

Exploring the Subnational Decline of Child Marriage in India: The Crucial Role of Education Expansion

Background

The implication of the evil practice of child marriage is widely published in the literature. Marriage before the ideal age impacts individual physical and mental health and well-being of offspring, education, agency, socio-economic empowerment, etc. India has significantly reduced the number of child brides i.e. girls marrying before 18 years of age in the last three decades. A recent study found that the level of child marriage declined from 49% in 1993 to 22% in 2021 with a subnational heterogeneity. However, an estimated 13 million women aged 20-24 reported married before their eighteenth birthday [1]. There are lots of interventions focussing on eradicating this evil practice, however, lower levels of education, community practice, poverty, own agency, and norms are found to be some of the reasons behind it

In the last three decades, the education scenario especially female education has improved significantly across states of India. This expansion of education positively affects many key welfare indicators such as nutrition, child mortality and women's autonomy and empowerment, etc. A global study also evident that the expansion of education has positively impacted the fertility mean age of marriage, age at first sex and childbearing [2 3 4]. However, this relationship /association is never studied in Indian context, where marriage is social institution and a universal event. Moreover, there is larger heterogeneity in demographic and social indicators across states, hence understanding of temporal reduction of child marriage at the subnational level is necessary for program and policy formulation at the local level.

The study has been conceptualized under the following rationale. First, although the studies have estimated the temporal trend of child marriage using the recently married young population, it largely overlooked the older women who married early. Hence it is necessary to understand the cohort pattern of temporal child marriage. Secondly, though the number of child brides has declined in India, the change is not uniformly distributed across the states of India. Hence this study targets to understand the subnational change in child marriage and identify the period of stall and the period of high growth. Thirdly though there is evidence of educational change, this study identifies the contribution of education in reducing child marriage both in the period of stall and period of high growth. This evidences the need for the focussed educational intervention in the lagging geographies. Lastly, the study uses the intersectionality approach to understand the association of education and child marriage distribution among the socio-economic vulnerable groups in India. Based on this the specific objectives of this study are as follows

Objective 1: To understand the pattern of education and child marriage progression in India and its subnational geographies: Understanding the periods of stalls and high growth.

Objective 2: To understand the compositional and rate effect of perceived education on child marriage reduction at the time of stalls and periods of high growth.

Objective 3: Intersectionality in education and child marriage progression: Role of socio-economic caste and class.

Data and Methods

Our analysis is based on a fifth round of national family health survey (NFHS) data collected in 2019-21 in India and all states. NFHS the Indian version of the demographic health survey provides information on various demographic and health indicators since its inception in 1991 in India. The recent two rounds of the NFHS are providing the indicators at the district level The data collected information at the household level, women's level (women aged 15-49), and men's level (women aged 15-49), and collected information for children aged five years and below. Using the multistage random sampling methods the study samples are representative of the district level [5].

For this study, we used the women file and considered the women aged 15-49 who were married. The women were asked about the year of marriage that helps in preparing the marriage cohorts. We divided the marriage years into 5 years of marriage cohorts (6 marriage cohorts) since 1990. The women reported the marriage year below 1990 were dropped from the sample. The proportion of married women below age 18 were estimated and used in the analysis. The temporal change in child marriage was estimated for all quinquennial cohorts. Child marriage is considered stalled if the annual change in child marriage is below 2% of its previous value. Similarly, the period where the larger

change is observed is considered as the period of high growth rate. The education level of women are divided into 4 categories as divided in NFHS i.e. (1)*No education* (2)*Primary (1-5)* (3)*Secondary (6-9)* (4)*Higher (10 year and more)*. The change is child marriage, and its education attribution is measured using kitagawa decomposition methods.

Results

Figure 1 presents the level of education among the married cohort from 1991-95 to 2016-21. We found about half (47%) of the married women of the 1991-95 cohorts were uneducated which declined to about 9% among the women of the married cohort of 2016-21. The transition showed that the level of education transitioned to the secondary level to the young married cohort. However, even in the young cohort of 2016-21, we found about a quarter of women had completed higher education. Similarly, the level of child marriage (proportion of women married before 18 years of age) among the married cohorts declined from 57% among the cohort of women 1991-95 to 18% among the women married cohort of 2016-21. The level of child marriage has declined across levels of education and is lower among the women with higher levels of education. The level of child marriage converged in the recent cohorts suggesting that providing the level of education to the secondary level has no/minimal impact on further reduction of child marriage.

Figure 1: Temporal trend of education and child marriage among the cohort of married in India.

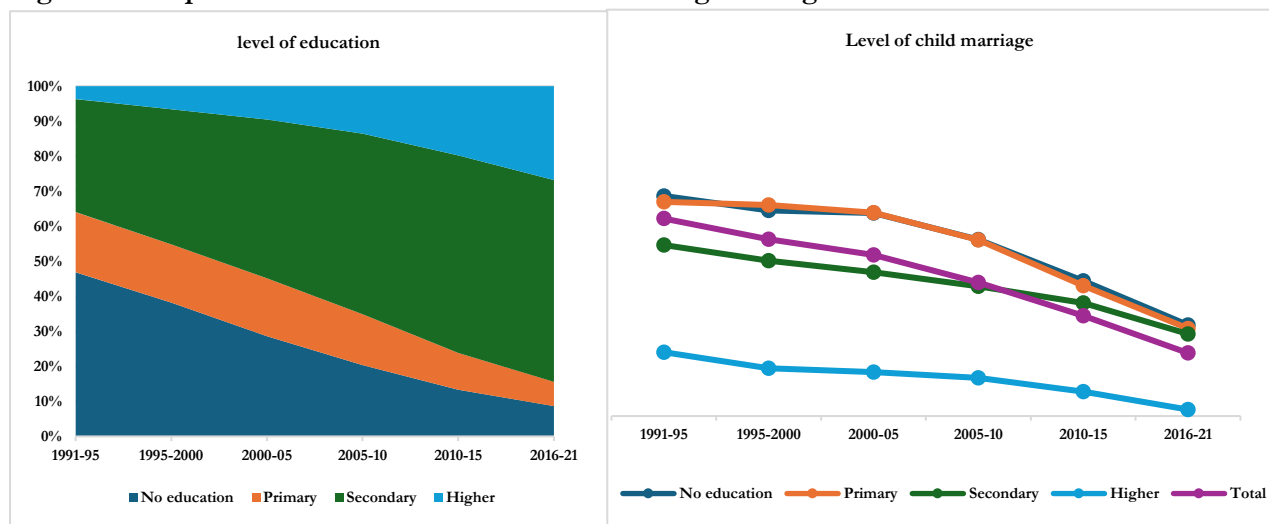


Table 1 presents the level of child marriage across the states and we found that like the national level, the proportion of child marriage among marriage cohorts has declined over time. The table also found 10 major states showed stall (highlighted in yellow) in child marriage at some point in time. These states were the states historically showing higher levels of child marriage and the majority of stalls were observed in the period 1995 to 2005. Similarly, across the states, higher growths were observed in the recent past and between 2010-2020.

Child marriage stalls primarily reflect stalling within and between educational groups; however, the pattern varies across the stalled states. Among the stalled states Rajasthan and Jharkhand showed that the stalls are purely the compositional effect that suggests there are requirements for changing the composition through promoting the girl's education. Similarly in West Bengal where the change in child marriage is purely due to the rate effect, that suggests keeping girls in school for longer duration to eliminate early marriage. In the other states, where child marriage stalls were observed were a mix of both composition and rate effect. Southern and western states such as Andhra Pradesh, Telangana, Karnataka and Gujarat the compositional effect dominates the stall while other states such as Uttar Pradesh and Bihar the rate effect dominates the stall in child marriage.

The study also decomposed the pattern of high growth and uniformly found that education has an impact in reducing child marriage i.e. majorly increasing the secondary and higher levels of education. This suggests the programme should focus on keeping girls in school at least higher education that can support in reducing child marriage.

Table 1: Proportion women married before 18 years by the marriage cohorts.

State	1991-95	1996-2000	2001-05	2006-10	2011-15	2016-21
Jammu & Kashmir & Ladakh	29.8	20.5	15.5	12.4	6.4	2.0
Punjab	34.3	28.6	23.9	16.5	11.2	5.5
Uttarakhand	52.7	41.3	35.8	29.2	17.4	6.2
Haryana	56.1	46.9	40.6	31.3	18.8	8.6
Delhi	51.9	41.8	33.2	24.9	15.1	8.6
Rajasthan	57.4	54.8	56.0	47.3	33.5	18.8
Uttar Pradesh	62.9	56.9	53.1	43.2	25.6	12.8
Bihar	73.9	70.0	68.6	58.6	49.5	34.6
Assam	45.8	41.1	40.1	38.1	32.3	23.7
West Bengal	62.3	62.1	61.5	53.7	45.5	34.7
Jharkhand	65.9	59.1	59.0	52.7	43.4	28.6
Odisha	48.4	42.2	35.0	30.5	24.8	18.0
Chhattisgarh	64.3	57.6	48.8	37.6	19.4	9.2
Madhya Pradesh	70.9	61.5	58.2	46.3	31.6	18.8
Gujarat	48.5	39.6	36.7	30.5	26.3	18.2
Maharashtra	52.3	43.7	38.1	31.5	23.8	16.3
Andhra Pradesh	58.9	58.6	51.2	44.0	32.5	20.8
Karnataka	49.0	48.8	39.5	32.6	22.1	13.8
Kerala	28.0	16.6	12.0	9.8	7.8	1.7
Tamil Nadu	45.2	35.6	24.4	17.5	14.5	9.9
Telangana	64.4	62.6	52.5	41.8	27.9	12.3
Stall						
High decline						

The study also found the inequality in the change in child marriage and education among the married cohort in India. We found that educational composition has changed across the social caste and expansion in education happened across all the castes. However, there is still some women from the socioeconomic backward classes. Similarly considering child marriage we found that child marriage is still high among the socio-economic backward classes moderated by the level of education among them.

Discussion

This paper is the first attempt to understand the association of education of child marriage with educational expansion among the women in India. The novelty of this paper is understanding this demographic event in cohort measure. Though some attempt have been done using period decline, the attempts are not straightforward in association education. The impact of educational sizeable improvements in the educational attainment of women on child marriage was examined to understand the marriage stalls, period of high growth and understand these association with intersectionality approach.

The study found that marriage stalls across states of India during the 1991-95 irrespective of the female educational expansion. The measure reason may be the expansion of education to the primary from no education and many be secondary which have a minimal role in changing the child marriage in Indian states. Kitagawa decomposition analysis suggest across the stalled states the effect of education varies across the states state. For example, for Jharkhand and Rajasthan its purely the compositional effect that needs a more educational expansion while in case of west Bengal its purely rate effect that need more longer duration keeping girls in school. Across the other states the effects are primarily mixed, however it differs by regional division. Decomposition of period of high growth suggests that larger chunk of reduction is due to the educational expansion beyond the secondary level, and it explains around 70-80% of reduction in child marriage. This suggests the impact of right to education and other educational policy change that supports in keeping girls in school. More rigorous efforts are required for the reduction further.

Table 2: Temporal trends of distribution of population and child marriage by caste

	Proportion of population by education			Child marriage		
	1991-2000	2001-2010	2011-2021	1991-2000	2001-2010	2011-2021
Scheduled caste						
No education	50.8	29.7	13.3	63.9	58.2	37.5
Primary	19.2	18.7	10.8	64.8	56.8	33.4
Secondary	27.7	44.9	59.3	50.7	41.9	29.4
Higher	2.4	6.7	16.7	23.3	14.5	5.1
Scheduled tribe						
No education	62.2	40.8	21.1	57.7	52.6	35.5
Primary	15.3	18.4	12.9	59.9	53.0	35.2
Secondary	20.9	36.4	55.9	48.2	40.9	28.3
Higher	1.6	4.4	10.2	19.4	11.5	4.4
Other backward classes						
No education	43.0	24.6	10.5	61.6	55.5	33.2
Primary	16.6	14.6	8.2	59.2	52.3	32.4
Secondary	36.0	49.6	56.5	47.3	39.0	27.5
Higher	4.5	11.2	24.8	17.8	14.2	4.9
Other						
No education	25.5	13.5	6.7	58.3	49.5	29.9
Primary	15.5	12.4	6.5	60.1	54.5	29.9
Secondary	47.9	53.8	53.5	42.2	34.8	25.8
Higher	11.2	20.3	33.3	12.0	7.9	2.9

In addition to having comparatively higher level of child marriage across the, marginalized social groups in India attributes as the systematic discrimination in education. However, the reduction till point may be attribute to the pro-policy towards the disadvantaged population. Through education and community social norms there is a significant improvement across the lower socio-economic marginalised population.

Conclusion

This paper has some limitation in terms of data use and methodology. First the study use year of marriage as the major variable for categorising the cohorts that may be affected by recall bias. Secondly there are many interlinking factors that impacts child marriage simultaneously through education is not considered in this study.

The findings presented in this paper re-emphasizes the need to expand female education beyond secondary school to ensure meaningful reductions in early marriages in India. Moreover, the regional pattern to be focussed and programme and policy to focus on local level and state specific interventions.

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