International Journal of Humanities and Social Science Research
ISSN: 2455-2070; Impact Factor: RJIF 5.22
www.socialsciencejournal.in
Volume 3, Issue 6, 2017, Page No. 54-59

Determinants of educational exclusion in India: An analysis of NSS 2013–14 data

Ramesh Gangavath[1], Laxminarayana Katt[2]
[1] Scholar, Department of Economics, University of Hyderabad, Telangana, India
[2] Department of Economics, University of Hyderabad, Telangana, India

Abstract
This study investigates the socio-economic and demographic predictors of out-of-school children in India, using nationally representative unit-level data from the 71st round of the National Sample Survey (2014). Employing four multivariate logistic regression models separately for rural and urban areas, the analysis distinguishes between children who have never attended school and those who have dropped out after enrolment. The findings reveal that children from economically disadvantaged households, those with illiterate household heads, and those belonging to Scheduled Castes, Scheduled Tribes, Other Backward Classes, and Muslim communities are significantly more likely to be out of school. In rural areas, the physical distance to school emerges as a key barrier to continued attendance, particularly among older children. Gender and age are also influential, with rural girls more likely to never attend school and older children (14–15 years) at greater risk of dropping out in both rural and urban contexts. The study highlights the persistence of structural inequalities in education and calls for targeted, equity-oriented policy interventions to ensure universal school participation and retention.

Keywords: Out-of-School children, educational disparities, socio-economic factors, India

Introduction

In today's world, driven by rapid scientific and technological progress, education has emerged not merely as a privilege but as a necessity. It plays a crucial role in individual empowerment and the broader project of societal transformation. However, in India, despite constitutional guarantees and numerous policy initiatives, deep-rooted disparities in education persist—particularly along the lines of caste, class, and gender. These structural inequalities not only restrict access to education but also reinforce cycles of social and economic marginalisation.

While India has made notable strides in expanding educational infrastructure and enrolment, the objective of achieving universal, quality education remains distant. Access to even basic education is still a major challenge for historically marginalised and economically vulnerable communities. This exclusion is not simply a matter of physical infrastructure or enrolment statistics, but is deeply entangled with longstanding social hierarchies and economic disadvantage.

Education is more than a tool for economic mobility—it is central to advancing equity, social justice, and democratic participation. The universalisation of primary education is therefore critical, not just for building human capital, but for addressing entrenched social divides. Achieving this goal demands inclusive policies that eliminate both direct and hidden costs of schooling and ensure equitable access for all.

Echoing this, the 12th Five-Year Plan (2012–17) of the Government of India described education as "the single most important instrument for social and economic transformation." Similarly, SDG 4 under the United Nations' Sustainable Development Goals calls for inclusive, equitable, and quality education for all by 2030.

Empirical studies from India and beyond confirm that socio-economic and structural factors heavily influence school attendance and dropout rates. Drawing on data from the NSS 71st round (2014), this study investigates household-level determinants of educational exclusion among children aged 6–15 in India, offering policy-relevant insights into overcoming systemic barriers to universal education.

Literature Review

Education plays a foundational role in the development of individuals and societies, serving as both a means and an end to achieving human well-being, socio-economic mobility, and national progress. In the context of India, education has historically been influenced by a complex interplay of poverty, caste, gender, and policy interventions. Scholars have examined education through diverse theoretical frameworks—ranging from basic needs and human development approaches to rights-based and capability perspectives—while also highlighting the socio-structural barriers that impede equitable access and participation. This literature review synthesizes research on the role of education as a human right, the evolution of education policy in India, and the persistent inequalities rooted in poverty, caste, and gender that shape school access and dropout patterns.

1. Education as a Right and Development Imperative

Education has evolved from being viewed as a mere social good to a fundamental human right. It is considered imperative in the modern context of scientific progress and societal complexity (Natarajan, 1990) [18]. Conceptually, education has been approached through various lenses. The basic needs approach (Sen, Haq) recognizes education as both an end and a means, while the human capital approach (Schultz, Becker, Mincer) emphasizes its developmental utility. Sen's (1999) capability approach offers an integrated view, framing education as essential to individual well-being, social transformation, and economic growth (Tilak, 2002) [25].

The transformation of education into a *justiciable right* in India has been a significant shift. Originally framed under the Directive Principles (Article 45), the 86th Constitutional Amendment inserted Article 21A, guaranteeing free and compulsory education for children aged 6–14 years. This was operationalized by the Right of Children to Free and

Compulsory Education Act, 2009 (Government of India, 2016), marking a shift to a rights-based legal framework.

2. Global Goals and National Accountability

India, as a signatory to the Millennium Development Goals (MDGs), committed to achieving universal primary education and eliminating gender disparities. While gender parity was largely achieved in primary enrolment, secondary and higher levels still lagged (United Nations, 2000). The Sustainable Development Goal 4 (SDG 4) furthers this ambition by targeting inclusive and equitable quality education for all by 2030 (United Nations, 2015).

Given its population size and diversity, India's educational success is pivotal to global progress on these targets. However, with millions of children still out of school (Government of India, 2016), the gap between policy intention and ground reality persists.

3. Poverty and Educational Exclusion

A well-established inverse relationship exists between poverty and educational attainment (Tilak, 1986, 1989a, 1994). Poor households often cannot afford direct costs (books, uniforms) or the opportunity cost of lost labour income (Tilak, 2002). Fields (1980) and Galbraith (1994) have shown that no literate population remains poor, emphasizing education's anti-poverty potential.

Yet, poverty continues to constrain access and retention. Sateesh and Sekher (2014) [24] found that 40% of out-of-school children cited financial hardship or opportunity costs. Among tribal populations, immediate economic needs often outweigh long-term educational investments (Sahu, 2014) [23]. Similar patterns are observed among Muslim communities, where dropout rates correlate with poverty levels (Ali, 2014). In urban contexts, over 30% of school dropouts attributed their exit to unaffordable education costs (Chigari et al., 2015) [6].

Even free elementary education does not eliminate exclusion if income poverty persists (Tilak, 2002) [25]. Children from poor households often engage in labour or domestic work, leaving little time for schooling or study, increasing the risk of dropout and low learning outcomes (Pandya & Bora, 1997; Baruah & Goswami, 2012 [2]; Bhat & Yasmeen, 1994) [3].

4. Gender Disparities in Education

Despite legal mandates and policy efforts, female literacy in India remains low. Deep-rooted patriarchal norms, son preference, and perceived lower returns to educating girls lead to lower enrolment and higher dropout rates among girls, especially in rural areas (Bose, 2012 [5]; Phillip & Bagchi, 1995) [20]. Kingdon (2005) [17] and Basu (1992) argue that girls are withdrawn from school early to help with domestic chores or to avoid the perceived risks of public exposure after puberty (Jeffery & Jeffery, 1994) [15].

Maternal education has a significant impact on gender equality in schooling. Educated mothers tend to treat daughters and sons more equally and value girls' education (Afridi, 2010; Bose, 2012) [5]. Women's education enhances bargaining power, decision-making capacity, and control over resources, contributing to shifts in gender norms (Sen, 1990; Amin, 1996; Mukhopadhyay & Garimella, 1998).

Even when girls are educated, it is often viewed as a marriage asset rather than a tool for autonomy or employment (Dhruvarajan, 1989; Vlassoff, 1996; Jeffrey & Jeffrey, 1996). In such cultural contexts, girls' education is encouraged only to the extent that it enhances their value as wives and homemakers, rather than empowering them as independent individuals.

5. Caste, Religion, and Structural Inequalities

India's stratified social structure further complicates access to education. The Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs) face cumulative disadvantages. Desai and Kulkarni (2008) [8] emphasize that caste-based identities persist across religious lines, affecting not just Hindus but also Muslims, Christians, and Sikhs.

The educational deprivation of these communities stems from both historical exclusion and contemporary discrimination. They often live in remote or underserved areas with poor schooling infrastructure and low-quality teachers. Dropout rates are disproportionately high among Dalits and Adivasis, who continue to face both economic and social barriers to sustained schooling.

The literature consistently shows that despite constitutional guarantees and extensive policy initiatives, educational access and retention remain deeply shaped by structural inequalities—poverty, caste, and gender. While India has made strides in enrolment and literacy, the gaps in outcomes, quality, and retention underscore the need for context-sensitive, intersectional policy reforms. Only by addressing these layered disadvantages—economic, cultural, and institutional—can the promise of equitable education for all be fulfilled.

Methodology

This study employs a quantitative research approach to investigate the socio-economic factors associated with school attendance, non-attendance, and dropout among children aged 6 to 15 years in India. Using nationally representative secondary data, a multivariate logistic regression analysis was conducted to identify the key predictors influencing children's school participation. The analysis draws from the 71st Round of the National Sample Survey (NSS), providing insights into how variables such as income, location, caste, religion, gender, and literacy status of household heads relate to educational exclusion in both rural and urban settings.

1. Analytical Technique

Multivariate logistic regression was used to examine the likelihood of a child being out of school. This method is suitable given the binary nature of the dependent variable (i.e., school attendance vs. non-attendance or dropout). The regression equation is as follows:

$$Li = Pi / (1 - Pi) = \beta1 + \beta2\ UMPCE + \beta3\ Distance + \beta4\ Literacy + \beta5\ Sex + \beta6\ Age\ group + \beta7\ Social\ group + \beta8\ Religion$$

Where:

Pi: Probability that a child never attends or discontinues schooling

Li: Log-odds of the outcome (non-attendance/dropout)

Independent Variables

- **UMPCE:** Usual Monthly Per Capita Consumer Expenditure (quintile-based)
- **Distance:** Distance to the nearest school
- **Literacy:** Literacy status of the household head
- **Sex:** Sex of the child
- **Age group:** Two groups – 6–13 years and 13–15 years
- **Social group:** Scheduled Tribe, Scheduled Caste, OBC, Others
- **Religion:** Hinduism, Islam, Christianity, Others
- **Locality:** Rural or Urban

Hypotheses

- **Null Hypothesis (H_0):** All coefficients are equal to zero (no influence).
- **Alternative Hypothesis (H_1):** At least one predictor significantly influences school non-attendance/dropout.

2. Data Source

The analysis is based on secondary unit-level data from the 71st Round of the National Sample Survey (Schedule 25.2), conducted by the NSSO from January to June 2014. The survey focused on Social Consumption: Education and covers all Indian states and union territories.

3. Research Type

This is a cross-sectional, quantitative study using statistical software Stata 12.0 for regression analysis. The NSS data were exported from Nesstar Explorer into Stata format. Microsoft Excel was used for tabulations and visualizations.

4. Research Design

Four separate logistic regression models were developed to capture differences across locality and schooling status:

1. **Model 1:** Rural children who never attended school
2. **Model 2:** Rural children who dropped out or discontinued
3. **Model 3:** Urban children who never attended school
4. **Model 4:** Urban children who dropped out or discontinued Each model uses the same set of independent variables listed above. The dependent variable in each case is binary—indicating either non-attendance or dropout depending on the model.

5. Limitations of the Study

The study highlights key socio-economic factors influencing school attendance and dropout rates but overlooks crucial qualitative and institutional elements such as school quality, teaching standards, infrastructure adequacy (including facilities like toilets, libraries, and playgrounds), pupil-teacher ratios, and student satisfaction with educational experiences. Future research should delve into these unobserved variables, which likely play a significant role in shaping educational access and outcomes.

Data Analysis

To examine the socio-economic and individual-level predictors of school non-attendance among children aged 6–15 years in India, four multivariate logistic regression models were developed using NSSO's 71st round unit-level data. Each model was estimated separately for rural and urban regions and accounted for two key categories of out-of-school children: (1) those who had never attended school, and (2) those who had previously attended but were currently not enrolled. This approach allowed for a nuanced understanding of how various predictors simultaneously influence school exclusion across different settings.

Table 2: Results of the Multivariate Logistic Regression Models (Odds ratio, P-value) for rural and urban areas

Predictors	Rural				Urban			
	Never attended		Currently not attending		Never attended		Currently not attending	
	First model		Second model		Third model		Fourth model	
	Odds Ratio	P-value	Odds Ratio	P-value	Odds Ratio	P-value	Odds Ratio	P-value
Quantile class of UMPCE								
1	5.29	0.00	3.28	0.00	5.16	0.00	16.46	0.00
2	3.65	0.00	2.84	0.00	1.66	0.23	10.09	0.00
3	2.48	0.00	2.5	0.00	0.73	0.54	7.71	0.01
4	1.96	0.00	2.1	0.00	0.55	0.23	3.22	0.16
5	1.00	(Base)	1.00	(Base)	1.00	(Base)	1.00	(Base)
Distance of the school								
Less than 1 km	1.00	(Base)	1.00	(Base)	1.00	(Base)	1.00	(Base)
1 km to 2 km	1.01	0.96	1.37	0.01	0.62	0.04	1.12	0.49
2 km to 3 km	0.88	0.46	1.73	0.00	0.55	0.13	1.24	0.34
More than 3 km	1.27	0.14	1.68	0.00	0.71	0.52	0.83	0.70
Head literacy								
Literate	1.00	(Base)	1.00	(Base)	1.00	(Base)	1.00	(Base)
Illiterate	3.45	0.00	2.55	0.00	3.21	0.00	2.87	0.00
Sex								
Male	1.00	(Base)	1.00	(Base)	1.00	(Base)	1.00	(Base)
Female	1.36	0.00	1.02	0.77	1.19	0.16	0.75	0.02
Age group								
6 to 13	1.00	(Base)	1.00	(Base)	1.00	(Base)	1.00	(Base)
14 to 15	0.91	0.36	5.69	0.00	0.99	0.93	6.19	0.00
Social group								
Scheduled Tribe	2.05	0.00	2.13	0.00	3.42	0.00	1.06	0.85
Scheduled Caste	1.97	0.00	1.64	0.00	2.06	0.00	1.57	0.04
Other Backward Class	1.67	0.00	1.22	0.08	1.41	0.04	0.93	0.61
Others	1.00	(Base)	1.00	(Base)	1.00	(Base)	1.00	(Base)
Religion								
Hindu	1.00	(Base)	1.00	(Base)	1.00	(Base)	1.00	(Base)
Islam	2.34	0.00	2.09	0.00	2.57	0.00	3.06	0.00
Christianity	0.67	0.22	0.63	0.04	0.60	0.30	0.59	0.50
Others	0.58	0.04	0.64	0.10	0.66	0.41	1.08	0.85

Source: Compiled from unit level data on education by NSSO, 71st round

The regression results reveal several statistically significant associations between the predictors and the likelihood of a child being out of school. Key findings from the four models are discussed below:

Model 1: Rural children who never attended school
Children from lower income households (UMPCE quintiles 1–4) had significantly higher odds of never attending school compared to those from the highest income group (quintile 5). Children from households headed by illiterate individuals were over three times more likely to have never attended school than those with literate heads. Female children had 1.36 times higher odds of school non-attendance compared to males. Belonging to Scheduled Tribes, Scheduled Castes, and Other Backward Classes was associated with significantly higher odds of never attending school compared to children from the 'Others' social group. Similarly, children from Muslim and other minority religious communities faced higher odds of exclusion relative to Hindu children.

Model 2: Rural children who had attended but were currently not in school
Income remained a strong determinant: children from the lowest UMPCE quintile had more than three times higher odds of dropping out compared to those from the wealthiest group. Greater distance to school (more than 1 km) was significantly associated with increased odds of discontinuation. The illiteracy of the household head also significantly increased the likelihood of discontinuation. Adolescents (14–15 years) were almost six times more likely to be out of school than younger children (6–13 years). Scheduled Tribe and Scheduled Caste children were more likely to drop out than those from the 'Others' category, and Muslim and Christian children had higher odds of discontinuation than Hindus.

Model 3: Urban children who never attended school
In urban areas, household income played a significant role only at the lowest quintile level. The illiteracy of the household head and belonging to marginalized social groups (ST, SC, OBC) significantly increased the probability of never attending school. Among religious groups, only children from Muslim households showed significantly higher odds of exclusion compared to Hindus. Distance to school showed a modest association only for the 1–2 km range.

Model 4: Urban children who had attended but were currently not in school
Children from the first three UMPCE quintiles were significantly more likely to be out of school than those in the highest quintile. Interestingly, girls in urban areas were less likely than boys to discontinue schooling. Age remained a strong determinant, with adolescents (14–15 years) showing more than six times the odds of dropping out compared to younger children. Children from Scheduled Castes and Muslim households were at higher risk of dropping out. Other social and religious groups did not show significant associations.

Summary of Findings
Children from lower-income households were consistently more likely to be out of school across all models. The impact was more pronounced in rural areas for both types of exclusion, while in urban areas, it was strongest among those who had previously attended school. In rural areas, distance to school significantly increased the odds of discontinuation, although it was not a factor for children who never enrolled. In urban areas, school distance showed limited or no association.
Illiteracy of the household head was a strong and consistent predictor of school exclusion across all settings and models. In rural areas, girls were more likely than boys to have never attended school, whereas in urban areas, boys were more likely to drop out after initial enrolment. Adolescents (14–15 years) faced substantially higher risks of discontinuation in both rural and urban areas, indicating a vulnerability during the transition to higher grades.
Scheduled Tribe, Scheduled Caste, and Other Backward Class children faced significantly higher odds of exclusion, especially in rural areas. Muslim children exhibited higher likelihood of being out of school in all four models. Christian children in rural areas were less likely to discontinue, while other minority religions showed mixed patterns.
These findings collectively indicate that school exclusion in India is strongly influenced by interrelated socio-economic and demographic factors. Vulnerability is heightened for children from poorer households, marginalized communities, and those residing in rural and less literate households. The subsequent section will explore the specific reasons cited by families and children for non-attendance and discontinuation, drawing from the same dataset.

Discussion
This study offers critical insights into the multifaceted determinants of school exclusion in India by analysing nationally representative data from the 71st round of the National Sample Survey (2014). Through disaggregated multivariate logistic regression models, it highlights how socio-economic disadvantage, demographic characteristics, and geographic factors contribute to school non-attendance and discontinuation across rural and urban contexts.
The results underscore the pervasive role of economic deprivation. Children from the lowest expenditure quintiles were disproportionately represented among those who had never attended school or had dropped out. This aligns with existing literature that links household poverty to lower educational access, as poor families often face direct costs of schooling and opportunity costs related to child labour or sibling care responsibilities.
Another prominent factor is parental education—particularly the literacy status of the household head—which emerged as a consistent predictor of school exclusion across all models. Households headed by illiterate individuals are likely to lack awareness of the long-term benefits of education and may place limited emphasis on schooling, especially for girls and older children.
The distance to school was found to be a significant barrier in rural areas, especially for children who dropped out after initially enrolling. This suggests that even after efforts under programs like Sarva Shiksha Abhiyan to expand school infrastructure, physical accessibility continues to affect retention, particularly for adolescent children who may have safety concerns or limited transport access.
Caste and religion remain key axes of disadvantage. Scheduled Tribe and Scheduled Caste children face

structural marginalization that restricts their access to continuous education, while Muslim children were consistently more likely to be out of school across both rural and urban contexts. This points to the need for socially sensitive policy measures that go beyond economic inclusion to address cultural exclusion and discrimination.

Gender differences in educational access appear to vary by location and type of exclusion. In rural areas, girls are more likely to never attend school, reinforcing concerns around gender bias and the devaluation of girls' education. However, in urban areas, boys are more likely to discontinue schooling, possibly due to economic pressures to enter the labor force at an early age.

Finally, age emerged as a strong predictor of dropout risk. Children aged 14–15 were significantly more likely to be out of school than those in the 6–13 age group. This may reflect challenges in transitioning from primary to secondary schooling, including academic pressure, rising costs, or a lack of upper-primary/secondary schools nearby.

Conclusion

The findings of this study reinforce the persistent and intersecting inequalities in school access and retention in India. Despite considerable policy efforts and near-universal enrolment at the primary level, school exclusion continues to affect specific socio-economically and culturally marginalized groups. Key determinants include poverty, illiteracy of the household head, social and religious identity, gender, age, and school accessibility.

Policy interventions must be multi-pronged. While schemes like the Right to Education (RTE) Act and mid-day meals have improved initial enrolment, they must be complemented by:

- Targeted financial support to the poorest families, especially in urban informal settlements and rural tribal belts.
- Community engagement and literacy programs aimed at educating parents about the value of schooling, particularly for girls.
- Strengthening of secondary education infrastructure, especially in rural areas, to facilitate smooth transitions beyond primary school.
- Affirmative action and inclusive pedagogy to address the barriers faced by children from Scheduled Castes, Scheduled Tribes, and religious minorities.
- Gender-sensitive policies, including safety provisions, scholarships, and menstrual hygiene support, to retain adolescent girls.

In conclusion, achieving universal school participation requires more than infrastructure—it demands a commitment to equity, social justice, and inter-sectoral coordination that addresses the deeper structural drivers of exclusion. The insights from this study can inform more finely tuned, inclusive, and context-specific educational policy interventions in India.

References

1. Ali MA. A comparative study on the dropout problem in Primary Education among Muslim community in relation to gender and economic status. IOSR Journal of Humanities And Social Science, 2014, 76–78.
2. Baruah SR, Goswami U. Factors influencing school dropouts at the primary level, 2012.
3. Bhat R, Yasmeen E. Economics of wastage in primary education-a case study of Kupwara district in Jammu and Kashmir. Journal of Educational Planning and Administration, 1994.
4. Borooah VK. Births, Infants and Education, An Econometric Portrait of Women and Children in India. Development and Change, 2003, 67–102.
5. Bose S. A Contextual Analysis of Gender Disparity in Education in India, The Relative Effects ofSon Preference, Women's Status, and Community. JSTOR, 2012, 67–91.
6. Chigari P, Angolkar M, Sharma M, Faith W, Ashokkumar BR. Determinants of Reasons for School Drop-Outs in Urban Areas Of Belagavi. IOSR Journal of Humanities and Social Science, 2015, 73–77.
7. Choudhury A. Revisiting Dropouts, Old Issues, Fresh Perspectives. Economic and Political Weekly, 2006, 5257–5263.
8. Desai S, Kulkarni V. Changing Educational Inequalities in India in the Context of Affirmative Action. Demography, 2008, 245–270.
9. Devi L, Venkataramaiah. Reasons for school dropouts in rural Telangana. Indian Psychological Review, 1997.
10. Goverment of India. National Policy on Education, Report of the Committee for Evolution of the New Education Policy. Ministry of Human Resource Development, 2016.
11. Government of India. Social, Economic and Educational Status of the Muslim Community of India, 2006.
12. Government of India. Faster, Sustainable and More Inclusive Growth, An Approach to the Twelfth Five Year Plan. Planning Commission, 2011.
13. Government of India. Education For All, Towards Quality with Equity. National University of Educational Planning and Administration, 2014.
14. Government of India. Education in India. Ministry of Statistics & Programme Implementation, 2016.
15. Jeffery P, Jeffery R. Killing My Heart's Desire, Education and Female Autonomy in Rural North India. Women as Subjects South Asian Histories, 1994, 125.
16. Kasente D. Gender and education in Uganda, A case study for EFA Monitoring Report, 2003.
17. Kingdon GG. Where Has All the Bias Gone? Detecting Gender Bias in the Intrahousehold Allocation of Educational Expenditure. Economic Development and Cultural Change,2005:53(2):409–451.
18. Natarajan S. Introduction to Economics of Education. Sterling Publishers Private Limited, 1990.
19. Pandya R, Bora S. A study of factors causing school dropouts. Journal of Indian Education, 1997.
20. Phillip M, Bagchi KS. The Endangered Half. Upalabdhi, Trustfor Development Initiatives, 1995.
21. Planning Commission. Twelfth Five Year Plan (2012-17), Faster, More Inclusive and Sustainable Growth. SAGE Publications India Pvt Ltd, 2013.
22. Pratinidhi A, Warerkar S, Garad S. A study of school dropouts in an urban slum community. Demography India, 1992, 21(2), 301–305.
23. Sahu KK. Challenging Issues of Tribal Education in India. IOSR Journal of Economics and Finance, 2014, 48–52.

24. Sateesh GM, Sekher T. Factors Leading to School Dropouts in India, An Analysis of National Family Health Survey-3 Data. IOSR Journal of Research & Method in Education, 2014, 75–83.
25. Tilak JB. Education and Poverty. Journal of Human Development, 2002, 191–207.
26. United Nations. Education 2030 Incheon Declaration and Framework for Action, Towards inclusive and equitable quality education and lifelong learning for all. UNESCO Institute of Statistics (UIS), 2015.
27. United Nations. Goal_3_fs.pdf, 2024.
28. United Nations. United Nations Millennium Development Goals, 2024.