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Sex Ratio Patterns and Family Dynamics in India: An Econometric Investigation

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Abstract
The purpose of this study is explore several socio-economic factors associated with sex ratio at birth and the influencing factors in the family dynamics of major states of India. We use quantitative secondary data collected from statistical databases like India Human Development Survey, 2010 and Census of India, 2011. As statistical methods we used regression and principal components analysis. Initial 18 variables were collapsed in to five factors with Eigen values greater than one that account for 91.098% of total variance. The first component has a maximum variance and successive components explain progressively smaller portions of the variance and all are uncorrelated with each other. Varimax rotation with Kaiser Normalization was used to transform the components in to factors that were more clearly interpretable. Results show that old age support from daughter has significant positive while average expected marriage expenses have significant negative association with child sex ratio in the major states of India in 2011. In addition, Literacy and physical mobility have significant positive and percent female engaged in salaried work have significant negative association with sex ratio aged seven and above and sex ratio for total population. Reduction in marriage expenses is an essential policy recommendation. Policies adopted in Kerala about old age support from daughter should be strengthen in other states for balancing child sex ratio and reducing son preference attitude in India.
Keywords: Sex Ratio, Socioeconomic Factors, Principal Component Analysis, India.

1. Introduction

Marriage and kinship pattern provide a background against which parents are faced with heart wrenching choices between sons and daughters, resulting in preferential treatment of boys. Marriage and kinship pattern affect both men's and women's lives. As a vast number of sociological and anthropological studies attest, marriage and kinship practices in India vary tremendously between regions, social classes, and communities. In spite of rising levels of education and image of growing westernization in India, love marriage remains a rarity, even among urban educated elite.

India is unusual, even among developing countries, marriage in India is almost universal and most of women marry at a relatively young age. Though the legal minimum age at marriage for a woman is 18 yet 60% are married before that age. Women in poor and less educated households often marry around the age of 16, but even women from better off and more educated households marry around age 19-20. The average age at marriage is 19.3 years in metropolitan cities and is considerably lower in less developed villages. Regional differences in age at marriage are striking, with an average age at marriage of 15-17 years in central states like Bihar and Madhya Pradesh, and a higher average age at marriage in Punjab and Himachal Pradesh, as well as in the southern states (IHDS, 2010).

Theories suggesting why gender inequality may widen during socioeconomic development, and the role of kinship organization in this process, include the 'gender and development' approach (Razavi and Miller, 1995). This approach argues that conventional socioeconomic development worsens pre-existing inequalities unless they are deliberately addressed during the planning process. In particular, gender inequality in the family and household emerges as an unintended consequence. Specifically, Blumberg (2004) has argued that women's position in agrarian societies diminishes when social organization separates the spheres of women and men; socioeconomic change enhances productive role of men but not women, and kinship organization is male-centric. Critical variables influencing gender equality include women's control over resources and involvement in the production process, contextualized within kinship system determining whether women can inherit and how near female natal kin they reside.

Our research therefore examines whether socioeconomic changes that enhance the productive roles of men more than women, and the rise of male-centered kinship and system and dowry custom where matrilineal and matrilocal system used to exist, will be associated with the child sex ratio, sex ratio seven and above aged and overall sex ratio. Paper tries to highlight that whether determinants are differing for below six years age group and above seven years age group.

2. Review of Literature

India is a country of striking demographic diversity. It exhibits a relatively high but declining fertility and uneven economic development with marked regional disparities by social group, age group and levels of prosperity (Agnihotri, 1995; Dyson & Moore, 1983). The Northern and Southern states exhibit considerable differences. While the north has lower levels of literacy and relatively higher level of agricultural development, the south generally exhibits higher literacy levels and better health facilities. India is one of the few countries in the world where males outnumber females. The sex ratio of Indian population has shown a secular declining trend except some marginal increases in the censuses of 1951, 1981, 2001 and 2011. The sex ratio in 2011 was 940, seven points higher than the sex ratio of 933 recorded in 2001.

It was Visariya's pioneering study of "sex ratios of population of India" (1971), which convincingly established the fact that the low female-male ratio (FMR) is mainly due to the sex differentials in mortality. He argued that the contribution of migration, under enumeration of females and sex ratios at birth is having only a marginal influence. Miller in her study "The Endangered Sex" (1981) emphasized the socio-cultural discrimination against female children as the main reason for female mortality. Miller called this as "extended infanticide" where life-sustaining inputs like food, nutrition, health care were denied to girl child. There is a great deal of evidence of girls being given less food and health care than boys, especially in north India. Girls are breast fed for shorter periods; they are taken to fewer medical consultations, and often very late, or not at all, to hospitals (Dreze and Sen 1995).

3. Research Methodology

Identifying and exploring the relationships between economic, social, educational, demographic etc. determinants of sex ratios have been subject to numerous empirical studies. The purpose of this study is explore several socio-economic factors associated with sex ratio at birth and to identify several characteristics of sex ratio at birth and the influencing factors in the major states of India. We use quantitative secondary data collected from statistical databases like India Human Development Survey, 2010 and Census of India, 2011. Details of selected variables for the present study and their data sources have been provided in table 1. These variables are mainly related to demography and development, marriage and family pattern, marriage expenses and dowry, women's control over resources, women's physical mobility, expectation of old age support from daughter and women's participation at work. Data were recorded for twenty one major states of India.

Table 1: Description and data source of the selected variables

S.N.	Variable	Description	Data Source
1	PMBAE	Percent Married before age 18	IHDS 2010
2	MAM	Mean age at marriage	IHDS 2010
3	MAC	Mean age at cohabiting	IHDS 2010
4	AFB	Age at first birth	IHDS 2010
5	AWEM	Average wedding expenses for males	IHDS 2010
6	AWEF	Average wedding expenses for females	IHDS 2010
7	ACD	Average cash dowry	IHDS 2010
8	WCH	Women's control over cash on hand	IHDS 2010
9	PWCHCA	Percent of women cannot go health center alone	IHDS 2010
10	PELD	Percent expecting to live with daughter in old age	IHDS 2010
11	PEFHD	Percent expecting financial help from daughter in old age	IHDS 2010
12	PFSW	Percent female employed in salaried work	IHDS 2010
13	FWPR	Female work participation rate	IHDS 2010
14	DPGR	Decadal population growth rate	Census 2011
15	LR	Literacy rate	Census 2011
16	LRM	Male literacy rate	Census 2011
17	LRF	female literacy rate	Census 2011
18	PSUP	Percent share of urban population	Census 2011
19	SR	Sex ratio (Females per 1000 males in total population)	Census 2011
20	SRSA	Sex ratio of population aged seven and above	Census 2011
21	CSR	Child sex ratio (Girls per 1000 boys in the age group 0-6)	Census 2011

Table 2 shows the descriptive statistics for twenty one variables of twenty one major states of India. This table clearly reflects the different progress made in PMBAE, PWCHCA and PSUP by the states of India. One point of

note is the variable PMBAE, which measures the percent of women marry below age of eighteen is ranges between 19% (Kerala) to 86% (Bihar). Here well known difference emerged in PWCHCA from 11% (Delhi) to 73% (Bihar), suggesting that women's physical mobility increases with development.
Table 2 also includes data on (PELD) percent expecting to live with daughter in old age ranges between 0% to 36% suggesting that no one intends to live with daughter in old age in highly traditional and lower female literate state Rajasthan (0%) and 36% parents want to live with daughter in old age in higher female literate state like Kerala. At national level, only 9% percent parents except to live with daughter and 11% except financial support from daughters in their old age. It is even more interesting to look at expectations in the event that sons are not able or willing to care for them (IHDS, 2010).

While wedding expenses for bride's family is uniformly higher than those for the groom's family (On average, about 50% higher).Regional differences in wedding expenses and gift are striking; on the whole, the richest states of Punjab and Haryana as well as Karnataka and Kerala have higher wedding expenses than the poorer states like Madhya Pradesh and Chhattisgarh, but gifts of durable items seem to be far more a northern than a southern phenomenon. In contrast, cash dowries seem to be the highest in Kerala.

Table 2: Descriptive Statistics of selected variables

S.N.	Variable	N	Minimum	Maximum	Mean	Std. Deviation
1	PMBAE	21	19.00	86.00	55.1429	18.48861
2	MAM	21	15.20	20.90	17.7333	1.50477
3	MAC	21	16.50	21.00	18.3000	1.16533
4	AFB	21	19.30	22.70	20.8190	.70329
5	AWEM	21	24916.00	153027.00	69221.2381	32739.35804
6	AWEF	21	34947.00	210342.00	106197.1905	48801.29169
7	ACD	21	272.00	72954.00	19615.4286	18166.77976
8	WCH	21	43.00	96.00	82.4286	13.18170
9	PWCHCA	21	11.00	73.00	32.0476	17.66770
10	PELD	21	.00	36.00	8.5238	7.63950
11	PEFHD	21	1.00	43.00	10.3810	9.28157
12	PFSW	21	3.00	53.00	10.1429	10.85489
13	FWPR	21	11.00	79.00	47.2381	15.36524
14	DPGR	21	4.86	25.07	17.5871	4.84836
15	LR	21	63.82	93.91	75.4829	7.42749
16	LRM	21	73.39	96.02	83.3833	5.68020
17	LRF	21	52.66	91.98	67.1014	9.72946
18	PSUP	21	10.04	97.50	32.8410	18.65353
19	SR	21	866.00	1084.00	944.5238	50.17531
20	SRSA	21	866.00	1099.00	949.0952	52.36306
21	CSR	21	830.00	964.00	910.8571	40.35008

Source: IHDS, 2010. Data analysis for the study.

As statistical methods we used regression and principal components analysis. Principal Component Analysis (PCA) is a branch of well known multivariate analysis (Harman, 1967) has been used to explain complex phenomena, based on a set of observable variables, the factors that are not directly observable. In general, the model for the i^{th} standardized variable is written as,

$$X_i = A_{i1}F_1 + A_{i2}F_2 + \ldots\ldots + A_{ik}F_k + U_i$$

Where the F's are the common factors, the U is the unique factor, and the A's are the coefficients used to combine the k factors.
The general expression for the estimate of the j_{th} factor, F_j, is;

$$F_j = \sum W_{ji} X_i = W_{j1}X_1 + W_{j2}X_2 + \ldots\ldots + W_{jp} X_p$$

The W_j's are known as factor score coefficients, and p is the number of variables. Principal Component Analysis with Kaiser Normalization has been used for factor extraction. Finally, scores for each factor has been computed for each case. These scores have been used as independent variables in the regression model. This paper shows that there is a close relationship between sex ratio and socio-economic factors. Also, the performed analyses show large discrepancies among states of India in the analyzed variables.

4. Results and Discussion

We performed a preliminary analysis in order to verify the adequacy of data for a factorial analysis. We use Barlett's test of sphericity to test the null hypothesis that the variables in the correlation matrix of the population are uncorrelated, and the indicator MSA (Measure of Sampling Adequacy) of Kaiser-Meyer-Olkin to evaluate in which degree each variable may be predicted by all the other variables. The results obtained with SPSS (Table no. 3), by including twenty one variables in the present analysis, show a significant value associated to Barlett's test of sphericity, with [chi square] statistic, Sig = 0.000 is smaller than 0.05 (conventional value), which means the null hypothesis of variables' uncorrelated is rejected, and the considered variables are adequate for a PCA. The value of the indicator MSA of KMO (0.546), higher than 0.5, show that the solution obtained with PCA can be accepted.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.546
Bartlett's Test of Sphericity	Approx. Chi-Square	595.176
	df	153
	Sig.	.000

Source: Data analysis for the study.

Table 4 shows that five components with Eigen values greater than one account for 91.098% of total variance. Initial 18 variables were collapsed in to five factors. The first component has a maximum variance and successive components explain progressively smaller portions of the variance and all are uncorrelated with each other. Varimax rotation with Kaiser Normalization was used to transform the components in to factors that were more clearly interpretable.

Table 4: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.706	48.369	48.369	8.706	48.369	48.369	4.349	24.163	24.163
2	3.426	19.035	67.404	3.426	19.035	67.404	3.675	20.419	44.583
3	1.720	9.555	76.959	1.720	9.555	76.959	3.651	20.282	64.864
4	1.509	8.385	85.344	1.509	8.385	85.344	2.685	14.915	79.779
5	1.036	5.754	91.098	1.036	5.754	91.098	2.037	11.319	91.098
6	.629	3.497	94.595						
7	.347	1.928	96.523						
8	.218	1.210	97.733						
9	.138	.765	98.498						
10	.112	.621	99.119						
11	.067	.374	99.493						
12	.038	.214	99.706						
13	.029	.158	99.865						
14	.013	.071	99.936						
15	.007	.040	99.976						
16	.003	.016	99.993						
17	.001	.007	100.000						
18	.000	.000	100.000						

Extraction method: Principal component analysis

The first component has an Eigen Value of 4.349 and percent of variance of 24.163%. The component consists of four variables including literacy and women's physical mobility, suggesting that physical mobility of women is

negatively associated with literacy rate. Table 5 shows that the first factor is highly and positively loaded on male literacy followed by total literacy rate and female literacy rate and it is negatively loaded on percent of women who cannot go health center alone. Thus component is labeled as literacy and autonomy of women. The second component has an Eigen value of 3.675 and percentage of variance is 20.419%. The component consists of for variables mainly related to marriage and family pattern. These variables are: age of first birth (.827), mean age at cohabiting (.816), mean age at marriage (.763), however percent of women marriage below age eighteen (-.751) has negative influence on the component. The third component has highest positive load on percent of parents who are expecting financial help from daughter in old age (.910) followed by percent expecting top live with daughter in old age (.901) and average cash dowry (.894). The component is negatively loaded with the variables like decadal population growth rate (-.654) and women has any cash on hand (-.635). The component explains that higher the level of old age support from daughters existed with lower population growth rate and lower control over resources in the states of India. The component is summarized as empowering women.

Table 5: Rotated Component Matrix

Component	1	2	3	4	5
LRM	.866				
LR	.842				
PWCHCA	-.813				
LRF	.800				
AFB		.827			
MAC		.816			
MAM		.763			
PMBAE		-.751			
PEFHD			.910		
PELD			.901		
ACD			.894		
DPGR			-.654		
WCH			-.635		
PFSW				.883	
FWPR				-.835	
PSUP				.824	
AWEM					.891
AWEF					.853
Extraction method: Principal component analysis.					
Rotation method: Varimax with Kaiser Normalization					

The fourth component has an Eigen value of 2.685 and percentage of variance is 14.915%. The component consists of three variables largely related to female work participation and urbanization. The component is highly positively loaded on percent female engaged in salaried work (.883) followed by percent share of urban population (.824) and negatively loaded on female work participation rate (-.835). It suggests that urban female is mainly engaged in salaried work while majority of rural females are indulge in cultivation. Thus component is labeled as female employment. The fifth component with Eigen value of 2.037 accounts for a variance of 11.319%. This component consists of two variables related to average expected wedding expenses. The variables are; average wedding expenses by males (.891) and average wedding expenses by females (.853). Thus component is labeled as wedding expenses.

Table 6 gives the factor scores for socioeconomic status of the twenty one major states of India. Himachal Pradesh holds top factor score (1.87) in the first factor, which is heavily loaded on literacy and physical mobility of the women in India. Bihar (-2.1) remained on bottom due to lowest literacy and lowest female physical mobility (73% women can't go health center alone) in the state. Assam, Kerala and Punjab are the most developed state in the marriage and family pattern, while Andhra Pradesh, Karnataka and Rajasthan are the least in this factor. The third factor which is summarized as empowering women is toped by Kerala (3.31) followed by Andhra Pradesh and Karnataka, while Delhi, Punjab and Haryana remained on bottom perhaps due to lowest expectation of old age support from daughters. In all north Indian states it is very common and popular tendency which also highlights their rigid son preference attitude. Delhi tops in fourth factor due to highest percent of women engaged in salaried work and highest share of urban population. Himachal Pradesh followed by Chhattisgarh remained on bottom in this factor due to higher level of female work participation rate. The fifth factor is labeled as wedding expenses has been topped by Jammu & Kashmir followed by Haryana, Delhi and Rajasthan. Due to lower level of

expenditure in male and female weddings, Assam preceded by West Bengal remained on least in this factor.

Table 6: Factor Scores for socioeconomic status of women in India

S.N.	State	F1	F2	F3	F4	F5
1	Jammu & Kashmir	-1.25787	1.04347	0.05948	-0.78828	2.80639
2	Himachal Pradesh	1.8717	-0.05087	-0.44015	-2.0093	0.56194
3	Uttarakhand	1.04225	-0.26098	-0.73375	-0.70123	-0.31954
4	Punjab	-0.07989	1.52991	-0.9678	0.41199	0.54763
5	Haryana	0.35372	-0.14712	-0.82284	-0.39428	1.2309
6	Delhi	0.75077	0.11106	-1.00486	3.48247	0.90464
7	Uttar Pradesh	-0.89596	-0.42228	0.15454	-0.23522	0.22758
8	Bihar	-2.10021	-0.44062	-0.03815	0.16895	-0.2588
9	Jharkhand	-1.31246	-0.15858	0.13069	0.52819	-0.31243
10	Rajasthan	-0.87587	-0.68077	-0.48316	-0.37354	0.66685
11	Chhattisgarh	-0.44894	-0.12209	-0.64663	-0.82348	-1.06181
12	Madhya Pradesh	-0.43555	-0.50479	-0.43123	-0.36251	-0.87326
13	Assam	-0.81558	2.13096	-0.28593	-0.04707	-2.12024
14	West Bengal	-0.0321	-0.24752	0.76309	0.41338	-1.07441
15	Orissa	-0.09956	-0.03889	0.34457	-0.52042	-0.3311
16	Gujarat	0.82602	0.13101	-0.60128	-0.20501	-0.16176
17	Maharashtra	1.27165	-0.36547	-0.45832	0.27044	-0.60869
18	Andhra Pradesh	-0.01622	-2.5928	1.58592	0.41258	0.1079
19	Karnataka	0.26511	-0.69656	0.8976	0.00203	0.23794
20	Kerala	0.90982	1.83575	3.31268	0.21352	0.29136
21	Tamil Nadu	1.07919	-0.05283	-0.33446	0.55679	-0.4611

4.1 Results of Regression Analysis

To examine the relationship between sex ratio and socioeconomic factors derived from PCA, we fitted multiple regression equation in this form:

$Y= a+bX_1 + bX_2+ bX_3+ bX_4+ bX_5$

Where Y represents sex ratio and X_1, X_2, X_3, X_4, X_5 represents the five factor scores of socioeconomic development extracted from PCA with Varimax rotation and Kaiser Normalization. Table 7 shows that regression factor score 3, which is summarized as old age support from daughter has significant and positive association with child sex ratio in India in 2011, suggesting that changing mindset towards daughter that she may support in old age as well as son would have positive influence in balancing child sex ratio in India. Regression factor score 5, which is highly positively loaded on variables like average wedding expenses for male (AWEM) and female (AWEF), has statistical significant negative association with child sex ratio in India. It is a clear sign that extra expenditure in marriage is main cause for the recent downfall in child sex ratio. It should be controlled.

Table 7: Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
(Constant)	910.857	4.869		187.088	.000			
REGR factor score 1	-5.616	4.989	-.139	-1.126	.278	-.139	-.279	-.139
REGR factor score 2	-3.109	4.989	-.077	-.623	.543	-.077	-.159	-.077
REGR factor score 3	**22.586**	**4.989**	**.560**	**4.527**	**.000**	**.560**	**.760**	**.560**
REGR factor score 4	-2.527	4.989	-.063	-.507	.620	-.063	-.130	-.063
REGR factor score 5	**-26.403**	**4.989**	**-.654**	**-5.292**	**.000**	**-.654**	**-.807**	**-.654**

a. Dependent Variable: Child Sex Ratio

R Square = .771, Adjusted R Square = .694, F (5,15) = 10.083, Sig.= .000, Durbin-Watson = 1.969

Table 8: Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
(Constant)	949.095	5.962		159.203	.000			
REGR factor score 1	**17.419**	**6.109**	**.333**	**2.851**	**.012**	**.333**	**.593**	**.333**
REGR factor score 2	1.983	6.109	.038	.325	.750	.038	.084	.038
REGR factor score 3	**36.710**	**6.109**	**.701**	**6.009**	**.000**	**.701**	**.841**	**.701**
REGR factor score 4	**-14.351**	**6.109**	**-.274**	**-2.349**	**.033**	**-.274**	**-.519**	**-.274**
REGR factor score 5	**-17.921**	**6.109**	**-.342**	**-2.934**	**.010**	**-.342**	**-.604**	**-.342**

a. Dependent Variable: Sex Ratio Aged Seven Above

R Square = .796, Adjusted R Square = .728, F (5,15) = 11.695, Sig.= .000, Durbin-Watson = 1.468

Table 8 shows that except second factor score all four factors scores have statistically significant at 5% level association with sex ratio aged seven and above. First factor which is summarized as literacy and physical mobility of women and factor 3 which is labeled as old age support from daughter have significant and positive association with sex ratio aged seven and above in India in 2011, suggesting that strengthening education facilities, women mobility and old age support from daughter would have positive influence in balancing sex ratio aged seven and above in India. The fourth factor is labeled as female employment and fifth factor which consists wedding expenses are negatively associated with sex ratio aged seven and above in India. Results are somehow similar when we use sex ratio as dependent variable.

Table 9: Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
(Constant)	944.524	5.656		166.985	.000			
REGR factor score 1	**14.655**	**5.796**	**.292**	**2.529**	**.023**	**.292**	**.547**	**.292**
REGR factor score 2	1.480	5.796	.029	.255	.802	.029	.066	.029
REGR factor score 3	**35.610**	**5.796**	**.710**	**6.144**	**.000**	**.710**	**.846**	**.710**
REGR factor score 4	**-12.596**	**5.796**	**-.251**	**-2.173**	**.046**	**-.251**	**-.489**	**-.251**
REGR factor score 5	**-19.234**	**5.796**	**-.383**	**-3.318**	**.005**	**-.383**	**-.651**	**-.383**

a. Dependent Variable: Sex Ratio

R Square = .800, Adjusted R Square = .733, F (5,15) = 11.988, Sig.= .000, Durbin-Watson = 1.490

Table 9 shows that wedding expenses have highest negative impact on sex ratio where as female employment has highest negative influence on sex ratio aged seven and above.

5. Conclusion and Recommendation

The results obtained in this study are in agreement with previous research. They point out that there is a close relationship between sex ratio and socioeconomic factors. The findings of the research have led to the following conclusions:

There is statistically significant at 1% level positive association between child sex ratio and expectation of old age support from daughter in the states of India in 2011. Policies adopted in Kerala in this regard seem appropriate and it should be strengthen in other states also for balancing child sex ratio and reducing son preference attitude. Socially, sons are preferred for continuation of family line, for looking after parents in their old age and for performing their last rites. If these duties can be performed by daughter, than people may have equal treatment between girl and boy child in India. Average expected marriage expenses have significant negative association with child sex ratio, sex ratio aged seven year and above and sex ratio of total population in India. It has highest negative impact on child sex ratio. State like Jammu & Kashmir and Haryana have been observed as higher level marriage expenses with lower level child sex ratio in 2011. The IHDS found that more than 15 percent of the loans that households acquire are directly related to marriage expenses. Both wedding gift and wedding expenses are the lowest among Adivasi households, and among this group, there is surprisingly little difference in wedding expenses for boys and girls. Given that Adivasi seem to have the most favourable sex ratio at birth.

Literacy and physical mobility of women have significant positive association with sex ratio, while percent female engaged in salaried work have significant negative association with sex ratio aged seven year and above and sex ratio of total population in India. There are some states in India where the gender gape in literacy is very low and sex ratio is more balanced. A focus on different with some more favourable to overall social development than others, makes it possible to think of indigenous model of women empowerment that do not rely on global norms but that are consistent with the best of Indian tradition. While education and economic growth have changed many facets of human development in India, gender inequality in many areas seem impervious to this change. Higher income households are more gender unequal in some cases, such as with regard to dowries. Not even high levels of education empower women in all spheres. Thus, we need to think of alternative strategies for women empowerment.

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