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Understanding the Non-Attendance Trends in Six Indian States: Highlighting Gender and Rural/Urban Disparities

While India has achieved universal primary education for both girls and boys, a gender gap in secondary education persists, disadvantaging girls across almost all states (1). The 2019 Indian National Education Policy (2) prioritizes school retention among the most vulnerable populations, including girls, but union territory and state-level efforts and targeting are also needed to improve educational outcomes for India (3) given the high variability in both secondary school retention and the severity of the gender gap across states and union territories. We review the gender gap in secondary education in selected states to help guide these targeted efforts.

STUDY OBJECTIVE: We aim to (a) examine school attendance by age, sex, and rural or urban residence, and (b) explore reasons for non-attendance by sex among children and youth age 6 to 17 years who are not attending school in six large, geographically distinct states disproportionately affected by gender gaps in secondary school attendance. Findings can guide state and union territory efforts toward national impact.

SELECTION CRITERIA FOR STATES: Selection criteria for the states were (a) for unique representation of each of six geographic regions in India, (b) being one of the largest states in the represented region, and (c) demonstrating a gender gap in secondary school attendance or low attendance for females aged 17 years. The selected states are Assam (northeast), Bihar (east), Gujarat (west), Madhya Pradesh (central), Rajasthan (north), and Telangana (south).

DATA SOURCE: We analyzed household data from the 4th wave of the representative National Family Health Survey (NFHS-4), conducted in 2015-16 (1). Among other indicators, the NFHS-4 provides data on school attendance and reasons for not attending school at national, state/union territories (UTs), and district levels. The sample for this study includes all children aged 6-17 residing in interviewed households, including those currently and formerly in school, as well as those who have never attended school.

DATA ANALYSIS: We graphed and described:

- the prevalence of school attendance by sex nationally and for all states/UTs at ages 10 and 17 ($n = 53,574$ and $n = 58,045$).
- the prevalence of school attendance for sex, rural/urban residence, and age for the national sample ($N = 677,427$), and for selected states.
- the reasons for non-attendance by sex among those not in school nation-wide ($n = 64,340$), and selected states.

KEY FINDING ON SCHOOL ATTENDANCE AT AGES 10 AND 17 BY SEX:

At Age 10: We see nation-wide school attendance at 95% and 96% for girls and boys, respectively (see Figure 1). Girls' attendance rates ranged from 90% in Daman and Diu to 100% in Puducherry and Lakshadweep. Differences between girls' and boys' attendance were rather small, ranging from 0 to 3 percentage points ($p.p.$); the exception was Daman and Diu with 10 $p.p.$ difference between girls and boys.

At Age 17: We see nation-wide school attendance at 46% and 54% for females and males, respectively (see Figure 2). Females' attendance rates ranged from 14% in Assam to 85% in Kerala. Other states/UTs with relatively low attendance rates for females were Odisha (32%), Gujarat (32%), Dadra and Nagar Havel (37%), Tripura (37%), and Jharkhand (37%). Differences between females' and males' attendance ranged from 0 to 25 $p.p.$, with more males attending school than females in most states/UTs.



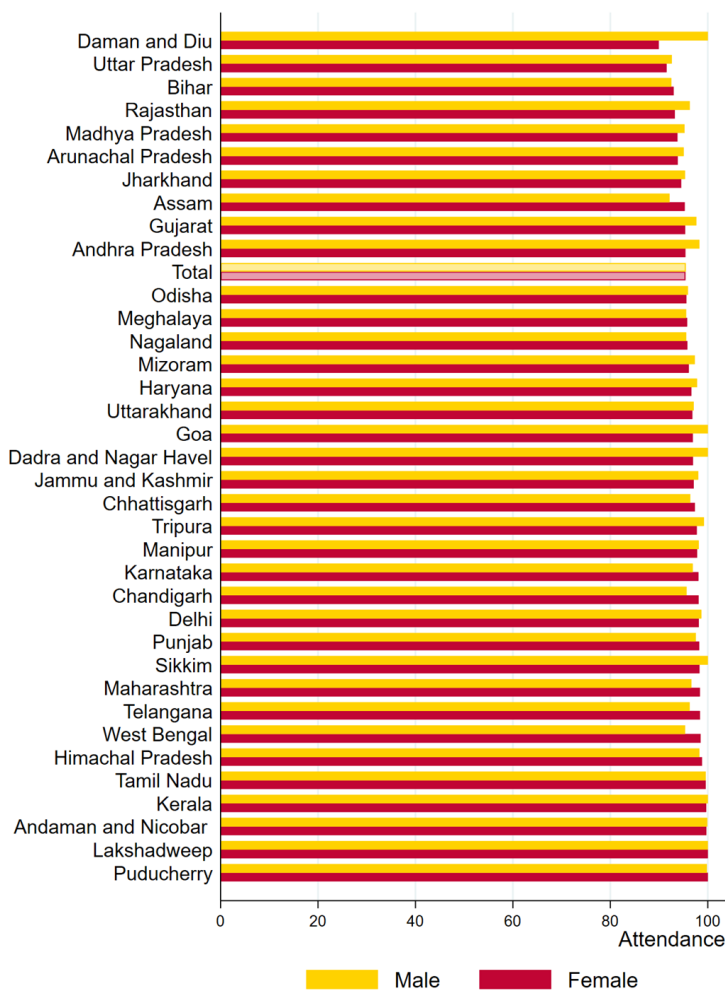


Figure 1. School attendance by sex and state of youth age 10 in India [NFHS-4 2015-2016; n = 53,574]

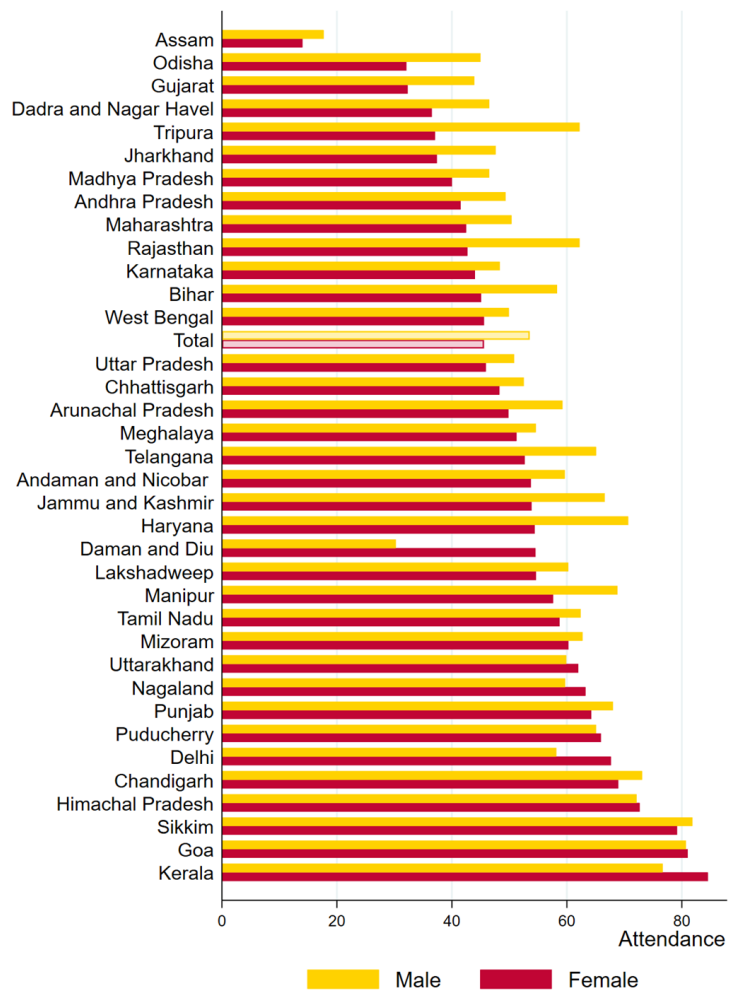


Figure 2. School attendance by sex and state of youth age 17 in India [NFHS-4 2015-2016; n = 58,045]

KEY FINDINGS ON SCHOOL ATTENDANCE BY AGE, SEX, AND RURAL/URBAN RESIDENCE BY STATE:

All India: We see a trend of increasing school attendance until the age of 10. At age 10, 95% of rural and 96-97% of urban children attended school (see Figure 3). After age 10, attendance declined steadily. The decline was more significant for rural children compared with urban children, and for rural females more than rural males. At age 17, 41% of rural females were attending school, compared to 52% of rural males and 57% of urban females and males (for detailed information, see (4)).

Northeastern State – Assam: Between the ages of 6 and 10 (i.e., primary school), attendance was higher than in later years, ranging from 92% to 100% (see Figure 4). Declines in attendance started at ages 9 (rural children), 10 (urban girls), and 11 (urban boys) and accelerated after the age of 13. The decline was greater for rural children compared with urban children. The decline was most evident between ages 16 and 17, ranging from 28 *p.p.* decrease for rural adolescents to 34 *p.p.* decrease for urban females. At age 17, urban males showed the highest attendance rate (31%), followed by urban females (25%), rural males (17%), and rural females (12%). There was a 19 *p.p.* difference in attendance between rural females and urban males.

Eastern State – Bihar: Between ages 6 and 10 (i.e., primary school), the attendance rate was increasing (see Figure 4). At age 10, 93% of rural girls, 92% of rural boys, and 94% of urban children attended

school. Declines in attendance started at age 10. The decline was greater for rural children compared with urban children, and for rural females more than rural males. At age 17, urban males showed the highest attendance rate (66%), followed by urban females (61%), rural males (57%), and rural females (43%). The difference between rural girls and urban males was 23 *p.p.* It is noticeable that the attendance among urban males spiked between ages 15 and 16 (7 *p.p.* increase from 75% to 82%).

Western State – Gujarat: Between ages 6 and 10 (i.e., primary school), the attendance rate ranged from 92% to 99% across all four groups (see Figure 4). Yet, the attendance rates cannot be identified as declining, stable, or increasing. Instead, the attendance rate across groups increased and declined interchangeably. At age 10, 98-99% of urban children, 97% of rural boys, and 93% of rural girls attended school. Decline in attendance rate started at age 8 for rural girls, age 10 for rural boys, and ages 10 to 11 for urban children. For rural girls, the decline in attendance was most accentuated and accelerated after age 12. At age 17, urban males showed the highest attendance rate (47%), followed by urban females (44%), rural males (40%), and rural females (25%). There was a 22 *p.p.* difference in attendance between rural females and urban males.

Central State – Madhya Pradesh: Between ages 6 and 10 (i.e., primary school), the attendance rates ranged from 90% to 98%, with rural girls showing the lowest attendance rates, followed by rural boys (see Figure 4). At age 10, 93% of rural girls, 95% of rural and urban

boys, and 96% of urban girls attended school. Decline in attendance rate started at age 9 to 10 but was most accentuated for rural children, especially rural girls. At age 17, urban females attended schools at highest rates (57%), followed by urban males (52%), rural males (44%), and rural females (33%). There was a 24 *p.p.* difference in attendance between rural and urban females.

Northern State – Rajasthan: Between the ages of 6 and 10 (i.e., primary school), the attendance rate for rural girls was lowest (88%-93%), followed by rural males (92%-96%), urban girls (93%-97%), and urban boys (94%-98%) (see Figure 4). Decline in attendance rate started at age 10 and accelerated after age 12. The decline was more accelerated for rural females than for the other groups. Between the ages 16 and 17, the attendance rate declined drastically for rural adolescents (15 *p.p.* and 14 *p.p.* decline for rural females and males, respectively). At age 17, urban males attended school at highest rates (67%), followed by rural males (61%), urban females (58%), and rural females (38%). There was a 29 *p.p.* difference in attendance between rural females and urban males.

Southern State – Telangana: Between the ages of 6 and 10 (i.e., primary school), the attendance rates in Telangana were high compared to other states, ranging from 94% to 100% (see Figure 4). Urban girls had near universal attendance from ages 7 to 10. For rural children, the decline in attendance started at age 11 and accelerated after age 14. The decline was more accelerated for rural females with a drastic decline of 16 *p.p.* at age 14-15 and 30 *p.p.* at age 16-17. For urban

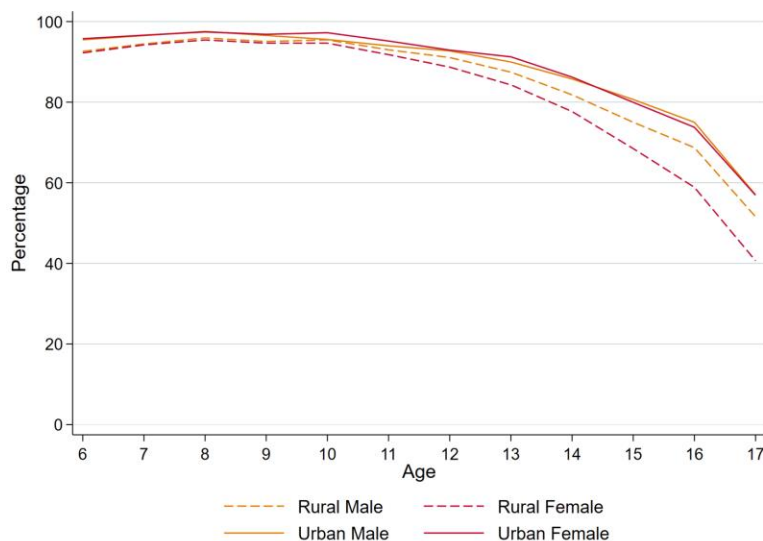


Figure 3. School attendance by sex, rural/urban residence, and age, among a representative household sample of youth age 6 - 17 in India, 2015-2016 [NFHS-4, N = 677,427]

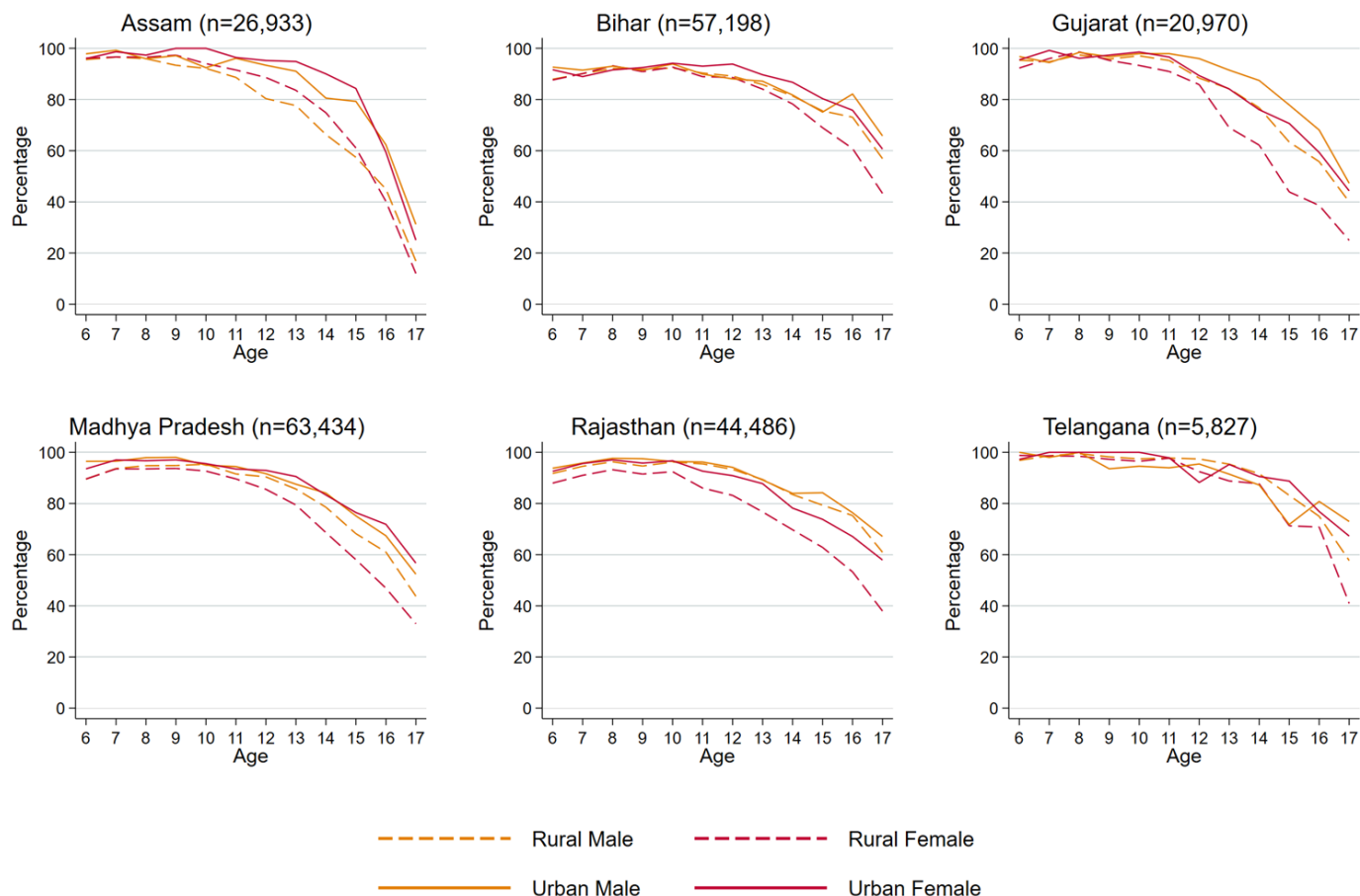


Figure 4. School attendance by sex, rural/urban residence, and age, among state-representative household samples of youth age 6 - 17 in six states [NFHS-4, 2015-2016]

children, the attendance rates erratically declined after the age of 11. At age 17, we see a 41% attendance rate for rural females, 58% for rural males, 67% for urban females, and 73% for urban males. There was a 32 *p.p.* difference in attendance between rural females and urban males.

KEY FINDINGS ON PRIMARY REASONS FOR NON-ATTENDANCE BY SEX AND STATE:

Not being interested in education was reported as the primary reason for not attending school for males across all selected states (ranging from 41% in Gujarat to 52% in Telangana) (see Figure 5). This reason was more often reported for males than for females. For females, lack of interest was the primary stated reason ranging from 21% in Bihar to 35% in Rajasthan.

Domestic/caregiving work barriers were the most often reported primary reason for girls' non-attendance in Bihar (22%). Also, in Rajasthan, Telangana, and Gujarat, almost one in four girls were not attending school due to domestic and caregiving work barriers. Domestic/ caregiving work was a greater barrier to school attendance for females than males. For males not attending school, this reason was stated for 24% in Telangana, 17% in Rajasthan and Madhya Pradesh, and 15% in Bihar.

Financial barriers were also often reported as primary reason for

non-attendance. For girls, this reason was reported for 19% in Assam, 13% in Telangana, and 12% in Bihar. For boys, this reason was stated for 19% in Assam, 15% in Bihar, and 14% in Rajasthan.

Logistic barriers (i.e., school too far away, transport not available) were more often reported as a reason for females' non-attendance than for males' non-attendance. For 21% of girls in Madhya Pradesh, 13% in Rajasthan, and 10% in Bihar and Gujarat was this the primary reason for not attending school. In contrast, this reason was stated for 1% to 6% of males in these six states.

Marriage was an often-reported reason for non-attendance for females in Assam (18%) and Bihar (10%).

STUDY LIMITATIONS: Multiple reasons may have contributed to the non-attendance of a student, but NFHS-4 assessed only the primary reason for students not attending school. Also, responses were reported by the head of the household and not by the children themselves.

CONCLUSION & IMPLICATIONS: While considerable progress has been made in secondary school attendance overall as well as in reducing gender gaps across India and within states/UTs (1, 5), there continue to be significant differences between females and males, rural and urban children, and across different states/UTs. Overall, school attendance decreases after the age of 10. In all states/UTs,

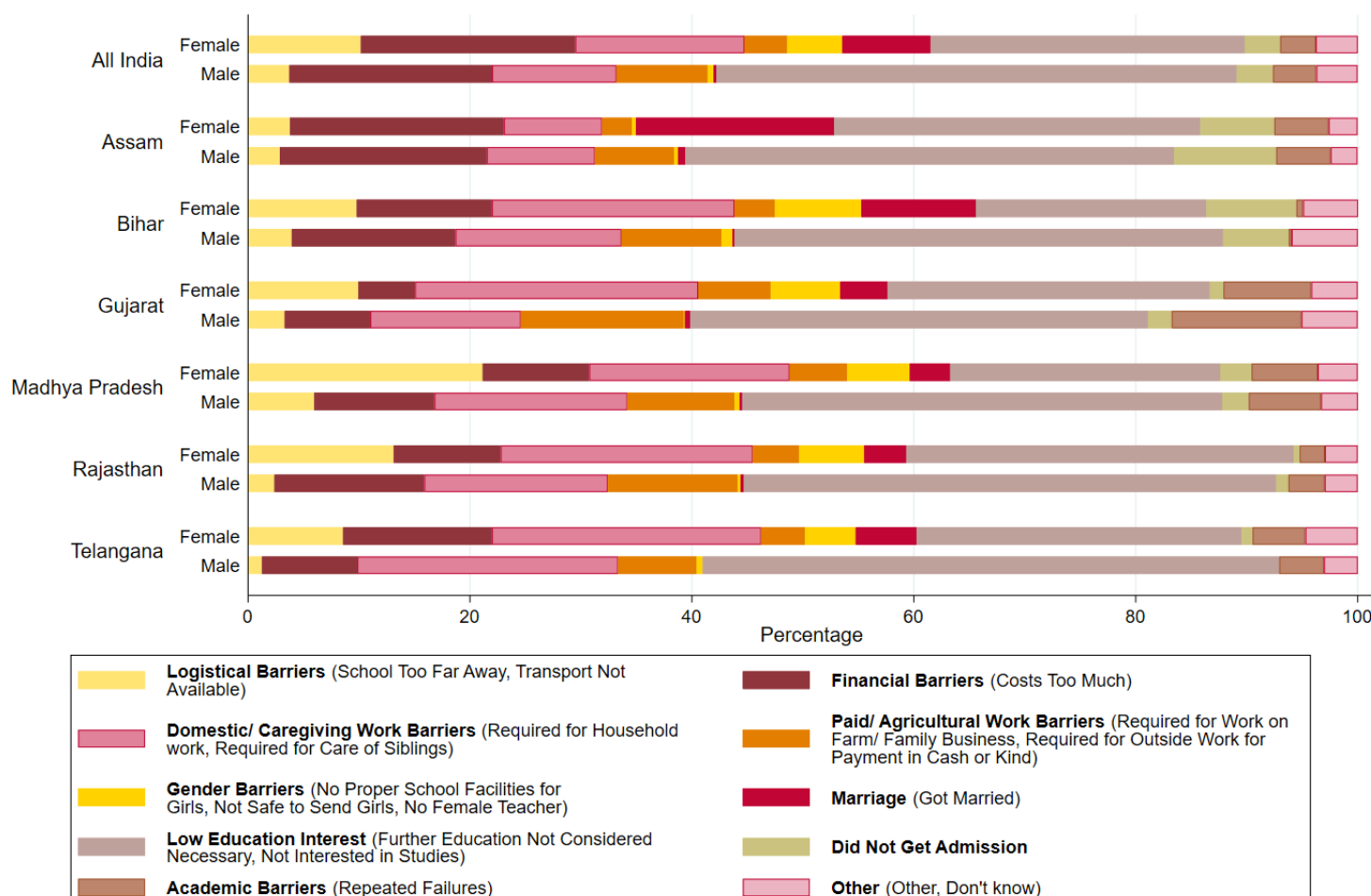


Figure 5. Reasons for not attending school by state and sex among a nationally-representative household sample of youth age 6 - 17 [NFHS-4 2015 - 2016; all India n=64,340; Assam n=3,322; Bihar n=3,397; Gujarat n=3,287; Madhya Pradesh n=8,385; Rajasthan n=4,377; Telangana n=484].

declines in attendance were more pronounced for girls than for boys and for rural than for urban children. For girls, besides the lack of interest in education, the four main barriers reported were domestic/caregiving work, logistic and financial barriers, and marriage. Responsibilities at home, family dynamics, and broader social gender norms such as early marriage seem to be powerful barriers to girls' school attendance once they hit adolescence. These findings suggest that India may need to go beyond education-only interventions and also focus on social and structural factors to increase secondary school attendance for girls.

Research has shown the effectiveness of some practices and policies in some places: For example, providing a bicycle program to girls to facilitate travel to school (i.e., reducing logistic barriers) increased girls' enrollment in secondary school and reduced the gender gap (6); Free mid-day meals (i.e., reducing financial barriers) increased attendance rates, especially of girls (7); Youth Information Centers comprising multi-component interventions (e.g., education, gender empowerment awareness, livelihoods-skills training) have shown a significant impact on reducing early marriages and school retention, especially among girls (8).

Continued evaluation is needed to assess the implementation of educational policies that aim to reduce non-attendance of students and improve access to and participation in high-quality education. Besides, future research should explore reasons why attendance rates spike for some groups at specific ages (e.g., males between ages 15 and 16 in Bihar), and whether these gains could be leveraged to the benefit of other groups. Also, a better understanding is required of how social and economic context and gender norms influence school attendance.

These findings highlight that more work is needed to achieve India's goal of not only universal primary, but also universal secondary education for Indian children. The precipitous decline in school attendance after age 10 must be addressed through multiple avenues, including policy, practice, and social change.

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geh@ucsd.edu



@GEH_UCSD