



Age at Marriage in India: A Geospatial Analysis

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Introduction and Need for the Study

- Only 1.8 percent of Indian women remain unmarried at the end of 40 years (NFHS 4).
- India also shows substantial diversity in age at marriage, particularly early marriage. This regional diversity in marriage timing is accompanied by well-recognized regional diversity in different dimensions of gender (Dyson and Moore 1983).
- The average age at marriage in India is increasing at a snail's pace, the major hurdles being the socio-cultural constraints
- There has been sufficient evidence to believe that, even within states, there are significant variations in the prevalence of child marriage.
- Even in a state with an overall high rate of child marriage, it is likely that some districts would have low prevalence of child marriage due to distinct cultural, social or administrative characteristics that make these districts stand out from the rest of the state.

Objectives

- To understand the trends and prevalence in male and female age at marriage in India.
- To understand the basic determinants (ascribed vs attained characteristics) of male and female age at marriage in India
- To analyze the spatial heterogeneity that persists in the prevalence of age at marriage in India

Data and Methods

- The study uses data from the fourth round of the National Family Health Survey (NFHS-4) conducted in 2015-16.
- Logistic regressions were performed using STATA 14. For this, a dichotomous variable for age at marriage (0 indicates age at marriage above 18 and 1 indicates age at marriage below 18) was created.
- This is done to establish the pattern of relationship between selected covariates and mean age at marriage respectively for the selected states of Uttar Pradesh, Punjab, Maharashtra, Tamil Nadu, West Bengal and Assam.
- The district level analysis is performed using GeoDa. The district level maps made separately for men aged 15-54 and women aged 15-24 and 15-49 facilitate the understanding of change in the pattern of mean age at marriage.

Findings

Figure: 1 Trend of Mean age at marriage

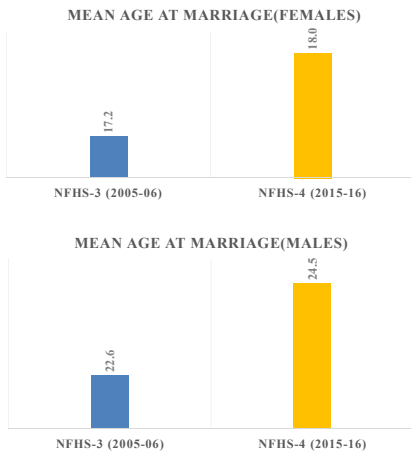


Table 1: Mean age at marriage by region-2015-16

Regions	Mean age at marriage	
	Females	Males
North	19.0	23.0
Central	17.9	22.0
East	17.9	23.0
North East	19.8	26.0
West	19.0	24.0
South	19.2	26.0
India	18.6	24.5

Contd.

Figure 2: Line graph showing the relationship between female age at marriage and wealth and Education

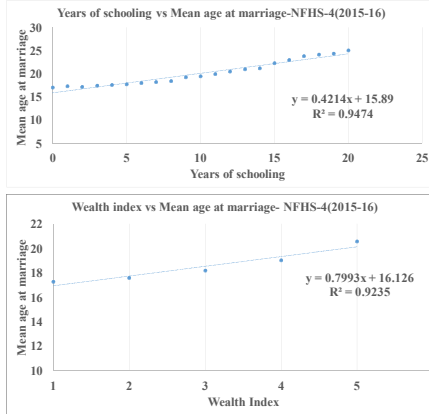


Table 2.1: Odds Ratio of females marrying below 18 years based on background characteristics of the respondents

States	Bihar	Punjab	Maharashtra	Tamil Nadu	West Bengal	Assam
Covariates	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Education (ref. no education)						
Primary	0.87	0.81	1.27	1.56	2.83**	1.34
Secondary	0.55*	0.53	0.80	0.72	1.25	0.71
Higher	0.31*	-	0.07*	0.42	0.84	-
Wealth (ref. poorest)						
Poorer	0.97	-	0.64	1.98	0.89	0.56
Middle	1.05	3.7	0.89	1.96	0.79	0.87
Richer	0.97	1.4	0.36*	1.90	1.11	1.02
Richest	0.45	1.4	0.20*	1.36	0.12	0.17
Religion (ref. Hindu)						
Muslim	0.64*	1.58	0.90	1.38	0.80	1.45
Others	-	0.56	0.72	1.30	0.94	2.02
Caste (ref. Scheduled Caste)						
Scheduled Tribe	0.48	-	1.15	0.77	0.84	0.48**
OBC	0.82	1.11	0.58	1.29	0.79	0.42*
Others	0.58*	2.61	1.14	7.17	0.97	0.66

The notation * is $p < 0.01$, ** is $p < 0.05$ (controlled for residence, husband's education, mass media exposure)

Table 2.2: Odds Ratio of males marrying below 21 years based on background characteristics of the respondents

States	Bihar	Punjab	Maharashtra	Tamil Nadu	West Bengal	Assam
Covariates	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Education (ref. no education)						
Primary	1.09	1.80**	0.79	0.97	1.20	0.92
Secondary	0.93	1.18	0.36*	0.49*	0.75	0.71**
Higher	0.58*	0.22**	0.11*	0.20*	0.28*	0.42**
Wealth (ref. poorest)						
Poorer	1.00	0.56	0.89	1.42	1.12	0.78
Middle	0.96	0.69	0.88	1.43	0.68	0.66**
Richer	0.64*	0.49	0.56*	0.91	0.56**	0.45*
Richest	0.53*	0.36**	0.34*	0.87	0.23*	0.52
Religion (ref. Hindu)						
Muslim	0.61*	2.62*	0.79	2.04**	1.88*	0.98
Others	0.32	1.08	0.71	0.48	1.34	0.82
Caste (ref. Scheduled Caste)						
Scheduled Tribe	0.95	-	1.37	0.70	1.15	0.83
OBC	0.85	0.64**	0.86	0.60*	0.85	1.19
Others	0.63*	1.02	0.99	1.05	0.60*	1.21

The notation * is $p < 0.01$, ** is $p < 0.05$ (controlled for residence and, mass media exposure)

Figure 3: Quantile maps showing percentage of males and females marrying below 21 years and 18 years of age respectively in Indian districts (2015-16)

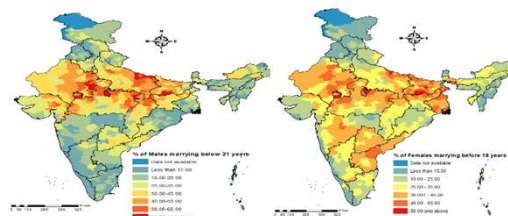


Figure 4: Quantile Map showing mean age at marriage for females and males aged 15-24 across India(NFHS4-2015-16)

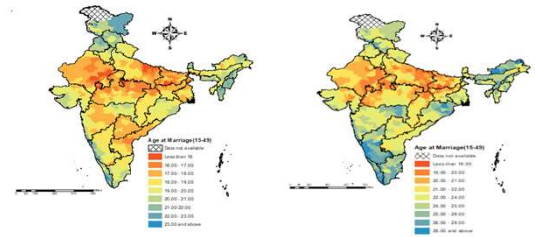


Figure 5a: Moran's I and LISA Maps for female age at marriage

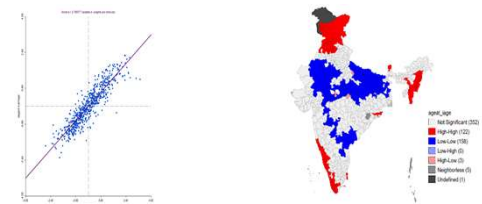
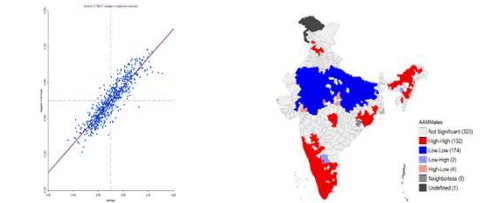


Figure 5b: Moran's I and LISA Maps for male age at marriage



Conclusion: With Special Reference to Bihar

- Marriage under legal age of 18 for girls is still prevalent in India. From Rajasthan in the West to Tripura in the east and in parts of Maharashtra, Karnataka, Andhra and Telangana, large proportion of girls are getting married below age 18.
- With mean age at marriage at 21 years for males and 17.2 years for females, Bihar is still lagging behind substantially.
- The districts that fare extremely poorly with respect to age at marriage for both males and females are concentrated in the Southern and Western parts of Bihar.
- Districts that need to be focussed on particularly are West and East Champaran, Siwan, Saran, Buxar, Nawada and Jamui. Though the age at marriage for both males and females is universally low in Bihar, a special focus on these districts will immensely help in increasing the overall age at marriage.
- The standard geostatistical analysis of age at marriage yields a high level of spatial autocorrelation.
- The effect of education and wealth in enhancing age at marriage is well visible in Uttar Pradesh and Maharashtra; while in other states, these variables have insignificant or contrasting effect.

References

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