

SOCIO-ECONOMIC ANALYSIS ON EVER-MARRIED WOMEN FROM INDIA

**ADDENDUM OF THE THESIS SUBMITTED
FOR THE DEGREE OF DOCTORAL OF PHILOSOPHY
IN ECONOMICS**

**BY
TANUSREE MISHRA**

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**UNDER SUPERVISION OF
PROF. TANMOYEE BANERJEE
&
PROF. SUSHIL HALDAR**

**DEPARTMENT OF ECONOMICS
JADAVPUR UNIVERSITY
KOLKATA**

Chapter 1

Introduction

1.1: Gender Status of Women in Indian Society:

Gender discrimination and abuse of females and girl children are observed worldwide. The stratification of men and women is initiated by the patriarchal system of distribution of property rights and inheritance¹. Women are subject to discrimination in every sphere of life, such as participation in decision-making at the household, in political systems, or in labour force participation.

Today there are over 200 million women were ‘missing’ worldwide due to sex selective abortion and death of females². There are about 62 million more numbers of men than women worldwide and 43 million surplus of men in Southern Asia is due to India³. Only India and Bangladesh shows higher prevalence of underweight rates of girls in South Asia as per the report of UNICEF (2014). According to Sen (1987) lower bargaining strength in household decisions is the result of female shortage in Eastern Asia. India has one of the lowest female labour force participation rates among the developing countries (Das et.al; 2015). Every third women experienced domestic violence of various form in India as revealed from NFHS4 data⁴. Even if women are able to survive they are denied of basic entitlements of life, such as, good health, education, employment and acceptance in family. Around 53 % of women in the age group 15-49 are anemic in India (NFHS-4 2015-16). Women as majority, suffers from leading mental health problem such as depression,

¹As Jejeebhoy and Sather(2001) mentioned in their paper titled “Women’s autonomy in India and Pakistan: Influence of Religion and Region”.

²<https://www.weforum.org/agenda/2015/10/where-are-all-the-women/>

³https://unstats.un.org/unsd/gender/downloads/worldswomen2015_report.pdf

⁴<https://www.news18.com/news/india/the-elephant-in-the-room-every-third-woman-in-india-faces-domestic-violence-1654193.html>

dementia among elderly group⁵. All these facts reveal the existence of a long-standing tradition of deprivation, social exclusion, and obvious disempowerment among women.

To search the causes of poor status of women we begin our journey with the brief look at the status of women from the pre-independence period:

1.1.1: Pre-Independence Period:

During the 19th-century British power rapidly grows in India. The pre-independence period witnessed severe subjugation of women. Age at marriage has increased in the late nineteenth century in most of the third world countries (Jones, 2007). The incidence of infant marriages was prevalent during the British era. The girl child must be married off before attaining her puberty was considered as an honorable gesture of Bengal culture, known as 'Gouridaan'⁶. A similar situation prevailed in southern India as well, where delaying the marriage of a menstruating girl is considered a sign of impurity (Caldwell, Reddy, and Caldwell, 1983). Several horrific and barbaric customs prevailed during the pre –independence era, such as Sati-Daha, Jauhar, PardaPratha etc. When a woman gets married once then it was impossible to think of any type of remarriage of the girl on account of facing violence in marriage or if she became a widow. The brutal custom of 'Sati-Daha in Bengal witnessed the horrific status of widowed women and girls during the colonial period. The immolation of the young widow girl into the funeral pyre of her husband is known as 'Sati-Daha (Bagchi, 1993)⁷. The custom also prevailed in Uttar Pradesh, Bihar, and in some districts of Andhra Pradesh, Orissa, and Tamil Nadu whereas in Rajasthan, Kashmir, and in Punjab the custom was observed among higher caste families⁸.

⁵https://www.who.int/mental_health/publications/women_mh_evidence_review/en/

⁶Ames, R. T., Kasulis, T. P., &Dissanayake, W. (Eds.).(1998). *Self as an image in Asian theory and practice*.SUNY Press.

⁷This horrific crime against women was banned by the intervention of Raja Rammohan Roy in 1829 through British General Lord William Bentinck

⁸<https://www.yourarticlelibrary.com/essay/status-of-women-in-india-during-the-british-period/35181>

Table1. 1: Number of Satis(1815-29)

Name of the Division	Predominant by	No. of Satis during the year 1815-28
Calcutta	Hindu	5099
Dacca	Muslim	610
Murshidabad	Muslim	260
Patna	Hindu	709
Bareilly	Hindu	193
Benares	Orthodox	1165

Source: Zamani, R. (2009). *Domestic Violence Against Women in India: A Case Study* (Doctoral dissertation, Aligarh Muslim University).

A similar type of incidence was also prevailed in western India, however, before the 17th century, known as the practice of 'Jauhar' among the Rajput clans and Muslims where the wives of defeated or dead warriors will immolate themselves in the fire which is often termed as mass Sati (Hawley, 1994; Harlan, 1992). Lifelong abstinence, penance, and preserving chastity was considered a symbol of purity of young widow⁹¹⁰. The 'Purdah Partha' was first initiated by Muslim communities during British dominated India and later adopted among Hindus¹¹.

Various acts and laws were formulated across the country from time to time during the pre and post-independence era to uplift the status of women in India. However, the situation has changed to a new dimension and magnitude.

1.1.2: Post- Independence Period:

After independence, India initiated rapid changes in every domain of development and growth. Hence with development, several initiatives were taken to uplift women's position from exploitation and life-threatening situations that prevailed from the 18th century (Kapur, 2019). With structural and cultural reforms in independent India, several doors of opportunity opened up for women in the field of health, education, employment, and politics. Growth in different economic sectors moved the efficiency of women which is suppressed under the depth of patriarchal norms,

⁹Observing the sorry plight of the child widow in Bengal the widow Hindu remarriage act was passed in 1856 by Lord Canning through the continuous efforts of great reformer Ishwar Chandra Vidyasagar.

¹⁰Hindu Women's right to Properties act enacted in 1937 to give equal property rights to women.

¹¹<https://www.britannica.com/topic/purdah>

towards increased participation in the workforce and leadership. All become possible with the advancement of the increase in female education. The constitution of independent India grants equal rights for both man and women with no discrimination between the two genders¹². Several legislative changes¹³ are also done to protect women from gender bias and abuse or any type of maltreatment. Further, changes were also made in case of political participation of women, such as reservation of 1/3rd of seats for women in the 3 tier Panchayati raj¹⁴ and also made them aware of their entitlement to vote. Increased participation in the workforce is reflected from several facts, such as more percentage of women got recruited in work related to service sectors apart from agricultural and manual workings. However, recent years witnessed a reverse trend in female labour force participation rate in Indian context as shown in Table 2. Table 3 portrays the change in literacy rate over time. The improvement in various fields in post-independence India is summarized below:

¹²<https://blog.iplayers.in/position-women-indian-society-independence/>

¹³ Hindu Marriage Act(1955), Special Marriage Act (1954), Dowry Prohibition Act(1961), Hindu Succession Act (1956), The Hindu Adoption and Maintenance Act (1956), etc.

¹⁴ 73rd Constitution Amendment Act 1993

Table1. 2: Female Labour Force Participation rate (all ages):

	Rural Female	Urban Female
1955	25.1	12.5
1956-57	23.3	11.9
1959-60	30.1	12.8
1964-65	23.58	12.39
1972-73	26.76	13.4
1983	37.35	16.56
1989-90	28.85	15.03
1993-94	32.2	14.8
1994-95	33	16.5
1995-96	31.8	14.1
1997	29.7	12.8
1999-2000	29.3	13.7
2004-05	30	14.7
2007-08	33.3	17.8
2009-10	29.2	14.6
2011-12	26.5	15.5
2017-18	18.2	15.9
2018-19	19.7	16.1

Source: Data from published reports of NSSO's employment-unemployment surveys (EUS) and Annual Reports of PLFS by the Ministry of Statistics and Programme Implementation (MOSPI)

<https://data.worldbank.org/indicator/SL.TLF.CACT.FE.NE.ZS?locations=IN>

Table1. 3: Literacy rate, adult female (% of the female of age 15 and above): 1981-2018

Year	Literacy rate
1981	25.676
1991	33.73
2001	47.842
2006	50.824
2011	59.277
2018	65.791

Source: <https://data.worldbank.org/indicator/SE.ADT.LITR.FE.ZS?locations=IN>

Despite several measures and reforms in post-independent India, women are still considered inferior to men. Women are entitled to provide their time and energy to household and child care

work, which are not considered as economic activities¹⁵. Globally labour force participation rate for women is around 49% whereas it is 75% for men and it is tougher for a willing woman to find a job compared to man¹⁶. In the case of the political leadership of women, it comprised only 13.8% in 2000 as parliament members Globally, from 9 % in 1987¹⁷. Gender differences are not only limited to rural and poverty-induced women only, at senior positions women also face discrimination (Garcia-Gonzalez, 2019). The proportion of ever-married women of age 15-49 years who experienced physical or sexual intimate partner violence is 28.8%¹⁸. According to World Health Organisation, the global burden of intimate partner violence is particularly borne by Women¹⁹. India ranked the highest position in an absolute number of married women below 18 years²⁰. Moreover one in three of the world's such brides of age below 18 years living in India²¹. Point to be noted that in India out of 1000 marriages only 13 end in divorce. Thus, in-depth observation is required to search the causes of this deeply penetrated idea of male supremacy over females and to focus on the major problems faced by the ever-married women in India.

The present dissertation aims to analyze the well-known yet less investigated, socio-economic problems, that are, *disempowerment, violence, and early marriage*, faced by the *ever-married* women from a developing country like India.

1.1.3: Empowerment, Violence and child marriage:

Empowerment: It is defined as a situation of exchange of power in such a manner that women gain more control over their own lives and less controlled by men (Kabeer, 1989). Kabeer (1999) explained empowerment as a process of change and she explained that women may enjoy a

¹⁵<https://www.ourworldindata.org/female-labor-supply>

¹⁶<https://www.ilo.org/infostories/en-GB/Stories/Employment/barriers-women#unemployed-vulnerable>

¹⁷https://www.unicef.org/sowc07/docs/beaman_duflo_pande_topalova.pdf

¹⁸<https://evaw-global-database.unwomen.org/en/countries/asia/india>

¹⁹https://apps.who.int/iris/bitstream/handle/10665/77432/WHO_RHR_12.36_eng.pdf;sequence=1

²⁰<https://www.girlsnotbrides.org/child-marriage/india/#:~:text=27%25%20of%20girls%20in%20India,18%20in%20the%20world%20%E2%80%93%2015%20C648%20C000>

²¹<https://data.unicef.org/resources/ending-child-marriage-a-profile-of-progress-in-india/>

great deal of power in various aspects of life, but that does not designate them as empowered, as previously they were not in a position of subjugation.

Domestic Violence: Domestic violence or intimate partner violence refers to conscious menacing, physical, sexual, emotional assault particularly on women by an intimate partner or any other member of a close relationship to establish power or control over the abused. The types of intimate partner violence are segregated into four components: physical abuse, sexual abuse, stalking or controlling behavior, psychological aggression as selected by WHO and the Centre for Disease Control and Prevention.

Child Marriage: The marriage of girls below the legal age of marriage that is 18 years is known as child marriage.

1.2: Background of the study:

Autonomy of women and gender equality works together towards the development of any society in a multiplier process. An empowered woman enlightens the future of an economy by creating impacts on generations. It is the most crucial aspect to eradicate gender inequality and women constitute half of the entire population thus it is the most essential component of the overall development of a nation. Thus empowerment implies becoming powerful from a position of disempowerment. So, it is necessary to first identify the domains and factors of *disempowerment*. However, failure of achieving empowerment lies in the fact that woman has to face the obstacles from household and relationships and social norms (Malhotra and Schular, 2005). Several other socioeconomic factors influence the incidence of empowerment. Caste and religion have a significant influence on gender differences as observed by Seguino(2011), Ozorak(1996). Thus in the case of Indian states with vast differences in culture and religious beliefs, how far it impacts the magnitude of disempowerment is not properly addressed in the past researches. The power dynamics between man and woman cannot work in balance since the belief system of the world is supportive towards men being aggressive and thus entitled to be obeyed²². But man and woman get married either voluntarily or involuntarily. According to Becker (1973, 1974), people get married to raise their children and to

²²According to Plumwood (1993), some developed countries accepted and justified the controlling behavior of men on women and children.

obtain utility from cooperation rather than from being alone. Now marital instability between husband and wife does not address the dissolution of marriage or legally break down of the marriage, but it means that couples will stay together but in a non-cooperative manner with lower marital quality (Booth et al.,1983; Lundberg and Pollak, 2003). The rest of the marriages with low marital satisfaction, which depends on several factors, may result in heated arguments and violence. The problem of *spousal violence* can be solved by empowering the women as examined by Farmer and Tiefenthaler (1997), Lundberg and Pollak (1993). Thus empowering women can be the solution to the problem of spousal violence. To what extent spousal violence creates an impact on the incidence of divorce this requires empirical investigation. Further women are neglected or averted from their parental home also since parents may have son preference²³the attitude which is a common phenomenon in developing countries. Patrilocal marriage and the patrilineal process of continuing the family tree are the two major causes of daughter aversion (Jejeebhoy and Sathar, 2001); further providing dowry is another major threat to the parents of daughters. Hence many families try to marry off their daughters early instead of investment in the education and nutrition of daughters (Ghosh 2011; Kugler and Kumar, 2017; Dasgupta, 2016). The issue of *child marriage* emerges from here. Several past researches focused on gender-based selection among children through different methods to terminate girl childbirth or continue to have children unless getting the desired number of sons (Clarke, 2000, Diamond-Smith et al.,2008, Pande and Malhotra, 2006). However, whether the incidence of child marriage of daughters has any relation with number of son or not needs to be examined.

Thus, the dissertation is devoted to searching the following aspects of ever-married women which were not discussed previously in the literature to the best of our knowledge:

Inter-state variation of magnitude and extent of disempowerment of ever-married woman in India while considering the multidimensionality property of disempowerment. Factors influencing

²³Son preference means that valuing more boys over girls. It reflects an attitude or belief of Parents that sons are going to be more beneficial to them. And for this purpose, parents apply various fertility controlling behavior which would create either more siblings or the boys will be born as younger children of the family (Basu and Jong, 2010).

disempowerment of women while considering the state-specific fixed effects are explored. Two suitable econometric models are designed for the estimation of the aforementioned issues. Also, we provide a graphical representation of the variation of disempowerment of women in India over time. The next issue is the influence of empowerment on the incidence of spousal violence on ever-married women while considering inter-state variation. This issue is discussed using theoretical and empirical tools. Next, the study considers the extent to which a woman is likely to divorce in response to spousal violence in India. Another econometric model is designed to investigate this issue. The incidence of child marriage in response to the number of sons in the household, while keeping in mind the inter-state variation of child marriage, for this purpose, a suitable empirical technique of structural equation modeling is applied.

Thus, the present dissertation aims to analyze the well-known yet less investigated, socio-economic problems, that are, *disempowerment, violence, and early marriage*, faced by the *ever-married* women from a developing country like India.

1.2.1: Objective of the Present Study:

The existence of long-standing tradition of deprivation, social exclusion, and obvious disempowerment is observed among ever-married women in different societies. The first objective of the dissertation is to provide a detailed review of existing literature on women's disempowerment, spousal abuse, and girl child marriage.

The next objective of the thesis centers on measuring the disempowerment of women in India and exploration of the factors influencing it at the state level using National Family Health Survey (NFHS-4) data.

Since the assessment of the change in disempowerment of women overtime is necessary for appropriate policy framing. Thus, our next objective is to compare the change in the disempowerment of women of India from 2005-06 to 2015-16 using NFHS-3 and NFHS-4 data sets using a comprehensive multidimensional approach.

The married women face various forms of spousal abuse or intimate partner violence in the patriarchal society like India. Thus, the present dissertation seeks to explore the relationship between women empowerment and spousal violence (SV). To fulfill this objective, firstly, we plan to develop a theoretical model and using NFHS-4 data, the study will validate the result of the theoretical analysis in the context of Indian married women in the age group of 15-49 years. And lastly the objective is to assess spousal violence and other controls to the incidence of divorce.

Next, it is observed from facts and studies that preferring sons or son dominance might have an implication with the early marriage of daughters, yet the idea has not been tested so far. Thus, the dissertation would seek to search the link of child marriage with son dominance in the family where son dominance is conceptualized by more number of sons to daughter in the family.

1.2.2:Hypotheses of the study:

Hypotheses for the present dissertation are as follows:

- **Hypothesis I:** Disempowerment of women in India depends on socio-demographic and economic factors.
- **Hypothesis II:** The extent of the disempowerment level of Indian women has changed overtime by considering fifteen indicator variables that are common in NFHS-3(2005-06) and NFHS-4(2015-16) data set.
- **Hypothesis III:** Spousal violence faced by women decreases with their empowerment level within a marital relation.
- **Hypothesis IV:** The spousal violence causes of divorce among the ever-married women.
- **Hypothesis V:** Son dominance in the family affects the decision of child marriages of daughters.
- **Hypothesis VI:** Parental marriage pattern affects the early marriage of girl child in the family.

1.2.3: Contribution:

The present dissertation will contribute to the literature in many aspects. Firstly, here we try to explore the extent of disempowerment across states using an econometric model that catches the inter-state variation and we apply a decomposition strategy to check the impact of religion on the difference in disempowerment for two seemingly equal and neighboring states.

Secondly, we try to compare the disempowerment level of women across states of India for two different periods using a unique D-curve methodology.

Thirdly, by applying a two-stage bargaining model we find that an increase in empowerment can reduce spousal violence. Next, we validate this finding empirically and we have applied an econometric model where we estimate the probability of divorce of ever-married women while taking spousal violence as an endogenous factor.

Lastly, the study would contribute to the literature as we plan to check the issue of child marriages of daughters to marital patterns of the parents and son dominance in the families, while taking into account the interstate variation in the incidence across states of India.

1.2.4: Relevance:

The relevance of the present dissertation can be analysed by focusing on various suitable policies to combat the three threats, i.e; Disempowerment, Spousal violence and Child marriage faced by the ever-married women in India. Women's autonomy is crucially important for the overall development of a society. However, in a patriarchal environment, policy framing to enhance the empowerment of ever-married women is utterly difficult and critical to guarantee the success of any measure. The solution to the problem domestic violence requires systematic strategic intervention to eradicate the traditional notion of gender stereotypes and norms apart from changes in legislation to penalize the wrongdoer or to protect the victim. Child marriage of girls, which is considered an ancient and worldwide tradition, imposes life threats to young girls' calls for social and legal framework transformation to uproot the evil practice. Arrangement of Different skill enhancement programmes from the school level would pave the way for self-sufficiency for the girls in the future.

Educational policies and working opportunities may create a limited expansion to women's autonomy until it takes into account direct action to couple dynamics by social counseling programmes. Finally, legislative changes for the prevention of child marriage need to be implemented more stringently.

1.2.5: Methodology:

The empirical analyses of the chapters are established by using modern econometric techniques to get more minute details of the research question. Chapter 3 is on measuring disempowerment, a Fairlie-Decomposition Technique is adopted for scrutinizing the difference in disempowerment in two different demographic settings beside multilevel multivariate logistic regression is applied for factor exploration. In chapter 4 a distinguished variety of graphical representations is applied to check the variation of disempowerment over time. Besides empirical modeling, a theoretical model is also developed in chapter 5 where empowerment and spousal violence on ever-married women together incorporated. In chapter 6 structural equation modeling techniques with path analyses is used to assess the issue of child marriage.

1.2.6: Data:

The entire dissertation builds all of its empirical analysis based on ever-married women in India. Now we will take a glance at what mean ever-married women in the context of the marital status of women:

1.2.6.1: Ever- Married women:

The present thesis concentrates on the problems of ever-married women in India. According to the definitions of Population Division of United Nations²⁴ the term Ever-Married implies that women or men who have been married at least once in their lifetime however their present marital status may not be married. Marital status can be classified into two broad categories according to the census of India (2001), viz;

(i.) Never Married

(ii.) Ever Married

²⁴<https://www.un.org/en/development/desa/population/publications/dataset/marriage/ever-married.asp>

Never married persons are single or bachelors and who has not married. Whereas ever-married persons are those who have married at least once, however they may not be in the currently married group. The ever-married group consists of divorced, separated, or widowed along with currently married persons. The present thesis uses National Family Health Survey (NFHS) and the District Level Household Survey (DLHS-4) of the Government of India Both the data set collects information of ever-married women.

We have used NFHS-4 (2015-16) data for chapters 3, 4, and 5, while DLHS-4 data (2012-13) set is used for chapter 6 for the issue of child marriage. The National Family Health Survey (NFHS) is a large-scale, multi-round survey conducted in a representative sample of households throughout India. The District Level Household Survey (DLHS) of the Government of India, a nationwide survey was conducted during 2012-13 to interview ever-married women.

1.2.7: Organization of Chapters:

The rest of the dissertation is segregated into the following chapters: Chapter 2 titled **Review of Literature** represents a detailed discussion of existing literature on the socio-economic problems faced by the ever-married women. The chapter discusses firstly the issues related to the empowerment of women, including the researches related to the problems associated with the measurement empowerment of women. Next, the literature are chosen for review based on violence faced by the ever-married women, both domestic and intimate partner violence are discussed. Lastly, the chapter is dedicated to the literature based on researches related to the issue of child marriage of girls. In this section papers on son, preference is also discussed. The chapter discussed both theoretical and empirical works related to the issues faced by women. The literature firstly focused on the problem and its importance to the society as a whole, then factors influencing the problems, and lastly it focused on the papers related to its spread and steps taken to resolve the issues.

Chapter 3 is entitled "**Disempowerment of women: The Indian Story**" represents the issue of disempowerment of ever-married women through an empirical investigation of the factors influencing the problem. The extension of the chapter shows an empirical model of decomposition designed to focus on detecting the difference of disempowerment in two neighboring states.

Chapter 4 named "**Women Disempowerment at Sub-National Level: A Socio-Economic Analysis**" is organized to investigate the extent and magnitude of disempowerment of ever-married women in India. The chapter represents the improvement or deterioration of disempowerment over time in various regions of India and in India as a whole.

Chapter 5 is entitled "**A Study on Spousal violence and Divorce in Indian Families**" is designed to search the association between empowerment and spousal violence faced by the ever-married women in India. Both theoretical and empirical models are built to enhance the investigation. The extension of the chapter built an empirical model to detect the likelihood of divorce decisions of the women in India.

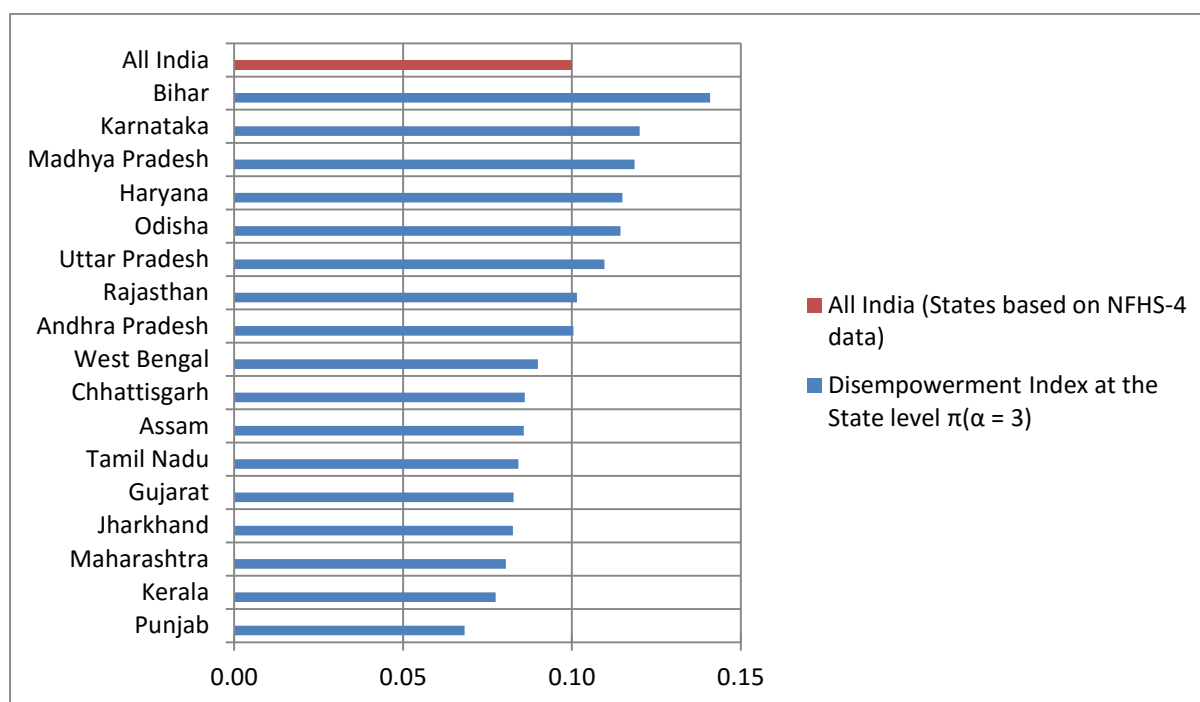
Chapter 6 is titled: "**Child Marriage: Some facts from selected Indian States**" represent the issue of child marriage of girls in India while focusing on the son preference attitude of parents. It also explores some hidden facts of some Indian states regarding this evil practice. The model is designed with advanced econometric techniques.

Chapter 7 concludes the dissertation.

Figures:

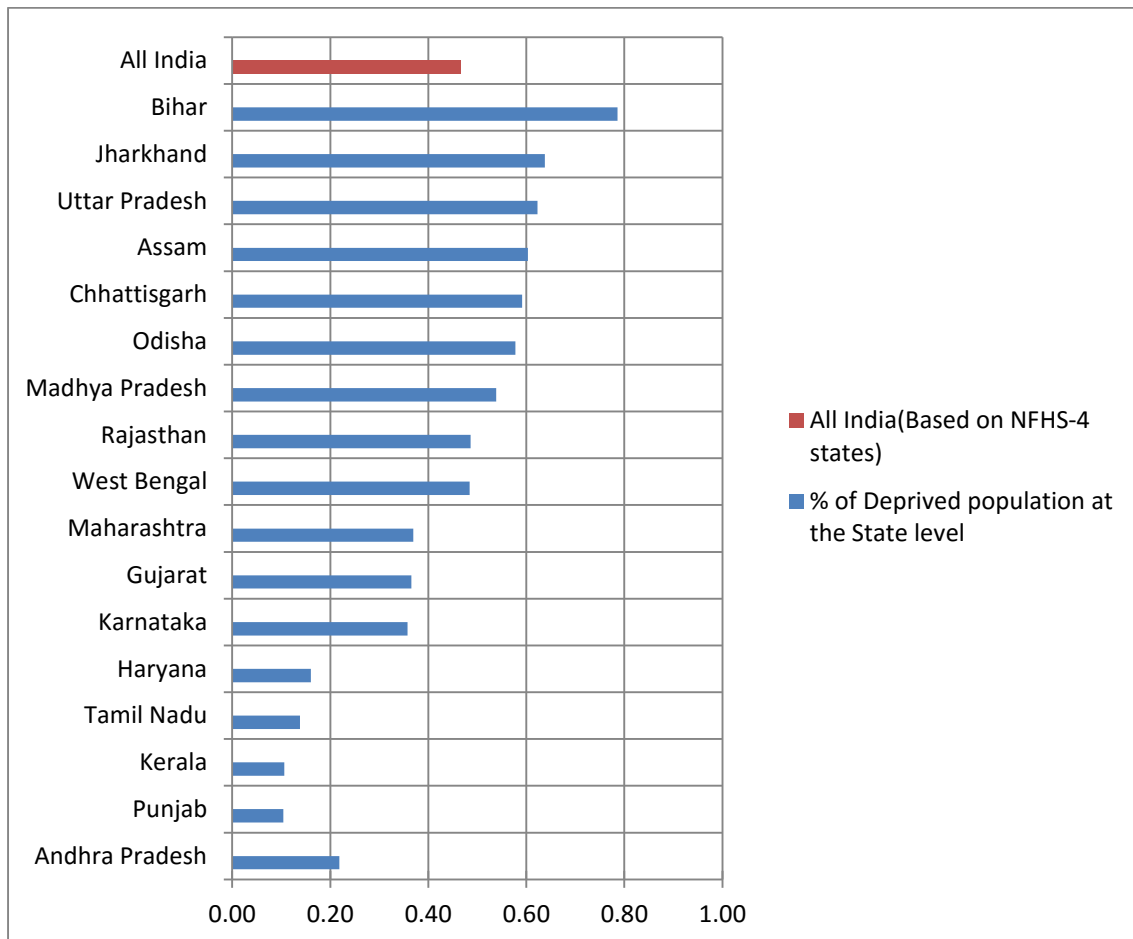
Chapter 3

Figure 3.1: Disempowerment index (based on π ($\alpha = 3$)) across 17 major states of India



Source: Author's drawing based on NFHS4 data

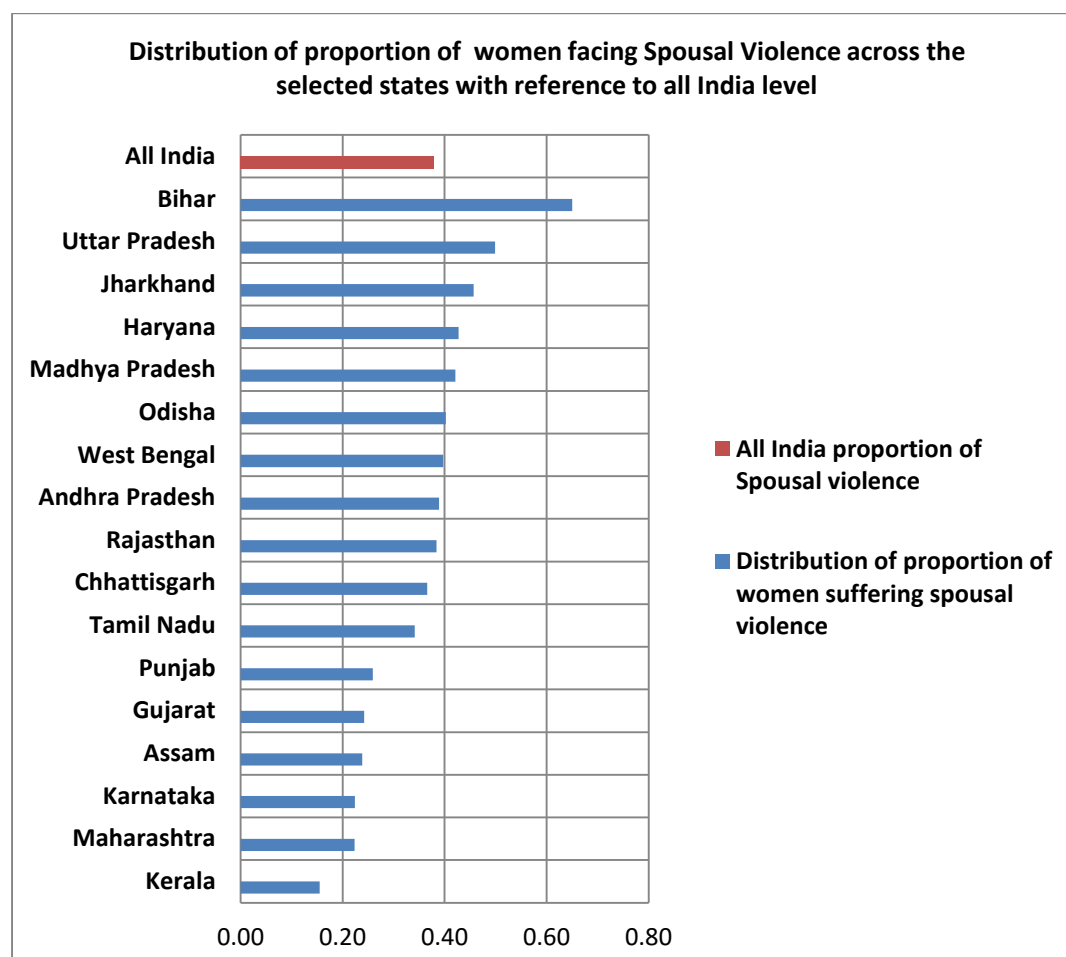
Figure 3.2: Bar Chart showing state wise Percentage of population who are deprived of basic infrastructure



Source: Author's own drawing based on NFHS4 data

Chapter 5

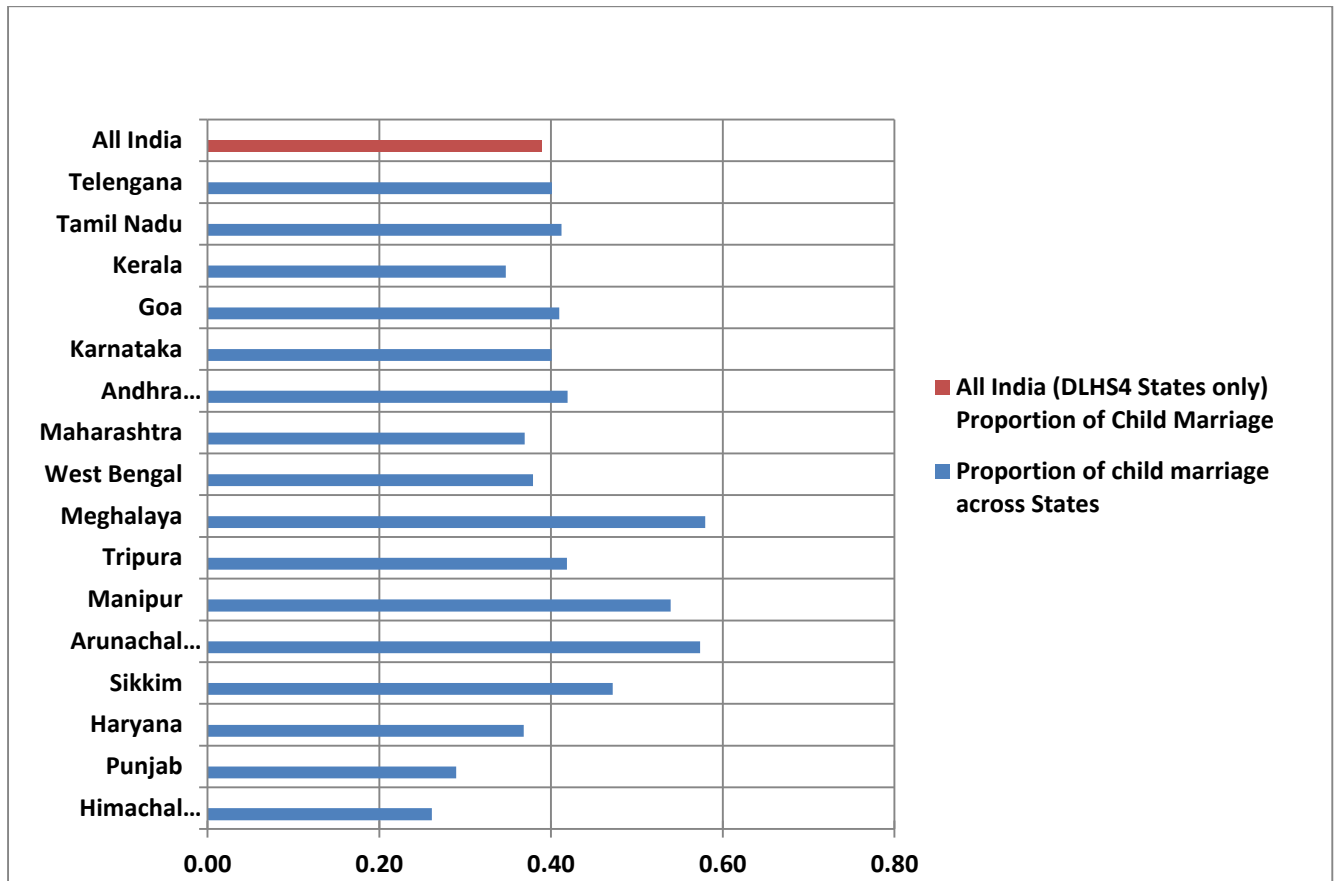
Figure 5.1: Bar Chart showing State-wise distribution of spousal violence with reference to all India



Source: Author's drawing based on NFHS4 Data

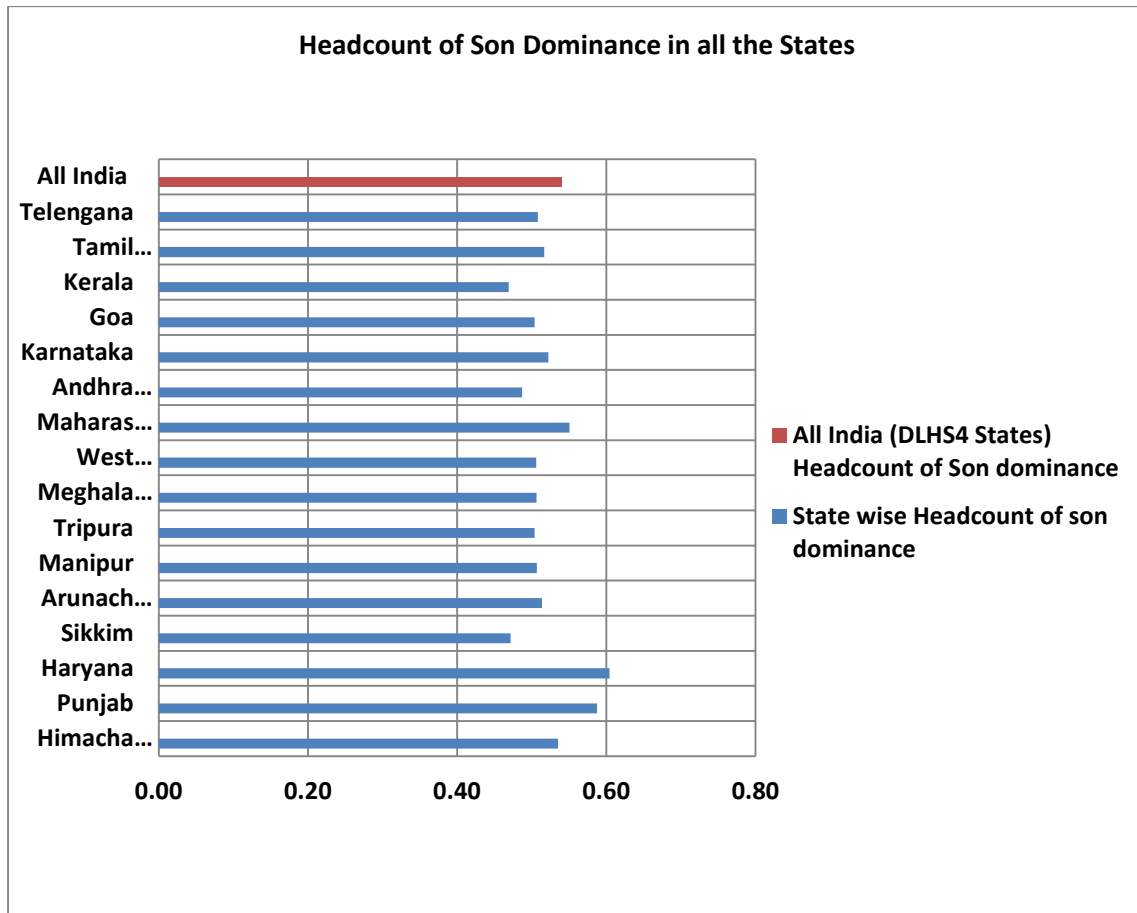
Chapter 6

Figure 6.1: Proportion of Child Marriage of daughters across the States of India included in DLHS-4 survey



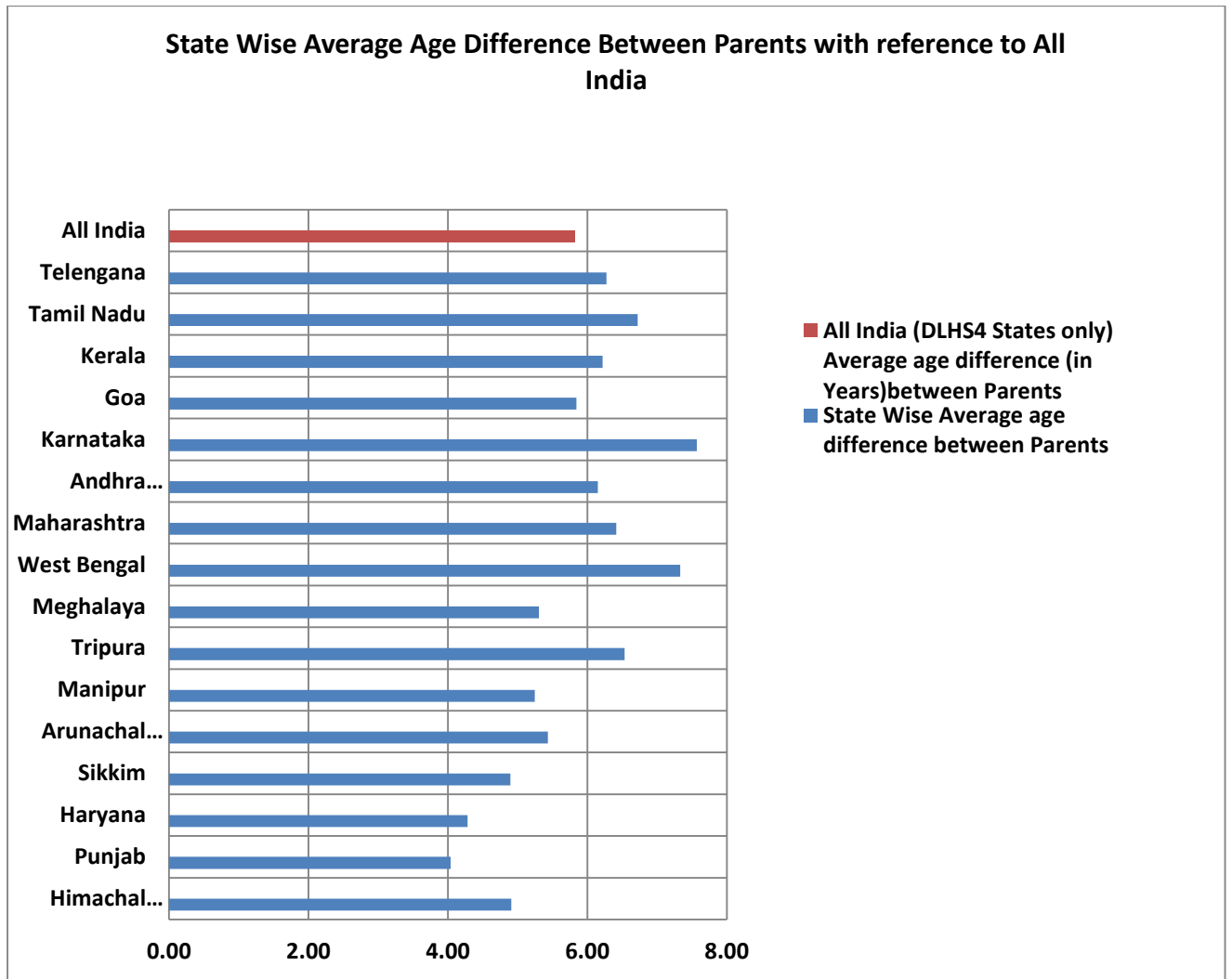
Source: Author's drawing based on DLHS4 Data

Figure 6.2: Head-count of Son-dominant households in the States of India included in DLHS-4 survey



Source: Author's drawing based on DLHS4 Data

Figure 6.3: Average Age Difference between husband and wife in years in the States of India included in DLHS-4 survey



Source: Author's drawing based on DLHS4 Data

Chapter 3

Table 3.8:Result of Multi level Logistic Regression

Dependent Variable: Incidence of Disempowerment of Women (DISEMP_Dummy)			
Explanatory variable		Coefficients with Standard Errors	Margins with Standard Errors
Deprivation Score		1.048*** (0.108)	0.225*** (0.022)
Type of Residence (Reference: Urban)	Rural	0.260*** (0.068)	0.057*** (0.015)
Household Structure (Reference : Nuclear)	Non-nuclear	0.159*** (0.027)	0.035*** (0.006)
Age of the Respondent		-0.019*** (0.003)	-0.004*** (0.001)
Duration of Marriage dummy	more than 10 years	-0.160*** (0.040)	-0.035*** (0.009)
Employment Status dummy		-0.366*** (0.042)	-0.080*** (0.009)
Witnessed Parental violence dummy		0.221*** (0.055)	0.048*** (0.012)
Religion (Reference: Hindu)	Muslim	0.349*** (0.092)	0.075*** (0.019)
	other	-0.120 (0.078)	-0.026 (0.017)
Education Level of Respondent (Reference:No education)	Primary	-0.208*** (0.037)	-0.046*** (0.008)
	Secondary	-0.582*** (0.052)	-0.131*** (0.011)
	Higher	-1.423*** (0.102)	-0.313*** (0.022)
var (deprivation Score)		0.138 (0.062)	
var(_cons)		0.123 (0.046)	
Observation per group: Min= 641, Avg = 1,533.5, Max: 3,547 Number of groups: 17 Number of Observations = 26,069 Log pseudolikelihood= -16562.202, Prob>chi2= 0.000 Integration method: mean variance adaptive Gauss-Hermite quadratureIntegration points: 7 Wald chi2(12) = 5316.13 Conditional intraclass correlation: Level: state = 0.036(0.013) (conditional on zero values of random effect covariates) Akaike's information criterion: 33154.4 Bayesian information criterion: 33276.93			

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Source: Author's estimation based on NFHS4 data

Table 3.9: Fairlie Decomposition for two states Punjab and Haryana

<i>Outcome variable :Disempowerment Dummy Independent Variables</i>		<i>Logistic Results Coefficient with robust standard error</i>	<i>Decomposition Coefficient with standard error</i>
	Deprivation Score	1.921*** (0.308)	0.0229*** (13.88%) (0.0036)
Employment Status Dummy (Reference: Unemployed)	Employed	-0.455*** (0.123)	-0.0034*** (2.06%) (0.0010)
Household Structure Dummy (Reference:Nuclear)	Non-nuclear	0.193 (0.111)	0.0007 (0.0005)
Education Level of Respondent (EDU_PRI) (Reference:No Education)	Primary	-0.046 (0.150)	-0.0002 (0.0008)
	Secondary	-0.720*** (0.128)	0.0028*** (1.69%) (0.0009)
	Higher	-1.846*** (0.265)	0.0069*** (4.18%) (0.0011)
Witnessed Parental violence dummy	Yes	0.237 (0.133)	0.0022 (0.0012)
Religion Dummy	Shikh	-0.328*** (0.114)	0.0405*** (.24.54%) (0.0140)
Duration of Marriage Dummy	More than 10 years	-0.073 (0.157)	0.0006 (0.0014)
	Current age of the Respondent	-0.035*** (0.009)	0.0140*** (0.0038)
	Group (Haryana)		0.52290076
	Group (Punjab)		0.35793358
	Difference		0.16496718***
	Unexplained Gap		0.07787758 (47.21%)
	Explained Gap		0.0870896 (52.79%)
	Constant	1.124 (0.344)	
Observations: 1861		Log pseudolikelihood=-1150.87	
Wald chi2(9)= 205.68Prob>chi2=.000			

*** p<0.01, ** p<0.05, * p<0.1; (percentages within the parentheses are with respect to total difference)

Source: Author's estimation based on NFHS4 data

Chapter 5:

Table 5.3: Results of Econometric Analysis (Model 1)

Model I: Clustered Quantile Regression

Dependent Variable: Spousal Violence score		
Explanatory Variables	Median regression	.75 Quantile regression
	Margins with Delta Method Standard Error	Margins with Delta Method Standard Error
EMP_SCORE	-0.061*** (0.015)	-0.164*** (0.015)
WEALTH	-0.018*** (0.004)	-0.027*** (0.007)
CURRENT_AGE_RESP	-0.0004*** (0.0001)	-0.001*** (0.0002)
EDU_DIFFERENCE (Reference: No Difference)		
Husband more educated	0.004*** (0.002)	0.007** (0.003)
Wife more educated	-0.001 (0.001)	-0.002 (0.004)
Employment status of the Respondent Dummy	0.004 (0.003)	0.012*** (0.004)
ALCOHOLIC_HUSB Dummy	0.046*** (0.005)	0.079*** (0.008)
Witnessed PARENTAL_VIO dummy	0.052*** (0.007)	0.079*** (0.008)
RELIGION (Reference: Other)		
Hindu	0.005 (0.005)	0.015** (0.007)
Muslim	0.007 (0.006)	0.030*** (0.010)
NUMBER_CHILD	0.005*** (0.001)	0.008*** (0.001)
TYPE_RESIDENCE Dummy		
Rural	-0.0001 (0.002)	-0.002 (0.004)
R-squared	.14718729	.15110193
Number of obs	28081	28081
Objective function	.04227266	.04173545
Parente-Santos Silva test for intra-cluster correlate Ho: No intra-cluster correlation	T =207.636 P> T = 0.000	T = 132.083 P> T = 0.000

Source: Author's estimation based on NFHS4 data.; Robust standard errors in parentheses; Std. Err. adjusted for 17 clusters

in state; *** p<0.01, ** p<0.05, * p<0.1

Continued:

Table 5.3:Model 2: Instrumental Variable Probit Regression

Dependent Variable: Incidence of Divorce dummy		
Explanatory Variables	Coefficients with clustered robust standard errors	Margins with Delta Method Standard Error
WEALTH	0.092 (0.054)	-0.001 (0.001)
CURRENT_AGE_RESP	0.025*** (0.003)	0.001*** (0.0002)
EDU_DIFFERENCE (Reference:No Difference)	Husband more educated -0.080** (0.035)	-0.002 (0.002)
	Wife more educated 0.161*** (0.043)	0.008 (0.002)
Employment status of the Respondent Dummy	0.279*** (0.056)	0.014*** (0.003)
OvservedPARENTAL_VIO dummy	-0.373*** (0.064)	-0.006** (0.003)
RELIGION (Reference:Other)	Hindu -0.246** (0.097)	-0.008 (0.005)
	Muslim 0.035 (0.115)	0.013** (0.005)
NUMBER_CHILD	-0.410*** (0.026)	-0.017*** (0.003)
TYPE_RESIDENCE (Reference: Urban)	Rural -0.024 (0.048)	-0.0004 (0.002)
Spousal violence score (endogenous regressor: instrumented by Alcoholic Husband in Model 2)	5.169*** (0.322)	0.064** (0.027)
corr(e.spousalvio,e.divorcedstatus) = 0.59 sd(e.spousalvio) = 0.16 Number of obs = 28600 Log pseudolikelihood= 10043.14 Prob> chi2 = 0.0000 Wald chi2(11)= 3202.55 Wald test of exogeneity (corr = 0): chi2(1) = 63.46 Prob> chi2 = 0.0000 Akaike's information criterion:-20054.29 Bayesian information criterion: -19922.11		

Source: Author's estimation based on NFHS4 data.; Robust standard errors in parentheses; Std. Err. adjusted for 17 clusters in state; *** p<0.01, ** p<0.05, * p<0.1

Chapter 6:

Table 6.1: Model 1: Instrumental Variable probit Regression

Dependent Variable: Incidence of Child Marriage				Proportion of Son among children	
Explanatory Variables:		Coefficients with clustered- robust standard error	Margins with Delta Method Standard Error	Coefficients with robust clustered standard error	
Endogenous Regressor	sonpro: Proportion of son in family	-1.999*** (0.109)	-0.169*** (0.039)	---	
	Caste category (Reference: SC)	ST	0.192*** (0.069)	0.067*** (0.023)	0.003 (0.005)
		OBC	-0.037 (0.025)	-0.008 (0.009)	-0.009*** (0.002)
		General	-0.089*** (0.025)	-0.027*** (0.009)	-0.010*** (0.002)
	Religion (Reference: Hindu)	Muslim	0.199*** (0.028)	0.062*** (0.010)	0.018*** (0.006)
		Other religion	0.041 (0.053)	0.009 (0.019)	0.009** (0.004)
	Land Ownership dummy	0.140*** (0.030)	0.051*** (0.009)	-0.001 (0.003)	
	Asset and Infrastructure Endowment score	-1.380*** (0.067)	-0.479*** (0.025)	-0.035*** (0.008)	
	Age difference between parents	-0.016*** (0.003)	-0.006*** (0.0009)	-0.001 (0.0003)	
	Education Difference between husband and wife (Reference: No Difference)	Husband more educated	-0.157*** (0.024)	-0.056*** (0.008)	0.001 (0.001)
Wife more educated		-.225*** (0.033)	-0.082*** (0.011)	0.002 (0.001)	
Sex of First born dummy (Instrument)		---	---	0.255*** (0.003)	
Constant		0.122 (0.128)	---	0.449 (0.008)	
Number of observations = 48,194		corr(e.sonpro,e.child_marriage)=		0.172 (0.015)	
		sd(e.sonpro)=		0.112 (0.002)	
Wald test of exogeneity (corr = 0): chi2(1) = 123.07 Prob>chi2 = 0.0000					
Wald chi2(11) = 3361.63 Prob>chi2 = 0.0000					
Log pseudolikelihood = 6911.982					
Akaike's information criterion: -13793.96 Bayesian information criterion: -13662.22					

Standard errors in parentheses; Std. Err.adjusted for 16 clusters in state;*** p<0.01, ** p<0.05, * p<0.1
Source: Author's estimation based on NFHS4 data

Table 6.2: Continued: Model 2:Multilevel Instrumental Variable Probit model

Dependent Variable		Incidence of Child Marriage	Proportion of Son among children
Explanatory Variables:		Coefficients with clustered robust Standard Error	Coefficients with clustered robust standard error
	sonpro: Proportion of son in family (Endogenous Regressor)	-1.432*** (0.146)	---
Caste category (Reference: SC)	ST	0.052* (0.027)	0.003 (0.005)
	OBC	-0.057** (0.025)	-0.009*** (0.002)
	General	-0.073** (0.031)	-0.010*** (0.002)
Religion (Reference: Hindu)	Muslim	0.205*** (0.032)	0.018*** (0.006)
	Other religion	-0.035 (0.028)	0.009** (0.004)
	Land Ownership dummy	0.134*** (0.021)	-0.001 (0.003)
	Asset and Infrastructure Endowment score	-1.431*** (0.066)	-0.035*** (0.008)
	Age difference between parents	-0.016*** (0.002)	-0.001 (0.0002)
Education Difference between husband and wife (Reference: No Difference)	Husband more educated	-0.152*** (0.024)	-0.001 (0.001)
	Wife more educated	-0.228*** (0.031)	0.002 (0.002)
Sex of First born dummy (Instrument)		---	0.255*** (0.003)
Constant		1.016 (0.124)	0.449 (0.008)
Number of observations = 48,194		M1[state]=1 (constrained) c.sonpro#M2[state]=1 (constrained) var(M1[state])= 0.151 (0.049) var(M2[state])= 0.264 (0.094) cov(M1[state],M2[state])= -0.186*** (0.063) var(e.sonpro)=0.013 (0.0003) Log pseudolikelihood = 6907.9265	

Standard errors in parentheses; Std. Err.adjusted for 16 clusters in state;*** p<0.01, ** p<0.05, * p<0.1. M1[state] and M2[state] are latent variables, where var(M1[state]) measures variability of fixed coefficient across states and var(M2[state]) measures variability of slope coefficient of the dependent variable child marriage dummy with respect to 'sonpro'.

Source: Author's estimation of the model with DLHS-4 data set using STATA 15 software

Chapter 7

7.4: Limitations

The present study suffers from some limitations due to the data sets (both NFHS-4 and DLHS-4) used for the empirical analysis. Firstly, as noted by Ahmad et al. (2019), even if NFHS data set is most reliable and representative data set for carrying out analysis on spousal violence at the population level, there is a problem of validation of the response of the respondent women about spousal violence. Further, NFHS-4 data set does not contain the questions relating to political decision making authority of the respondent²⁵. Individual perception towards religion is also not covered in the data set. In addition to this, whether the respondent is aware of various acts such as section 498 A²⁶ of Indian Penal code that punishes husbands or in-laws subjecting the woman to cruelty or section 304 B²⁷ of Indian penal code on dowry deaths also does not come under the purview of NFHS questionnaire which can be used to formulate awareness of the women regarding law and order of the country. A Limitation pertaining to the DLHS 4 data set is that it does not contain the questions relating to 'ideal number of son/daughter', which are commonly used to measure

²⁵Only one question related to help seeking of the respondent is present in the data set, that is, "Religious leader: Person respondent went to seek help".

²⁶Section 498A: Husband or relative of husband of a woman subjecting her to cruelty: Whoever, being the husband or relative of the husband of a woman, subjects such woman to cruelty shall be punished with imprisonment for a term which may extend to three years and shall also be liable to fine. Retrieved from: https://www.indiacode.nic.in/show-data?actid=AC_CEN_5_23_00037_186045_1523266765688§ionId=46286§ionno=498A&orderno=562

²⁷ Section 304B: Dowry death: When the death of a woman is caused by any burns or bodily injury or occurs otherwise than under normal circumstances within seven years of her marriage and it is shown that soon before her death she was subjected to cruelty or harassment by her husband or any relative of her husband for, or in connection with, any demand for dowry, such death shall be called "dowry death", and such husband or relative shall be considered to have caused her death. Whoever commits dowry death shall be punished with imprisonment for a term which shall not be less than seven years but which may extend to imprisonment for life. Retrieved from: https://www.indiacode.nic.in/show-data?actid=AC_CEN_5_23_00037_186045_1523266765688&orderno=342

son preference attitude of parents. Further, due to the fear of social stigma and norms, women may underreport about spousal violence. Another limitation of the study is that we do not include other types of spousal abuse like denial of food or other necessities of life, restricting access to children, isolation, spiritual abuse, cultural abuse, and others due to lack of information. Apart from this, several other forms of threats against ever-married women are not covered in the dissertation such as digital abuse against women by the partner, in terms of doxing, stalking, sextortion, trolling, etc. Violence against women from other members of the in-laws apart from the husband is also not covered in the thesis. Another limitation is that the lack of data on empowerment indicators of divorced women, without this information it is difficult to compare the empowerment level of the presently married group and divorced women.

Lastly, abuse of male partners in a spousal relationship is also not addressed in the dissertation.

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Supervisor's Signature:

