions—particularly Articles 14, 15(3), 17, 21, 38(2), 39(a), and 46—and welfare schemes such as the Kanyashree Prakalpa, Beti Bachao Beti Padhao, MGNREGS, and NRLM, specifically as they pertain to SC women's education and empowerment. The study's findings are relevant to state planners, district administration, NGOs, SHGs, educators, and scholars engaged with SC welfare, gender equity, and inclusive development in West Bengal.

#### **V. OBJECTIVES OF THE STUDY**

**O1:** To examine the status of women empowerment among Schedule Caste women in West Bengal in relation to social, economic, educational, and political dimensions.

**O2:** To analyze the relationship between educational attainment and women empowerment among Schedule Caste women in West Bengal.

**O3:** To investigate the influence of educational attainment on decision-making ability among Schedule Caste women in family and community life.

#### **VI. HYPOTHESES OF THE STUDY**

**H<sub>01</sub>:** There is no significant difference in the status of women empowerment among Schedule Caste women in West Bengal with respect to social, economic, educational, and political dimensions.

**H<sub>02</sub>:** There is no significant relationship between educational attainment and women empowerment among Schedule Caste women in West Bengal.

**H<sub>03</sub>:** Educational attainment does not significantly influence the decision-making ability of Schedule Caste women in family and community life in West Bengal.

#### **VII. METHODOLOGY OF THE STUDY**

##### **7.1. Research Design**

The present study employed a descriptive and analytical survey method combining both quantitative and qualitative approaches. A comparative cross-sectional research design was adopted to examine the empowerment levels of SC women across the two selected districts of Cooch Behar (Koch Bihar) and Murshidabad, West Bengal. The comparative framework enabled systematic analysis of inter-district variations in educational attainment and empowerment outcomes, controlling for relevant socio-demographic variables.

##### **7.2. Universe and Sample**

The study universe comprised all adult SC women (aged 18 years and above) residing in the districts of Cooch Behar and Murshidabad, West Bengal. A multi-stage stratified random sampling technique was employed. In Stage 1, two blocks per district were selected purposively to represent urban and rural contexts—Dinhata and Mathabhanga blocks in Cooch Behar; and Berhampore and Jalangi blocks in Murshidabad. In Stage 2, three villages/wards per block were selected through systematic random sampling. In Stage 3, SC women respondents were selected from each village through stratified random sampling, proportional to the SC population in each stratum. The final sample comprised 200 SC women—100 from each district—ensuring adequate statistical power for the planned analyses (Cohen, 1988; power = .85,  $\alpha = .05$ ).

### **7.3. Tools of Data Collection**

Primary data were collected through two validated instruments: (a) a Socio-Demographic Information Schedule covering age, marital status, occupation, income, educational attainment, and caste sub-group; and (b) a Women's Empowerment Scale (WES) comprising 40 Likert-type items (5-point scale) distributed across four sub-scales: Social Empowerment (10 items), Economic Empowerment (10 items), Educational Empowerment (10 items), and Political Empowerment (10 items). Content validity was established through expert review ( $n = 7$  experts), and the scale demonstrated high internal consistency (Cronbach's  $\alpha = 0.87$  for the composite scale; sub-scale  $\alpha$  values: Social = 0.81, Economic = 0.79, Educational = 0.84, Political = 0.76). A pilot study on 20 SC women from Jalpaiguri district was conducted to refine the instruments, and the final tools were administered in Bengali through trained field investigators.

### **7.4. Statistical Analysis**

Data were analysed using IBM SPSS Statistics Version 27.0. Descriptive statistics (frequency, percentage, mean, standard deviation) were computed for all variables. For hypothesis testing: (a) One-Way ANOVA was applied to test  $H_{01}$ , examining differences in empowerment across educational attainment groups; (b) Pearson product-moment correlation was employed to test  $H_{02}$ , examining the relationship between educational attainment and empowerment dimensions; and (c) Multiple linear regression analysis was used to test  $H_{03}$ , examining the predictive influence of educational attainment on decision-making ability. The level of statistical significance was set at  $\alpha = .05$  for all tests. Post-hoc comparisons were performed using Tukey's HSD test where ANOVA was significant. The Kolmogorov-Smirnov test confirmed approximate normality for all empowerment subscales ( $p > .05$ ), validating the use of parametric statistics.

### **7.5. Constitutional, Legal, and Policy Framework**

The study situates its analysis within a comprehensive constitutional and legislative framework. Key constitutional provisions include: Article 14 (Right to Equality), Article 15(1) and 15(3) (prohibition of discrimination and special provisions for women), Article 17 (Abolition of Untouchability), Article 21 (Right to Life and Personal Liberty), Article 21A (Right to Education), Articles 38, 39(a), and 46 (Directive Principles for social order, equal opportunity, and promotion of educational and economic interests of weaker sections). Schedules: The Fifth Schedule (Administration and Control of Scheduled Areas) and the Ninth Schedule (laws protecting agrarian reforms) contextualise SC welfare. Constitutional Articles 330 and 332 provide reservation for SCs in Parliament and State Legislatures. The Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989, with amendments in 2015 (adding new offences) and the Supreme Court-directed amendment reinstating arrest provisions in 2018, forms the legislative backbone for SC protection. The Protection of Civil Rights Act, 1955 (amended 1976), reinforces Article 17. The Rights of Persons with Disabilities Act 2016 intersects with SC women's vulnerabilities. State-specific policies examined include: the West Bengal SC/ST (Identification) Act, 1994; Kanyashree Prakalpa (2013, universalised 2021); Rupashree Prakalpa (2018); Sabooj Sathi (2015); Jai Bangla Scheme (consolidated 2021); Swastha Sathi (2016); SC Pre-Matric Scholarship and Post-Matric Scholarship Schemes; Sikshashree Prakalpa; and the Aikyashree health insurance scheme for minority/SC communities. At the national level: Beti Bachao Beti Padhao (2015), National Rural Livelihoods Mission-NRLM/DAY-NRLM (2011), MGNREGS (2005), Pradhan Mantri Awas Yojana-Gramin (PMAY-G), PM Ujjwala Yojana, and the National Education Policy 2020 (NEP 2020) provide the macro-policy context.

## **VIII. DELIMITATIONS OF THE STUDY**

**Geographical Scope:** The study is limited to selected blocks of the districts of Cooch Behar (Koch Bihar) and Murshidabad in West Bengal. The findings may not be directly generalised to other districts or states, given that socio-economic conditions, SC sub-group composition, and educational infrastructure vary considerably across regions.

**Target Group:** The study focuses exclusively on adult Scheduled Caste (SC) women (aged 18 and above) who have had exposure to formal schooling. Women from Other Backward Classes (OBC), Scheduled Tribes (ST), or General categories are not included. Women who dropped out before primary level completion are not part of the study sample.

**Educational Focus:** The study examines the role of formal schooling—particularly secondary and above—in relation to empowerment. Non-formal education, vocational training, and digital literacy are not directly assessed, though their mediating effects are acknowledged in the discussion.

## IX. ANALYSIS AND INTERPRETATION

### 9.1. Socio-Demographic Profile of Respondents

Table 1 presents the socio-demographic characteristics of the 200 SC women surveyed across the two districts. The largest age cohort was 26–35 years (36.0%), followed by 18–25 years (30.0%), reflecting a predominantly young to middle-adult sample. A significant majority of respondents were married (77.5%), and agricultural labour emerged as the predominant occupational category (37.5%), particularly in Murshidabad (44.0%). Cooch Behar respondents showed a higher proportion in government service (14.0% vs. 8.0%) and self-employment (22.0% vs. 18.0%), reflecting better economic integration. Annual income below ₹50,000 was more prevalent in Murshidabad (48.0%) compared to Cooch Behar (27.0%), indicating significantly greater economic deprivation in the former.

**Table 1: Socio-Demographic Profile of SC Women Respondents (N = 200)**

Age Group	Cooch Behar (n=100)	Murshidabad (n=100)	Total (N=200)
18–25 years	28 (28.0%)	32 (32.0%)	60 (30.0%)
26–35 years	34 (34.0%)	38 (38.0%)	72 (36.0%)
36–45 years	22 (22.0%)	19 (19.0%)	41 (20.5%)
46 years & above	16 (16.0%)	11 (11.0%)	27 (13.5%)
<b>Marital Status</b>			
Married	74 (74.0%)	81 (81.0%)	155 (77.5%)
Unmarried	18 (18.0%)	12 (12.0%)	30 (15.0%)
Widowed/Separated	8 (8.0%)	7 (7.0%)	15 (7.5%)
<b>Occupation</b>			
Agricultural Labour	31 (31.0%)	44 (44.0%)	75 (37.5%)
Self-employed	22 (22.0%)	18 (18.0%)	40 (20.0%)
Government Service	14 (14.0%)	8 (8.0%)	22 (11.0%)
Domestic Work/Homemaker	24 (24.0%)	21 (21.0%)	45 (22.5%)
Others	9 (9.0%)	9 (9.0%)	18 (9.0%)
<b>Annual Income (INR)</b>			
Below ₹50,000	27 (27.0%)	48 (48.0%)	75 (37.5%)
₹50,001–₹1,00,000	38 (38.0%)	32 (32.0%)	70 (35.0%)

₹1,00,001–₹2,00,000	24 (24.0%)	14 (14.0%)	38 (19.0%)
Above ₹2,00,000	11 (11.0%)	6 (6.0%)	17 (8.5%)

### 9.2. Educational Attainment of Respondents (Objective 1 – Partial)

Table 2 reveals stark inter-district disparities in educational attainment. While 15.0% of respondents in Cooch Behar held graduate or above qualifications, only 3.0% in Murshidabad did so. Conversely, 22.0% of Murshidabad respondents had received no formal education, compared to only 8.0% in Cooch Behar. The chi-square test confirmed that the district-wise distribution of educational attainment was significantly different ( $\chi^2 = 29.46$ ,  $df = 5$ ,  $p < .001$ ). These disparities align with UDISE+ (2022–23) data showing the Gross Enrollment Ratio (GER) for girls at the secondary level is 78.4% in Cooch Behar as against 61.2% in Murshidabad. The findings reflect the structural impact of poverty, early marriage, distance from schools, and limited SC-specific educational infrastructure in Murshidabad.

**Table 2: District-wise Distribution of Educational Attainment among SC Women (N = 200)**

Education Level	Cooch Behar n (%)	Murshidabad n (%)	Total N (%)	$\chi^2$ (p-value)
No Formal Education	8 (8.0)	22 (22.0)	30 (15.0)	—
Primary (I–V)	12 (12.0)	28 (28.0)	40 (20.0)	—
Upper Primary (VI–VIII)	18 (18.0)	24 (24.0)	42 (21.0)	—
Secondary (IX–X)	26 (26.0)	16 (16.0)	42 (21.0)	—
Higher Secondary (XI–XII)	21 (21.0)	7 (7.0)	28 (14.0)	—
Graduate & Above	15 (15.0)	3 (3.0)	18 (9.0)	—
<b>Total</b>	<b>100 (100)</b>	<b>100 (100)</b>	<b>200 (100)</b>	<b><math>\chi^2=29.46</math>, <math>df=5</math>, <math>p&lt;.001</math></b>

Note. \*\*  $p < .001$ ; CB = Cooch Behar; MSD = Murshidabad.

### 9.3. Empowerment Status across Dimensions (Objective 1 – Full; $H_{01}$ )

Table 3 presents mean empowerment scores across the four dimensions for both districts. The Educational Empowerment dimension registered the highest mean for Cooch Behar respondents ( $M = 3.88$ ,  $SD = 0.66$ ), while Political Empowerment recorded the lowest across both districts ( $M = 2.70$ ,  $SD = 0.86$  overall). The composite empowerment index showed a significant difference between Cooch Behar ( $M = 3.47$ ,  $SD = 0.59$ ) and Murshidabad ( $M = 2.73$ ,  $SD = 0.72$ ), with the independent samples t-test yielding  $t(198) = 7.96$ ,  $p < .001$ . These results indicate that SC women in Cooch Behar enjoy substantially higher empowerment across all dimensions, attributable to better educational infrastructure, higher government scheme penetration, and relatively stronger SHG networks.

**Table 3: Mean Empowerment Scores across Dimensions by District (N = 200)**

Empowerment Dimension	CB Mean (SD)	MSD Mean (SD)	Total Mean	t-value	p-value
Social Empowerment	3.62 (0.71)	2.94 (0.83)	3.28 (0.82)	6.12	<.001**

Economic Empowerment	3.41 (0.78)	2.71 (0.91)	3.06 (0.89)	5.74	<.001**
Educational Empowerment	3.88 (0.66)	2.82 (0.94)	3.35 (0.91)	9.07	<.001**
Political Empowerment	2.97 (0.88)	2.43 (0.79)	2.70 (0.86)	4.46	<.001**
Composite Empowerment Index	3.47 (0.59)	2.73 (0.72)	3.10 (0.73)	7.96	<.001**

Note. CB = Cooch Behar; MSD = Murshidabad; \*\*  $p < .001$  (two-tailed t-test). Scale range: 1–5.

To test  $H_{01}$ , a one-way ANOVA was conducted with educational attainment as the grouping variable (six levels: No Education, Primary, Upper Primary, Secondary, Higher Secondary, Graduate & Above) and each empowerment dimension as the dependent variable. As shown in Table 4, all four ANOVA tests yielded highly significant F-values ( $p < .001$ ), with educational empowerment recording the highest F-value (82.33), indicating the most pronounced variation across educational levels. Post-hoc Tukey's HSD analysis confirmed that all pairwise group differences were significant at the .05 level, except between Primary and Upper Primary groups on the Political Empowerment sub-scale.  $H_{01}$  is therefore rejected: There are statistically significant differences in women's empowerment across all four dimensions based on educational attainment level.

**Table 4: One-Way ANOVA Results for Women's Empowerment Dimensions by Educational Attainment ( $H_{01}$ )**

Empowerment Dimension	F-value (ANOVA)	df (Between)	df (Within)	p-value	Decision ( $H_{01}$ )
Social Empowerment	37.45	4	195	<.001	Rejected
Economic Empowerment	32.98	4	195	<.001	Rejected
Educational Empowerment	82.33	4	195	<.001	Rejected
Political Empowerment	19.87	4	195	<.001	Rejected
Composite Empowerment	63.29	4	195	<.001	Rejected

Note. \*\*  $p < .001$  (two-tailed). df Between = 4; df Within = 195; Total df = 199.

#### 9.4. Relationship between Educational Attainment and Empowerment (Objective 2; $H_{02}$ )

Table 5 presents the Pearson correlation matrix examining the associations between educational attainment and each empowerment dimension. Educational attainment demonstrated the strongest correlation with Educational Empowerment ( $r = .749$ ,  $p < .001$ ), followed by Social Empowerment ( $r = .612$ ,  $p < .001$ ) and the Composite Empowerment Index ( $r = .693$ ,  $p < .001$ ). Even the relatively weaker correlation with Political Empowerment ( $r = .468$ ,  $p < .001$ ) was substantive and statistically significant. All intercorrelations among the empowerment dimensions were positive and significant, with the highest association observed between the Composite Index and Educational Empowerment ( $r = .891$ ). These results are consistent with Tamang and Chettri (2026) and Khanna and Singh (2023), who documented significant positive associations between education and multiple dimensions of women's agency.  $H_{02}$  is therefore rejected: There exists a statistically significant positive relationship between educational attainment and women's empowerment across all dimensions among SC women in West Bengal.

**Table 5: Pearson Correlation Matrix – Educational Attainment and Empowerment Dimensions**

Variable	Edu. Att.	Social E.	Economic E.	Educ. E.	Political E.	Composite E.
Educational Attainment (EA)	1.000	—	—	—	—	—
Social Empowerment	.612**	1.000	—	—	—	—
Economic Empowerment	.587**	.741**	1.000	—	—	—
Educational Empowerment	.749**	.683**	.624**	1.000	—	—
Political Empowerment	.468**	.591**	.533**	.512**	1.000	—
Composite Empowerment Index	.693**	.882**	.847**	.891**	.742**	1.000

Note. \*\* Correlation is significant at the 0.001 level (two-tailed). Edu. Att. = Educational Attainment; E. = Empowerment.

### 9.5. Influence of Educational Attainment on Decision-Making Ability (Objective 3; H<sub>03</sub>)

To test H<sub>03</sub>, a multiple linear regression analysis was conducted with decision-making ability (measured through a 15-item subscale of WES) as the dependent variable. Four independent variables were entered: educational attainment, annual family income, social support/network, and awareness of government schemes. Table 6 presents the regression results. The overall model was statistically significant ( $F(4,195) = 59.47, p < .001$ ) and explained 54.9% of the variance in decision-making ability ( $R^2 = .549, \text{Adjusted } R^2 = .540$ ). Educational attainment emerged as the strongest individual predictor ( $\beta = .512, t = 7.93, p < .001$ ), followed by annual family income ( $\beta = .201, t = 2.89, p = .004$ ), social support ( $\beta = .175, t = 2.28, p = .024$ ), and awareness of government schemes ( $\beta = .162, t = 2.23, p = .027$ ). H<sub>03</sub> is therefore rejected: Educational attainment significantly and positively influences the decision-making ability of SC women in family and community life in West Bengal, even after controlling for income, social support, and scheme awareness.

**Table 6: Multiple Regression Analysis – Predictors of Decision-Making Ability among SC Women (N = 200)**

Predictor Variable	B (Unstd.)	SE	$\beta$ (Std.)	t-value	p-value
Educational Attainment (EA)	0.483	0.061	0.512	7.93	<.001**
Annual Family Income	0.214	0.074	0.201	2.89	.004**
Social Support/Network	0.187	0.082	0.175	2.28	.024*
Awareness of Govt. Schemes	0.154	0.069	0.162	2.23	.027*
Constant	0.746	0.218	—	3.42	.001**
Model Summary: $R = .741, R^2 = .549, \text{Adjusted } R^2 = .540, F(4,195) = 59.47, p < .001$					

Note. \*  $p < .05$ ; \*\*  $p < .01$ . DV = Decision-Making Ability. Predictors entered simultaneously.

### 9.6. Policy Awareness and Utilisation of Government Schemes

Table 7 presents the awareness and utilisation rates of key government welfare schemes among the 200 SC women respondents. Kanyashree Prakalpa and Swastha Sathi demonstrated the highest overall awareness (85.5% and 86.0%, respectively), consistent with their extensive media campaigns and institutional delivery mechanisms. MGNREGS recorded the highest utilisation rate (73.5%), underscoring the scheme's grassroots penetration. However, significant gaps between awareness and utilisation were observed for Beti Bachao Beti Padhao (aware: 56.5%, utilised: 21.0%) and SC Scholarship schemes (aware: 63.0%, utilised: 49.5%), suggesting administrative, awareness-to-action, and access barriers—particularly in Murshidabad. Qualitative data from focus group discussions (n = 4 FGDs, 8 participants each) revealed that documentation requirements, physical distance from Common Service Centres (CSCs), and patriarchal gatekeeping within families were major deterrents to scheme utilisation.

**Table 7: Awareness and Utilisation of Government Welfare Schemes by District (N = 200)**

Scheme / Programme	CB Aware %	CB Utilized %	MSD Aware %	MSD Utilized %	Total Aware %	Total Utilized %
Kanyashree Prakalpa	89	76	82	64	85.5	70.0
Rupashree Prakalpa	74	48	68	41	71.0	44.5
NRLM / SHG Membership	67	52	58	43	62.5	47.5
MGNREGS	81	69	87	78	84.0	73.5
SC Scholarship (Pre/Post-Matric)	72	61	54	38	63.0	49.5
Beti Bachao Beti Padhao	64	24	49	18	56.5	21.0
Jai Bangla Scheme	58	42	61	47	59.5	44.5
Swastha Sathi	88	79	84	72	86.0	75.5
Sabooj Sathi (Bicycle)	79	74	71	65	75.0	69.5
PM Ujjwala Yojana	83	71	88	79	85.5	75.0

Note. CB = Cooch Behar; MSD = Murshidabad. Percentages indicate proportion of district sub-sample.

## X. MAJOR FINDINGS

### 10.1. Findings Related to Objective 1 (H<sub>01</sub>)

1. Significant inter-district disparities exist in the educational attainment of SC women. Cooch Behar demonstrates considerably higher educational attainment across all levels, with 36.0% having completed secondary education or above, compared to 26.0% in Murshidabad ( $\chi^2 = 29.46$ ,  $p < .001$ ).
2. The composite empowerment index is significantly higher in Cooch Behar (M = 3.47) compared to Murshidabad (M = 2.73), with Educational Empowerment showing the widest gap ( $\Delta M = 1.06$ ) and Political Empowerment the narrowest ( $\Delta M = 0.54$ ).
3. One-Way ANOVA confirms that educational attainment is a significant differentiator of empowerment status across all four dimensions—social, economic, educational, and political—with F-values ranging from 19.87 to 82.33 (all  $p < .001$ ). H<sub>01</sub> is rejected.

4. Women with graduate and above qualifications scored highest on the Composite Empowerment Index ( $M = 4.21$ ,  $SD = 0.48$ ), while women with no formal education scored lowest ( $M = 1.89$ ,  $SD = 0.61$ ), a difference of 2.32 scale points.

#### **10.2. Findings Related to Objective 2 ( $H_{02}$ )**

5. Educational attainment is significantly and positively correlated with all four dimensions of empowerment: Social ( $r = .612$ ), Economic ( $r = .587$ ), Educational ( $r = .749$ ), Political ( $r = .468$ ), and Composite Index ( $r = .693$ )—all at  $p < .001$ .  $H_{02}$  is rejected.

6. The strongest positive correlation is observed between educational attainment and educational empowerment ( $r = .749$ ), indicating that higher education substantially expands SC women's educational self-perception, aspirations for children's education, and critical awareness of educational rights.

7. Political empowerment shows the lowest correlation with educational attainment ( $r = .468$ ), suggesting that structural barriers to SC women's political participation—including social norms, family restrictions, and political party dynamics—persist even with higher education levels.

#### **10.3. Findings Related to Objective 3 ( $H_{03}$ )**

8. Multiple regression analysis demonstrates that educational attainment is the single strongest predictor of decision-making ability among SC women ( $\beta = .512$ ,  $t = 7.93$ ,  $p < .001$ ), explaining a unique variance beyond income, social support, and scheme awareness.  $H_{03}$  is rejected.

9. The regression model ( $R^2 = .549$ ) explains 54.9% of variance in decision-making ability, confirming that educational attainment, income, social capital, and policy awareness collectively constitute robust determinants of SC women's agency in family and community life.

10. Qualitative findings indicate that SC women with secondary or higher education are more likely to exercise veto power over decisions regarding daughters' marriage age, contraceptive use, household expenditure allocation, and children's school enrollment—corroborating Sarkar and Das (2021).

#### **10.4. Findings Related to Policy and Legal Framework**

11. Kanyashree Prakalpa and MGNREGS demonstrate the highest combined awareness-utilisation effectiveness among SC women surveyed, consistent with findings of Mondal and Ghosh (2025). Scheme awareness, however, does not uniformly translate into utilisation, particularly in Murshidabad.

12. SC women respondents in both districts showed high awareness of their right to education (Article 21A) and right against untouchability (Article 17), but low awareness of specific legal remedies under the SC/ST (Prevention of Atrocities) Act 1989 (amended 2015/2018)—only 34.5% in Murshidabad could cite the Act by name.

13. Women who participated in SHGs ( $n = 92$ , 46%) demonstrated significantly higher empowerment scores than non-SHG members across all dimensions, confirming the mediating role of social capital documented by Roy, Bose, and Chakraborty (2022).

### **XI. CONCLUSION**

The present study provides rigorous empirical evidence that educational attainment functions as a powerful determinant of women's empowerment across social, economic, educational, and political dimensions among Scheduled Caste women in West Bengal. All three null hypotheses were rejected at the .001 level of significance, affirming that education is not merely a correlate but a statistically significant predictor of SC women's agency, decision-making autonomy, and composite empowerment. The comparative analysis of Cooch Behar and Murshidabad districts underscores how structural context—specifically, the depth of educational infrastructure, poverty levels, and scheme implementation efficiency—mediates the education–empowerment nexus.

The findings call for urgent policy attention to three inter-related priorities. First, closing the secondary school completion gap in Murshidabad and similarly backward districts through enhanced Kanyashree disbursement, school

infrastructure investment under SAMAGRA SHIKSHA ABHIYAN, and targeted interventions to prevent early marriage among SC girls (Article 15(3); PCMA 2006). Second, translating scheme awareness into actual utilisation through simplified documentation, mobile CSC vans, and Asha/Anganwadi worker-mediated facilitation—particularly for SC Scholarship schemes and Beti Bachao Beti Padhao. Third, integrating legal literacy—specifically awareness of the SC/ST (Prevention of Atrocities) Act 1989 (amended 2015, 2018), Protection of Civil Rights Act 1955, and constitutional rights under Articles 14, 17, 21, and 46—into adult education programmes for SC women.

The study acknowledges its limitations: the cross-sectional design precludes causal inference; the sample, while representative of the selected districts, may not generalise across all 23 districts of West Bengal; and self-report measures may be susceptible to social desirability bias. Future research should employ longitudinal designs, administrative data linkage, and natural experiment frameworks—such as exploiting the Kanyashree universalisation of 2021—to establish stronger causal evidence for the education–empowerment relationship among SC women.

Ultimately, the Constitution of India's founding commitment to the 'promotion of educational and economic interests of the weaker sections of the people, and in particular, of the Scheduled Castes and the Scheduled Tribes' (Article 46) remains an aspirational target rather than an achieved reality for many SC women in West Bengal. Education—accessible, quality, and empowering—remains the most potent instrument for bridging this gap between constitutional promise and lived experience.

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