

Recent Estimates on the Determinants of Higher Education Attainment in India

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Abstract: *This paper examines patterns and determinants of higher education attainment in India using nationally representative data from the Comprehensive Annual Modular Survey (CAMS) of the National Sample Survey Office. The analysis focuses on individuals aged 18 and above, the analysis investigates how disability status, social identity, household structure, economic resources, and spatial location shape access to higher education. Employing a logistic regression framework, the study estimates marginal effects and odds ratios for overall higher education attainment and disaggregated levels of education, while also conducting extensive heterogeneity analysis across gender, caste, religion, and rural–urban residence. The results reveal persistent and pronounced inequalities. Household size, caste, religion, and economic status remain powerful predictors of educational attainment, with Scheduled Castes, Scheduled Tribes, and Muslim individuals facing substantially lower odds of enrollment. Urban residence and household economic resources significantly increase access, highlighting the continuing importance of spatial and economic advantage. Interestingly, women show a slight but notable advantage in higher education enrollment relative to men, signalling a reversal of historical gender gaps at the entry level. However, this advantage is fragile and sharply eroded by marital status, particularly for married, widowed, and divorced women. Heterogeneity analyses further demonstrate that the intensity and form of disadvantage vary systematically across social groups and locations, with economic resources partially mitigating- but not eliminating- structural barriers. Overall, the findings underscore the coexistence of expanding access with deeply entrenched inequalities, pointing to the need for targeted and intersectionally informed policy interventions in Indian higher education.*

JEL Classification: I24; I28; J16; J15; R23

Keywords: Higher Education; Educational Inequality; Caste; Gender; Religion; Urban–Rural Divide; India; Household Structure

1. Introduction

Education contributes to human welfare through multiple channels. Although primary schooling is broadly recognised as a basic entitlement, participation in tertiary or higher education is largely discretionary and shaped by a complex set of individual motivations. Advancing inclusive and equitable access to higher education forms a core component of the United Nations' Sustainable Development Goal 4 (SDG 4), particularly Targets 4.3 and 4.5, which emphasise universal access to tertiary education and the reduction of inequalities. From an economic perspective, enrollment in higher education is often driven by anticipated financial gains, with human capital theory consistently documenting a positive association between educational attainment and earnings. In addition to private returns, higher education yields significant social externalities by strengthening civic participation, fostering cultural engagement, and improving overall social well-being. In a globalised setting, higher education thus embodies not only economic and social value but also symbolic prestige, influencing aspirations across heterogeneous population groups.

India's higher education system underwent a profound structural shift following the Liberalization, Privatization, and Globalization (LPG) reforms initiated in 1991. These reforms reshaped labour market dynamics, heightened demand for skilled labour, and enabled greater private sector involvement in education provision. The mid-1990s are commonly identified in the literature as the beginning of India's *massification phase*, marked by rapid growth in institutional

capacity, access, and student enrollment. The magnitude of this expansion has been considerable. Student enrollment in higher education increased from 34.2 million in 2014–15 to about 43.3 million in 2021–22. By 2024, the higher education sector was valued at INR 5.75 trillion, with forecasts projecting expansion to INR 11.60 trillion by 2033, corresponding to a compound annual growth rate of 8.1%. Over the period 2014–15 to 2022–23, the total number of higher education institutions (HEIs) grew by nearly 13.8%, rising from 51,534 to 58,643. Growth was particularly pronounced among universities, which expanded by approximately 59.6%, from 760 to 1,213. Private provision emerged as a key driver of this transformation: the number of private universities increased from 87 in 2010–11 to around 510 at present—an expansion of nearly 480%. Correspondingly, student enrollment rose from 3.42 crore in 2014–15 to roughly 4.33 crore in 2021–22.

India's higher education sector is undergoing a significant structural transition, driven by processes of massification, international mobility, increasing gender participation, and the rapid adoption of digital modes of delivery. The scale of expansion within the domestic higher education system has been unprecedented (Figure 1). Between 2015 and 2022, the number of universities increased from 760 to 1,168, while the number of colleges grew from 38,498 to 45,473. This growth reflects a concerted policy initiative aimed at broadening access to higher education and strengthening institutional capacity across the country. Nevertheless, the temporary slowdown in college expansion observed around 2018 points to phases of consolidation or heightened regulatory oversight, indicating that expansion may occasionally outpace the system's ability to sustain quality standards. Additional

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pressure on the higher education system is evident in Figure 2, which documents a consistent rise in Gross Enrollment Ratios (GER), accompanied by linear, quadratic, and exponential projections for future periods. These forward-looking trends are broadly consistent with demographic dynamics and ambitious policy objectives intended to align

India more closely with global norms of higher education participation. At the same time, the speed and scale of this expansion prompt important concerns regarding the capacity of labour markets to effectively absorb an increasingly large cohort of graduates.

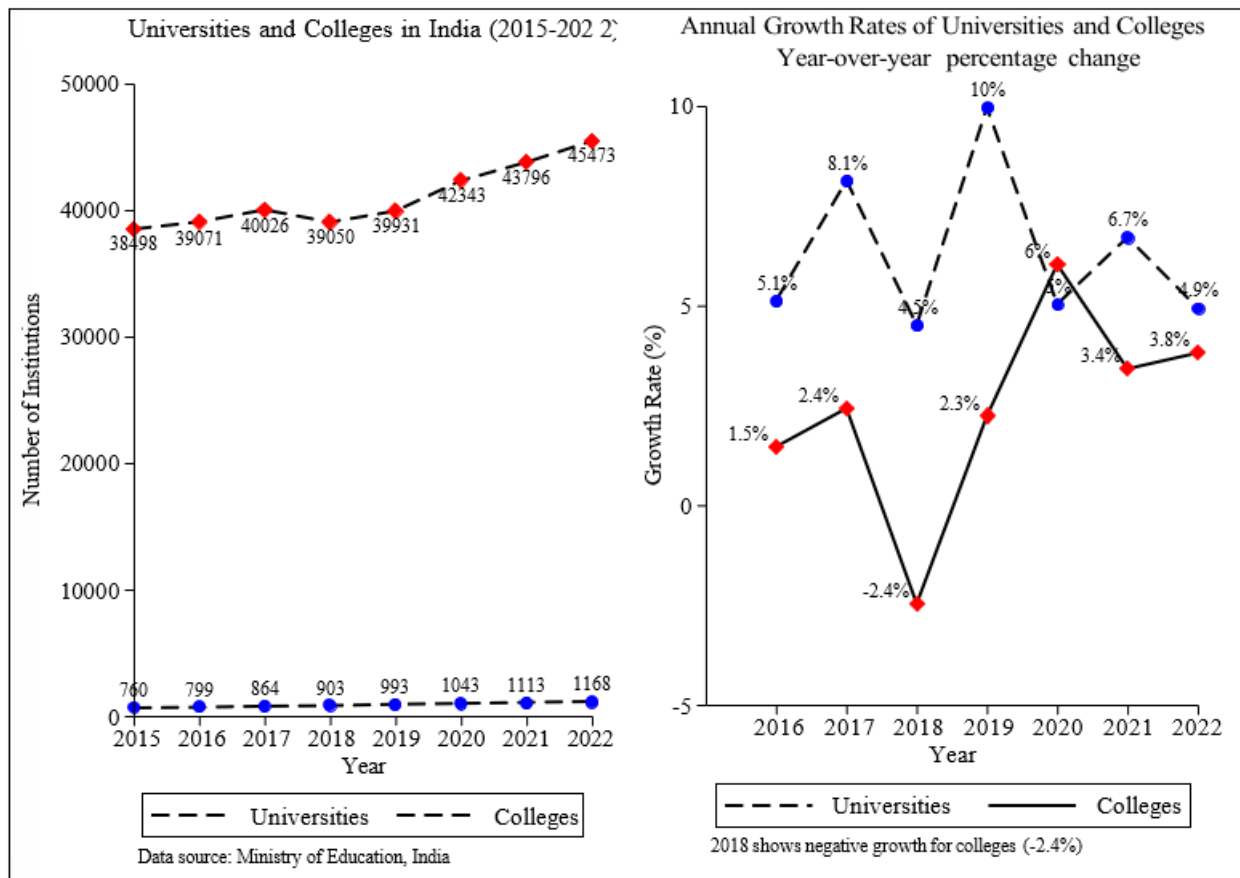


Figure 1: Growth of Higher Education Institutions in India (2015–2022)

Data source: Ministry of Education, India

The overall evolution of access to higher education in India over this period is depicted in Figure 2, which documents a consistent and sustained rise in the Gross Enrolment Ratio (GER) across major demographic categories. The expansion is unambiguous, with one of the most striking developments

being the reduction- and in several cases reversal- of the gender gap, as female GER has equalled or exceeded that of males. Although Scheduled Caste (SC) and Scheduled Tribe (ST) students began from relatively lower levels of participation, their enrollment trajectories exhibit clear

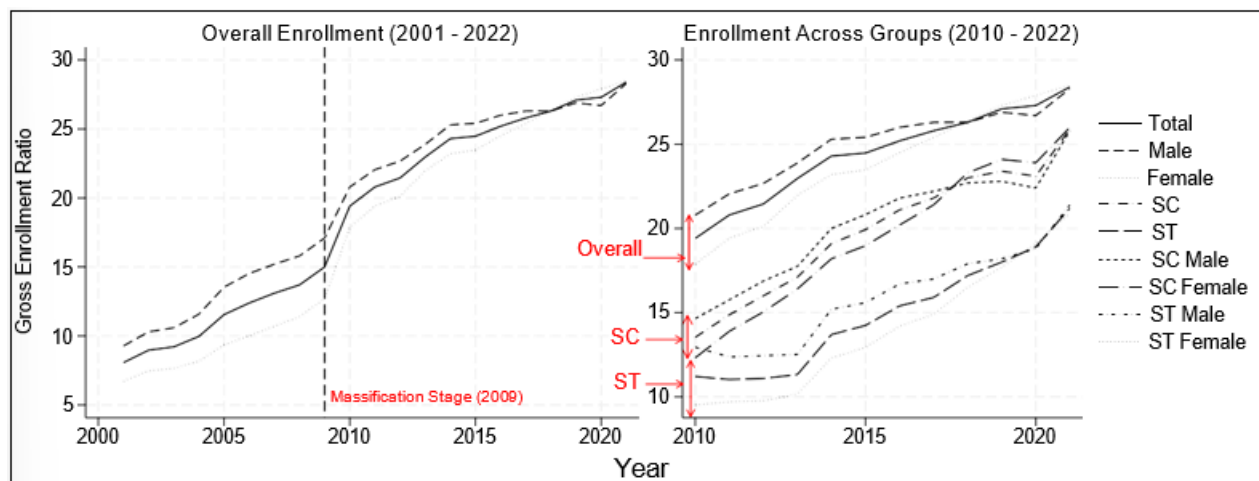


Figure 2: Gross Enrollment Ratio (GER) Trends and Forecasts for Higher Education in India (2016–2026)

Source: Author's Preparation Using AISHE Data

upward convergence over the past two decades, signalling meaningful improvements in access for historically disadvantaged groups.

Changes in the social composition of the higher education student population are further illustrated in Figure 2. The stacked area representation indicates that students belonging to the OBC and 'Others' categories constitute the largest proportions of total enrollment. More notably, the growing representation of female students from OBC, SC, and ST backgrounds stands out, with their shares increasing visibly over time. This shift in composition highlights the inclusive character of the expansion process and reinforces the gender-based convergence patterns observed earlier.

The existing literature on higher education in India consistently documents persistent and multidimensional inequalities in both access and attainment. A seminal contribution by Tilak (2015), using data spanning 1983 to 2009, identifies a self-reinforcing cycle of inequality whereby unequal access to education translates into asymmetric information and employment opportunities, thereby perpetuating broader socioeconomic and political disparities. The study reveals pronounced divides across sector, gender, social group, and religion, and further shows that these inequalities have intensified over time, with individuals at the upper end of the income distribution exhibiting a substantially higher likelihood of enrollment in private institutions. Subsequent studies extend this narrative of structural disadvantage from multiple perspectives.

S. Deshpande (2006) characterises higher education inequalities as fundamentally "exclusive," arguing that the selective and elite nature of tertiary education—unlike primary education, which is treated as a basic entitlement—produces uneven distributions of economic and social returns. Despite public financing and its potential role as a vehicle for upward mobility in a context of widespread poverty, the author suggests that notions of "merit" often function more as ideological symbols than as objectively justified criteria. Strong empirical support for these patterns is provided by several studies. Using NSS data, Khan (2015) demonstrates that gross enrollment ratios are systematically skewed in favour of urban residents, males, and higher-income households. These disparities intensify at advanced levels of education: employing NSS 2014 data, Madan (2020) shows that caste-based inequalities are more pronounced among highly educated groups, implying that education may exacerbate rather than mitigate social stratification. The interaction between social identity and educational outcomes is a recurring theme. Borooah & Iyer (2005) establishes that religion and caste are closely linked to educational participation, with upper-caste boys enjoying significantly higher enrollment probabilities. This finding is reinforced by Borooah (2012), who reports that even after accounting for socioeconomic characteristics, children from marginalized groups remain persistently disadvantaged relative to upper-caste counterparts. With a specific focus on higher education, Basant & Sen (2014) and Choudhury & Kumar (2024) underscore the importance of social, religious, and economic factors in shaping participation, with the latter documenting a 12% gender gap favouring males in access to professional programmes such as engineering and medicine.

This paper makes *two* key contributions. *First*, it offers the most up-to-date and comprehensive empirical assessment of higher education attainment in India and its determinants, extending beyond analyses limited to particular states, short time horizons, or specific institutional categories. *Second*, the study advances understanding of heterogeneity in higher education attainment across caste, gender, income, region, and sector.

2. Data and Methodology

This study draws on data from the most recent 69th round of the National Sample Survey Office (NSSO), namely the Comprehensive Annual Modular Survey (CAMS). The analysis is restricted to individuals aged 18 years and above. The primary outcome variable is binary, indicating whether an individual has attained higher education. To capture heterogeneity across educational stages, higher education attainment is further disaggregated into graduation, post-graduation, and Ph.D. levels. The principal explanatory variable of interest is disability status, alongside a set of socioeconomic controls including gender, caste, religion, household expenditure, and rural–urban location. Summary statistics for all variables are reported in Table 1.

The empirical strategy relies on a discrete choice modelling approach, wherein the likelihood of individual i attaining higher education is expressed as a function of disability status and a vector of socioeconomic characteristics. Formally, the unobserved latent propensity to attain higher education, denoted by y^* , is specified as:

$$y^* = \mathbf{X}_i\boldsymbol{\beta} + \epsilon_i \quad (1)$$

where $\mathbf{X}_i$ represents the vector of explanatory variables, $\boldsymbol{\beta}$ is the parameter vector to be estimated, and ϵ_i is an idiosyncratic error term. The observed outcome is binary, such that $y_i = 1$ if the individual has attained higher education and $y_i = 0$ otherwise. Estimation is carried out using a logistic regression model, with the probability of higher education attainment given by:

$$P(y_i = 1 | \mathbf{X}_i) = \frac{\exp(\mathbf{X}_i\boldsymbol{\beta})}{1 + \exp(\mathbf{X}_i\boldsymbol{\beta})} \quad (2)$$

The core analysis centres on the marginal effects of disability status and other covariates on the probability of attaining higher education. Odds ratios are additionally reported to aid interpretability. To examine heterogeneity in determinants, the model is estimated separately across educational levels (graduation, post-graduation, and Ph.D.) and across key social groupings, including gender, caste, religion, and sector of residence. This disaggregated estimation strategy enables an assessment of how the drivers of higher education attainment differ across population subgroups.

3. Results

3.1 Descriptive Statistics

Descriptive statistics reported in Tables 1 and 2 reveal

substantial heterogeneity in higher education enrollment across social, demographic, and economic characteristics. Of the total sample comprising 1,315,772 individuals, only 16.6 percent are enrolled in higher education, while the remaining 83.4 percent are not. Marked differences emerge across social groups. Individuals classified under the “Others” category account for 39.1 percent of total enrollments, despite constituting only 25.8 percent of the non-enrolled population. In contrast, Scheduled Tribe (ST) and Scheduled Caste (SC) groups exhibit disproportionately lower participation, representing 10.4 percent and 11.0 percent of enrollments, respectively. Religious disparities are similarly pronounced: Hindu individuals constitute over four-fifths of all enrollments (81.3 percent), exceeding their 75.5 percent share among the non-enrolled, whereas Muslims and Christians account for relatively smaller proportions of enrollment at 7.8 percent and 6.7 percent, respectively. Spatial disparities remain stark, with urban residents comprising nearly two-thirds of enrolled students (64.3 percent) despite representing less than half of the total sample (46.2 percent), highlighting the persistence of the rural–urban divide in access to higher education.

Differences by gender, marital status, and household economic standing further reflect entrenched inequalities. Male individuals constitute a majority of enrolled students at 57.4 percent, while females, though accounting for nearly half of the overall population, represent only 42.6 percent of enrollments. Marital status also exhibits a strong association with enrollment: never-married individuals account for 39.3 percent of those enrolled, compared to just 20.8 percent among the non-enrolled, whereas currently married and widowed individuals display substantially lower participation rates. Household economic position, measured through consumption expenditure quintiles, reveals a pronounced gradient. Only 9.9 percent of enrolled individuals belong to the poorest quintile (Q1), while as many as 35.6 percent are drawn from the richest quintile (Q5), underscoring the strong positive relationship between economic resources and higher education enrollment. Finally, intra-household status also matters: unmarried children account for nearly one-third of enrollments (32.0 percent), compared to 16.9 percent among the non-enrolled, while household heads and spouses—who dominate the overall sample—contribute relatively smaller shares to higher education participation.

3.2 Determinants of Higher Education Attainment in India

Regression results presented in Table 3 demonstrate that access to higher education in India is systematically shaped by household resources, social identity, and spatial location. Individuals residing in larger households face significantly lower probabilities of attaining higher education, reflecting the manner in which financial constraints and caregiving responsibilities limit educational progression beyond the school level. These disadvantages are further reinforced by social identity. Individuals belonging to Scheduled Castes, Scheduled Tribes, and Other Backward Classes exhibit consistently lower odds of enrollment relative to those in the “Others” category, highlighting the persistence of caste-based constraints despite prolonged affirmative action policies. Religious affiliation also differentiates access: Muslim individuals experience the most pronounced disadvantage, while Christians and members of smaller religious minorities are likewise less likely than Hindus to attain higher education. Together, these patterns indicate that educational trajectories remain closely tied to entrenched community hierarchies. In contrast, spatial location operates in the opposite direction. Urban residents display substantially higher probabilities of higher education attainment, underscoring the role of institutional concentration, superior infrastructure, and broader opportunity sets in urban areas.

Gender differences point to a gradual convergence in access. Women are modestly more likely than men to attain higher education, signalling a narrowing of the gender gap, particularly among younger cohorts for whom aspirations for female education have strengthened. However, marital status substantially constrains participation: currently married, widowed, and divorced individuals exhibit sharply lower odds of enrollment compared to those who are never married, reflecting the dominance of household responsibilities and social norms over individual educational aspirations. Economic status emerges as one of the strongest predictors of higher education attainment, with the likelihood of enrollment rising steeply across the expenditure distribution; individuals in the richest quintile are more than three times as likely as those in the poorest quintile to pursue higher education. Intra-household position further conditions access: married children are significantly more likely to attain higher education, whereas spouses of the household head face among the lowest probabilities.

Table 1: Variable description and summary statistics of dependent and independent variables. Here B: Binary Variable, C: Continuous Variable and CAT: Categorical Variable

Variable Name	Variable Description	Type	Obs.	Mean	S.D.	Min	Max
Higher Education	Attained higher education	B	1,365,296	0.166	0.372	0	1
Household Size	Number of household members	C	1,365,296	5.035	2.262	0	1
Social Group:							
Others	Social group / caste category	CAT	1,365,296	0.280	0.449	0	1
ST		CAT	1,365,296	0.161	0.367	0	1
SC		CAT	1,365,296	0.153	0.360	0	1
OBC		CAT	1,365,296	0.406	0.491	0	1
Religion							
Hinduism	Religion of the individual	CAT	1,365,296	0.765	0.424	0	1
Islam		CAT	1,365,296	0.112	0.316	0	1
Christianity		CAT	1,365,296	0.078	0.269	0	1
Others		CAT	1,365,296	0.044	0.206	0	1
Sector							

Rural	Sector of residence	CAT	1,365,296	0.538	0.499	0	1
Urban		CAT	1,365,296	0.462	0.499	0	1
Gender:							
Male	Gender of the individual	CAT	1,365,296	0.522	0.500	0	1
Female		CAT	1,365,296	0.478	0.500	0	1
Transgender		CAT	1,365,296	0.000	0.005	0	1
Marital Status							
Never Married	Marital status	CAT	1,365,296	0.238	0.426	0	1
Currently Married		CAT	1,365,296	0.693	0.461	0	1
Widowed		CAT	1,365,296	0.062	0.242	0	1
Divorced/Separated		CAT	1,365,296	0.006	0.078	0	1
Expenditure Quartile							
Q1	Per capita expenditure quartile	CAT	1,365,296	0.196	0.397	0	1
Q2		CAT	1,365,296	0.188	0.391	0	1
Q3		CAT	1,365,296	0.193	0.395	0	1
Q4		CAT	1,365,296	0.205	0.403	0	1
Q5		CAT	1,365,296	0.218	0.413	0	1
Relationship to Head							
Self	Relationship to household head	CAT	1,365,296	0.308	0.462	0	1
Spouse of Head		CAT	1,365,296	0.230	0.421	0	1
Married Child		CAT	1,365,296	0.101	0.301	0	1
Spouse of Married Child		CAT	1,365,296	0.094	0.292	0	1
Unmarried Child		CAT	1,365,296	0.194	0.395	0	1
Others		CAT	1,365,296	0.073	0.260	0	1

Table 2: Summary Statistics by Higher Education Enrollment Status across groups

	Not Enrolled (N=1,149,194)	Enrolled (N=216,102)	Overall Sample (N=1,365,296)
Social Group			
Scheduled Tribe (ST)	196,736 (17.1%)	22,543 (10.4%)	219,279 (16.1%)
Scheduled Caste (SC)	186,547 (16.2%)	23,896 (11.1%)	210,443 (15.4%)
Other Backward Class (OBC)	470,124 (40.9%)	85,517 (39.6%)	555,641 (40.7%)
Others	295,787 (25.7%)	84,146 (38.9%)	379,933 (27.8%)
Religion			
Hinduism	868,015 (75.5%)	175,996 (81.4%)	1,044,011 (76.5%)
Islam	137,416 (12.0%)	16,997 (7.9%)	154,413 (11.3%)
Christianity	92,141 (8.0%)	14,260 (6.6%)	106,401 (7.8%)
Others	51,622 (4.5%)	8,849 (4.1%)	60,471 (4.4%)
Sector			
Rural	659,337 (57.4%)	77,680 (35.9%)	737,017 (54.0%)
Urban	489,857 (42.6%)	138,422 (64.1%)	628,279 (46.0%)
Gender			
Male	590,568 (51.4%)	122,880 (56.9%)	713,448 (52.3%)
Female	558,591 (48.6%)	93,218 (43.1%)	651,809 (47.7%)
Transgender	35 (0.0%)	4 (0.0%)	39 (0.0%)
Marital Status			
Never married	273,043 (23.8%)	88,609 (41.0%)	361,652 (26.5%)
Currently married	790,457 (68.8%)	122,869 (56.9%)	913,326 (66.9%)
Widowed	78,583 (6.8%)	3,608 (1.7%)	82,191 (6.0%)
Divorced/Separated	7,111 (0.6%)	1,016 (0.5%)	8,127 (0.6%)
Expenditure Quartile			
Q1 (Poorest)	303,103 (26.4%)	27,967 (12.9%)	331,070 (24.2%)
Q2 (Lower-middle)	285,646 (24.9%)	40,241 (18.6%)	325,887 (23.9%)
Q3 (Upper-middle)	283,913 (24.7%)	56,881 (26.3%)	340,794 (25.0%)
Q4 (Richest)	276,532 (24.1%)	91,013 (42.1%)	367,545 (26.9%)
Relationship to Head			
Self	353,349 (30.7%)	53,818 (24.9%)	407,167 (29.8%)
Spouse of head	274,103 (23.8%)	28,175 (13.0%)	302,278 (22.1%)
Married child	107,296 (9.3%)	25,788 (11.9%)	133,084 (9.7%)
Spouse of married child	103,789 (9.0%)	21,414 (9.9%)	125,203 (9.2%)
Unmarried child	222,571 (19.4%)	72,357 (33.5%)	294,928 (21.6%)
Grandchild	18,281 (1.6%)	6,289 (2.9%)	24,570 (1.8%)
Father/Mother	34,891 (3.0%)	784 (0.4%)	35,675 (2.6%)
Brother/Sister	33,169 (2.9%)	7,237 (3.3%)	40,406 (3.0%)
Others	1,745 (0.2%)	240 (0.1%)	1,985 (0.1%)

Table 3: Regression Results for Higher Education Enrollment

Higher Education Enrolment Status	Odds Ratio	S.E.	L.C.I.	U.C.I.	AME
Household Size	0.885***	-0.001	0.882	0.887	-0.015
Social Group (Ref: Others)					
ST	0.587***	-0.006	0.575	0.598	-0.066
SC	0.609***	-0.005	0.599	0.619	-0.062
OBC	0.807***	-0.005	0.798	0.816	-0.029
Religion (Ref: Hindu)					
Islam	0.541***	-0.005	0.532	0.551	-0.067
Christianity	0.878***	-0.01	0.858	0.898	-0.016
Others	0.821***	-0.01	0.801	0.841	-0.024
Urban	1.709***	-0.009	1.691	1.727	0.067
Gender (Ref: Male)					
Female	1.176***	-0.009	1.159	1.193	0.02
Transgender	0.377	-0.214	0.124	1.147	-0.087
Marital Status (Ref: Never Married)					
Currently married	0.467***	-0.006	0.456	0.479	-0.108
Widowed	0.129***	-0.003	0.124	0.134	-0.203
Divorced/Separated	0.304***	-0.011	0.283	0.326	-0.15
Expenditure Quartile (Ref: Q1)					
Q2	1.452***	-0.014	1.424	1.479	0.034
Q3	1.868***	-0.018	1.834	1.903	0.062
Q4	2.393***	-0.022	2.349	2.437	0.095
Q5	3.512***	-0.034	3.447	3.579	0.154
Relation with the HH (Ref: Self)					
Spouse of head	0.552***	-0.006	0.541	0.563	-0.065
Married child	1.775***	-0.016	1.744	1.807	0.086
Spouse of married child	1.262***	-0.015	1.233	1.291	0.032
Unmarried child	0.964**	-0.013	0.939	0.99	-0.005
Others	0.838***	-0.011	0.816	0.86	-0.022
Constant	0.312***	-0.004	0.302	0.321	
Observations	13,65,296				
Pseudo R ²	0.102				

Standard errors in parentheses, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

L.C.I. and U.C.I. represent the lower and upper bounds of the 95% confidence interval.

AME represents the Average Marginal Effect.

4. Discussion

A large and well-established literature demonstrates that higher education attainment in India is strongly shaped by social, economic, and demographic structures. Family composition and household size have long been recognised as key constraints, as larger households dilute per-capita educational investment through competition for resources and caregiving demands (Rosenzweig & Wolpin, 1980; Kugler & Kumar, 2017). Caste-based inequalities remain both deep and persistent: Scheduled Castes (SC) and Scheduled Tribes (ST) continue to exhibit lower rates of participation and completion relative to the “Others” category, even after controlling for income and parental background (A. Deshpande, 2011; Thorat & Newman, 2010). Religious identity further differentiates access, with Muslims consistently facing lower enrolment and completion rates than Hindus or Christians, driven in part by spatial segregation, uneven institutional distribution, and intersecting economic disadvantage (Basant & Sen, 2010; Committee, 2006; Bhattacharya & Banerjee, 2020).

Spatial disparities are equally central to understanding access. Urban areas offer greater institutional density and infrastructure, superior infrastructure, and greater availability of both public and private institutions, resulting in systematically higher participation rates in higher education (Tilak, 2007; Jeffrey et al., 2008). Gender patterns, however, have evolved over time. Earlier studies documented substantial female

disadvantages in tertiary participation (Chanana, 2001; Kingdon, 2002), whereas more recent evidence points to narrowing gaps at the point of entry, particularly among younger cohorts (Choudhury, 2017; of Education, 2023). Economic position- captured through household income or consumption expenditure- has remained a powerful predictor, with upper quintiles disproportionately represented in both enrolment and completion outcomes (Drèze & Kingdon, 2001; Tilak, 2007). Intra-household roles further shape opportunity: unmarried children typically face fewer constraints, while household heads and spouses often encounter role-based limitations on educational participation (Jeffrey et al., 2004).

The regression estimates closely mirror these structural patterns while also revealing important shifts. Household size remains negatively correlated with educational attainment on attainment (OR = 0.885), lending support to the resource dilution hypothesis, although the magnitude is smaller than in early-2000s evidence—likely reflecting declining fertility and expanded educational access. Caste-based gaps remain substantial, with SC and ST individuals exhibiting enrolment odds approximately 40–45% lower than those in the “Others” category, underscoring the durability of structural barriers. Religious disadvantage is particularly pronounced for Muslims (OR = 0.541), a result consistent with the findings of the Committee (2006) and notable for its persistence nearly two decades later, indicating limited structural transformation.

Urban advantage remains strong (OR = 1.709), reinforcing longstanding evidence on spatial inequality (Tilak, 2007). Gender coefficients, however, signal a notable reversal: women are now modestly more likely than men to be enrolled in higher education (OR = 1.176), marking a departure from historically male-dominated entry patterns (Choudhury, 2017). This advantage, however, is highly contingent. Marital status introduces a sharp reversal, with married, widowed, and divorced individuals facing substantially lower odds of enrolment (OR = 0.467, 0.129, and 0.304, respectively), reflecting the continued salience of social roles and caregiving expectations. Economic gradients remain steep: individuals in the richest quintile (Q5) exhibit odds of enrolment more than 3.5 times those in the poorest quintile (Q1), pointing to intensifying economic stratification. Intra-household position further conditions access, with spouses of household heads being disadvantaged, while married children enjoy relative advantages, highlighting the role of age and family hierarchy in shaping opportunity.

The heterogeneity analysis sharpens these insights. Gendered constraints are uneven: women experience stronger penalties associated with marital status and household size but derive greater benefits from urban residence and economic resources. Spatial context also reshapes social disadvantage—Scheduled Tribes face the strongest penalties in rural areas, whereas Scheduled Castes experience more pronounced disadvantage in urban settings. Economic resources function as an equalising force, but unevenly across caste and religious groups, indicating differentiated returns to wealth.

Persistent and powerful effects of caste, religion, and economic class continue to define access to higher education, reflecting enduring exclusion and unequal distribution of quality institutions and opportunities (A. Deshpande, 2011; Thorat & Newman, 2010; Basant, 2021). At the same time, the margins of inequality have shifted, particularly along gender and spatial dimensions. Household position remains a central mechanism through which opportunity is mediated, as caregiving burdens and role expectations continue to be distributed unequally across family members.

5. Conclusion

This study provides a comprehensive assessment of higher education attainment in India, highlighting both the scale of expansion and the persistence of deep structural inequalities. Using recent nationally representative data, the analysis demonstrates that access to higher education remains strongly shaped by social identity, household structure, economic resources, and spatial location. Despite sustained growth in institutions and enrollment, participation continues to be unevenly distributed across caste, religion, gender, and rural–urban divides.

The findings reaffirm the enduring disadvantages faced by Scheduled Castes, Scheduled Tribes, and Muslim communities, even after accounting for household economic status and other socioeconomic characteristics. Household size and intra-household position emerge as significant constraints, reflecting the continued relevance of resource dilution and caregiving responsibilities. Urban residence and economic privilege substantially enhance access,

underscoring the role of institutional density and financial capacity in shaping educational opportunities. While women now exhibit a modest advantage in higher education enrollment, this progress is highly contingent and reverses sharply with marriage, widowhood, or divorce, revealing how social roles and family norms continue to structure educational trajectories.

The heterogeneity analysis further reveals that inequalities are not uniform but intersect across caste, religion, gender, and space. Economic resources act as a partial equalizer, particularly for historically marginalized groups, yet the returns to wealth vary considerably across social contexts. These patterns indicate that expansion alone is insufficient to dismantle entrenched hierarchies and that inequality in higher education increasingly operates through overlapping social dimensions.

Overall, the study highlights a central paradox of India's higher education system: widening access has coexisted with persistent and, in some cases, intensifying stratification. Addressing these challenges requires policy approaches that move beyond aggregate expansion targets and instead focus on intersectional disadvantages, household-level constraints, and the uneven geography of educational opportunity. Without such targeted interventions, higher education risks reproducing existing social inequalities even as participation continues to grow.

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