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THE ROLE OF LEGISLATIVE CHANGE IN REDUCING DOMESTIC VIOLENCE AGAINST WOMEN IN INDIA *

By APARNA MATHUR** AND SITA NATARAJ SLAVOV***

Abstract

This paper investigates whether two legislative changes aimed at empowering women did in fact lower the risk of domestic violence for women in India. We use the National Family Health Survey, a nationally representative household dataset to explore this issue. The first legislative change we exploit is a natural experiment wherein five states made amendments to their inheritance laws allowing daughters equal status as sons in the right to inherit the joint property of the father. We find no statistically significant effect of this arguably exogenous improvement in women's autonomy on their likelihood of being victims of domestic abuse. The second change was geared at improving political representation of women by reserving at least one-third of seats in the local Panchayats for women. The change to representation was implemented at different dates depending on the timing of elections. Our results suggest that improved representation increased the probability of violence. There are two competing explanations for these results. First, women may have experienced retaliation by men who feared the erosion of their power and opposed the policy change. Second, the policy change may have made women more willing to report violence to interviewers. Given our finding that improved representation may have also increased the rate of employment for women (a general measure of empowerment), we speculate that our results may be driven by an increase in the willingness of women to discuss violence with interviewers.

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I. Introduction

The problem of violence against women is particularly severe in India. A 2012 survey by Thomson Reuters Foundation ranks India as the worst of the G-20 major economies for women (Baldwin 2012). Further, according to Ramadurai (2013), among 15-19 year olds in India, 57 percent of boys and 53 percent of girls find wife beating acceptable. This is troubling since research suggests that women who justify wife beating are also more likely to report being subject to domestic violence (Kimuna et al. 2013). Data from the National Crime Records Bureau (NCRB), an agency that collects data on crime in India, suggest that there were 244,270 crimes committed against women during 2012 (a rate of 41 crimes per 100,000 women). These crimes include 24,923 rapes (4 per 100,000 women), 8,233 dowry-related murders (1 per 100,000 women), and 106,527 instances of abuse by a husband or his relatives (18 per 100,000 women).¹

One of the most comprehensive, nationally representative data sources on domestic violence in India is the National Family Health Survey (NFHS), an initiative of the Indian government that was first launched in 1992-1993. While the focus of the survey has been on family welfare, maternal and child health, and nutrition, a second (NFHS-2) and third (NFHS-3) round of the survey, launched in 1998-1999 and 2005-2006 have increasingly added questions relating to wife beating and domestic abuse, in general. NFHS-3, in particular, has the most extensive set of questions on wife beating. In this survey, 35 percent of ever-married women report having been physically abused by their spouse. The problem is exacerbated because only around a third of women report telling anyone or seeking help.

The reluctance of women to seek help further suggests that the reported crimes in the NCRB database suffer from severe under-reporting. As per the NCRB data, over the period 2001-2011, there has been a 25.8 percent increase in dowry deaths and more than a 100 percent increase in the category “cruelty by husbands and relatives”.² A large part of this is likely to be higher reporting rather than simply higher incidence of abuse. In 2005, the Indian government passed the Protection of Women from Domestic Violence Act, which was different from the

¹ Crime data were downloaded from the National Crime Records Bureau’s 2012 “Crime in India” report, available at http://ncrb.gov.in/CD-CII2012/Additional_Tables_CII_2012/Additional%20Tables.htm. The crime counts reported come from Table 3e (“All India Crimes against Women during 2001-2012”) and were converted to rates using a total female population of 586,469,174, as reported in the 2011 Indian Census (available at http://www.censusindia.gov.in/2011-prov-results/data_files/india/Final_PPT_2011_chapter5.pdf).

² <http://ncrb.gov.in/CD-CII2011/Statistics2011.pdf>

earlier law, Section 498A of the Indian Penal Code, because it explicitly defines domestic violence in addition to dowry-related cruelty. Under this Act, women could report not just actual abuse, but the threat of abuse, whether physical, sexual, verbal, emotional or economic.

This paper focuses on the factors that might explain the prevalence of domestic abuse, by using household-level data from the NFHS. An advantage of the NFHS is that we have two waves of data. While the NFHS is not a panel, the repeated cross section design allows us to exploit policy variation both across states and demographic groups, and over time.

The basic question that the paper seeks to answer is whether women's empowerment, through political reservation or changes in inheritance laws, does in fact lead to a decline in domestic abuse. On the one hand, empowerment can improve the household bargaining position of wives relative to their husbands. On the other hand, husbands may view more empowered wives as a threat to their own status, and may retaliate with violence. In addition, the surveys themselves may suffer from underreporting, and laws that aim to empower women may reduce underreporting, thus resulting in a measured increase in domestic violence. In this paper, we exploit variation created by two legislative changes that took place in India in an approximately similar time period. The first was the change in state-level inheritance laws. Until a national-level reform in 2005, India's main inheritance law, the Hindu Succession Act – which applies to Hindus, Buddhists, Jains, and Sikhs – put daughters at a disadvantage relative to sons with respect to the inheritance of family property. However, during the 1970s through the 1990s, several states adopted inheritance laws that put married daughters on a more equal footing relative to sons. These state laws only applied to women who were married after the law was passed. A woman who is subject to one of these state laws is likely to be wealthier than one who is not. The second change was the increase in political reservations for women in states and Union territories through the passage of the 1993 73rd Constitutional Amendment, which instituted a three-tiered system of local government at the village, sub-district, and district levels in rural areas of the country. The Amendment stipulated that one-third of all seats at each governance level were to be filled by women. The implementation of these Amendments at the state level varied exogenously due to the timing of elections to these local bodies. Thus, we use variation in these laws across women (differentiated by state, religion, and/or date of marriage) to proxy for women's empowerment.

We find that political reservations significantly increase the probability of reporting violence. This is consistent with the findings of Iyer et al.(2012), who show that reported crimes against women increased as a result of the same policy change. The increase documented by Iyer et al. (2012) can be explained by an increase in reporting; that is, women who were affected by the policy were more willing to report violence. It is possible that underreporting occurs in surveys as well, and that the law change increased women's willingness to report violence during the survey interview. Another possible explanation is that women experienced retaliation by men who felt threatened by the law change. At the same time, we find that inheritance law changes do not have a statistically significant impact on domestic violence, though our estimates are imprecise.

In the next section, we briefly review the literature on domestic violence and women's empowerment in India. In section 3, we provide background on the Hindu Succession Act, the various state-level reforms to inheritance law, as well as the changes to political reservations. In section 4, we describe our dataset. In section 5, we present our methodology and results. Section 6 concludes.

II. Literature Review

Theoretical models suggest that the effect of women's economic empowerment on domestic violence is ambiguous. For example, a woman's wealth and income may increase total household resources, which may both reduce economic stress (lowering the risk of violence) and alter household bargaining in her favor (Farmer and Tiefenthaler 1997; Tauchen, Witte, and Long 1991). On the other hand, husbands who feel threatened by the increased economic strength of their wives may retaliate by committing more domestic violence. Tauchen, Witte, and Long (1991) also argue that household income in general can increase violence if the abuser's marginal utility of violence is increasing in the welfare of the victim.

Empirical studies from India confirm this ambiguity.³ Some studies find a lower risk of domestic violence among women who work (Bhattacharya, Bedi and Chhachhi 2009), earn more

³ There is a large literature on the determinants of domestic violence in general. Providing a full review is not feasible here; therefore, we focus on the literature that is specific to India. Many studies on domestic violence outside India find a negative relationship between women's economic empowerment and her risk of domestic violence (see, e.g., Gelles 1976; Bowlus and Seitz 2006; Aizer 2007; Farmer and Tiefenthaler 1997). In addition, there are a number of studies using Indian data that focus on other domestic violence risk factors besides women's

income (Rao 1997), or have greater wealth (Panda and Agarwal 2005). Panda and Agarwal (2005) further find that women who own assets are also more likely to leave their homes if they experience violence. Amaral (2013) finds that state-level amendments to the Hindu Succession Act, aimed at equalizing the inheritance rights of sons and daughters, are associated with lower reported crimes against women at the state level, as well as lower reported violence in the NFHS data. Women's political representation has also been shown to induce a large and significant rise in documented crimes against women in the aggregate at the state level, driven primarily by higher reporting (Iyer et al., 2012).

Rao (1997) also confirms the theoretical prediction that a woman's income may have a differential effect on violence than income earned by other family members. In particular, the woman's income plays a larger role in explaining reductions in violence than the incomes of other family members. On the other hand, Jejeebhoy (1998) finds no statistically significant relationship between domestic violence and a woman's paid employment, and Kishor and Johnson (2004), Eswaran and Malhotra (2011), Kimuna et al. (2013) and Krishnan et al. (2010) find an increase in the risk of domestic violence among women who work for pay.

With only a few exceptions, these studies utilize datasets that are restricted to small, regional communities or specific states. Kishor and Johnson (2004), Kimuna et al. (2013), and Eswaran and Malhotra (2011) examine the link between women's employment and domestic violence using the nationally representative NFHS. Amaral (2013) examines the impact of the Hindu Succession Act changes on domestic violence using both aggregate crime statistics and the NFHS data. Iyer et al. (2012) examine the impact of the changes to women's political representation on reported crimes. We extend their work by studying the impact of both policy changes on reported domestic violence in the NFHS. As we will show, these policy experiments had different results.

empowerment (e.g., Martin et al. 1999; Jeyaseelan et al. 2007). We focus in this section on those related to the work status, income, and wealth of the wife and her family.

III. Two Legislative Changes: The Hindu Personal Inheritance Law and Women's Political Representation

III.A. Women's Political Representation

Since the early 1950s, India has had a system of local governing village councils, known as Gram Panchayats. The 73rd Constitutional Amendment, which was passed in 1993, made several changes to these Panchayats. First, the Panchayats – which were previously quite weak – were given more fiscal authority and more control over local services such as water provision, sanitation and roads (Chattopadhyay and Duflo, 2004, Ghatak and Ghatak, 1999). Second, a fraction of seats were required to be reserved for women, scheduled castes, and scheduled tribes (see e.g., Chattopadhyay and Duflo (2004), Iyer et al.(2012) and Ghani et al.(2014)). It is the latter change that serves as the policy experiment in our paper. Even though the 73rd Constitutional Amendment applied to all Panchayats, there was variation in the timing of implementation due to the fact that some states had already adopted similar changes prior to 1993, as well as the fact that the post-1993 reservations were not implemented until there were local elections. As documented in Iyer et al. (2012), West Bengal incorporated this change in 1993 but before the passage of the Amendment. Kerala made a similar change in 1991. Other states like Karnataka, Maharashtra and Madhya Pradesh implemented these changes even earlier. We use the timing of these changes using data provided in Iyer et al. (2012) as well as Ghani et al. (2014) to explore the impact of these laws on domestic violence against women. Using the state-level variation in the timing of implementation of these political reservations, Iyer et al. (2012) find that these reforms resulted in a rise in reported crimes against women in. Based on evidence from a crime survey conducted in Rajasthan, they conclude that the reforms likely induced an increase in reporting rather than an actual increase in crimes.

III.B. Hindu Personal Inheritance Law

Our second policy experiment comes from the Hindu Succession Act – which governs the disposal of the property of intestate Hindus, Buddhists, Jains, and Sikhs – and various state-level amendments that were aimed at reducing its bias against women.⁴ There have historically been two legal doctrines governing Hindu inheritance, which later laid the foundation for

⁴ Our description of the Hindu Succession Act, its history, and its amendments draws heavily on Roy (2008).

contemporary Indian inheritance law. These legal doctrines are known as the Mitakshara and Dayabhaga schools of law. Under Mitakshara, there was a distinction between a family's ancestral or joint property, and the separate property of its members. In contrast, under Dayabhaga, all property was treated as separate. Mitakshara gave sons, grandsons, and great-grandsons a legal right to the ancestral family property, on an equal footing with the legal claim of the father. However, female descendants had no claim over joint family property. Women were entitled to inherit their fathers' separate property under both the Dayabhaga and Mitakshara schools, but the claims of male heirs and the widowed mother took precedence. Notably, both schools put women at a disadvantage relative to men.

The Hindu Succession Act of 1956 tried to attenuate the bias against daughters; however significant gender inequalities persisted. Under the Act, daughters had the same right as sons to inherit their fathers' separate property, as well as the father's "notional" share of the family's ancestral property. However, sons were further entitled to their own, independent share of the family's ancestral property. Sons were also allowed to request that the ancestral property be divided, while daughters had no such right. While the Act eliminated gender inequality under the Dayabhaga school (which recognized only separate property), it persisted under the more widely used Mitakshara system.

After the 1956 Act some states enacted legislation to amend the Act in order to make it more gender neutral. These states include Kerala (1976), Andhra Pradesh (1986), Tamil Nadu (1989), Maharashtra (1994), and Karnataka (1994). These amendments gave women in the affected states an independent claim to the family's ancestral property. However, they only applied to women who were not married when the legislation was passed. These arguably exogenous changes in inheritance law provide a natural experiment for our study, as they allow us to test whether women who were "treated" by the amendments experienced different outcomes than other women who were unaffected by the amendments. This is a particularly interesting law to look at since a large share of wealth in India consists of land (Roy 2008). Our treatment group includes women in the states that adopted the amendments, who were married after the passage of the amendments. Moreover, because the Hindu Succession Act explicitly excludes Muslims, Christians, Parsis, and Jews from its provisions, women in these religious groups were not treated, even if they live in a state that amended the law and were unmarried when the amendment was passed.

As discussed in the previous section, Amaral (2013) exploits this variation in inheritance laws to study the impact of inheritance law on both aggregate crime measures and individual reports in the NFHS. In addition, a number of studies test for the effect of these reforms on other outcomes for women, including autonomy (Roy 2008), the inheritance of land, and educational attainment (Deininger et al. 2013). These findings corroborate the idea that inheritance legislation empowered women and improved their bargaining status within households.⁵

IV. Analysis of the Data: National Family Health Survey, 1998-99 and 2005-2006

The National Family Health Survey (NFHS) is conducted by the Ministry of Health and Family Welfare of the Government of India. There have been three waves so far, with the first two in the years 1992-1993 and 1998-99 and the third in 2005-06. In this paper, we work with the two waves conducted in 1998-99 and 2005-2006 since these waves had information on domestic violence. Our sample consists only of ever-married women. In 2005-06, some women were randomly assigned to be interviewed for a domestic violence module, which collected much more detailed information than the earlier wave. For 2005-06, we keep only women who participated in this module. Across the two waves of data, our sample size is 156,843 women.⁶

We use two alternative dependent variables in our NFHS analysis. The first is an indicator for whether the respondent has been subjected to violence by her spouse. The second is whether the respondent has been subjected to violence by anyone (including her spouse). For our inheritance treatment variable, a woman is considered treated if she is not Christian, Muslim, Parsi, or Jewish⁷, and was married after the enactment of inheritance law reform in her state. In regressions that use this treatment variable, we drop all women who were married in 2005 and later. For the political representation treatment variable, we define a woman as treated if the state

⁵ There are similar findings for other measures of women's empowerment, both within India and outside. For example, Duflo (2003) finds that, in South Africa, giving pension payments to women rather than men improves the height and weight of girls. In India, exogenous increases in female income among lower castes significantly increased investment in schooling, particularly for girls (Luke and Munshi 2010).

⁶ We also drop observations with missing values for any of the variables used in our analysis.

⁷ The religious groups in the NFHS include Hindu, Muslim, Christian, Sikh, Buddhist/Neo-Buddhist, Jain, Jewish, Parsi/Zoroastrian, No Religion, Donyi Polo, Other, and two small, unlabeled groups. We exclude women from the treatment group only if they are identified as Muslim, Christian, Jewish, or Parsi/Zoroastrian. In constructing the religion dummies used as controls in the regressions, we combine Jain, Jewish, Parsi/Zoroastrian, No Religion, Donyi Polo, Other, and the two unlabeled groups into the "Other" category.

in which she lives had their first election to elect a woman to the Panchayat, and the woman lived in a rural area.

Table 1 shows the summary statistics for variables included in our regressions. About 22 percent of the women in our sample, overall, report being beaten by a spouse, and 25 percent report ever being beaten. In terms of education, 45 percent have no education, while 29 percent report some form of secondary education. Less than half say that their age at marriage was greater than 18, which is surprising given that the legal age for marriage in India is 18. For the partner, a much higher fraction, 41 percent and 17 percent, reported secondary and higher levels of education, respectively. Approximately 77 percent of women are Hindu. On average, these women were married in the year 1988, and 37 percent were living in an urban area.

Table 2 shows the fraction of women reporting different kinds of violence in both waves of the survey. The figures in Table 2 utilize sample weights to make them representative of the national population.⁸ The top panel of the table presents data from the 2005-06 wave, and the spousal violence indicator, shown in the second-to-last row of the panel, was constructed from the sub-categories of violence in the first six rows. Overall, in 2005-06, 35 percent of women report experiencing some form of violence by their spouse, most commonly slapping. A slightly higher percentage of women have been physically harmed by anyone (including their spouse). The domestic violence questions in the 1998-99 wave are far less detailed, and perhaps as a result, the levels of reported violence are lower. Only 19 percent report ever being beaten by a spouse, and 21 percent report ever being beaten by anyone (including their spouse).⁹ In our

⁸ For the 1998-99 wave, we utilize individual-level sample weights. For the 2005-06 wave, we utilize the domestic violence module weights.

⁹ The 2005-06 wave of the survey includes two summary variables for spousal violence, one indicating whether the respondent has “experienced any less severe violence” (including the responses in the first four rows of the top panel of Table 5), and another indicating whether the respondent has “experienced any severe violence” (including the responses in the last three rows of the top panel of Table 5). Our spousal violence variable takes on the value of 1 if either of these responses is positive, and zero if both of these responses are negative. The 2005-06 wave also includes a summary indicator for whether the respondent has been hurt by someone other than her spouse. Our indicator for being subjected to any violence takes on the value of 1 if the respondent has been subjected to violence by her spouse (spousal violence variable equal to 1) or someone other than her spouse. It takes on the value of zero if the respondent has not been subjected to violence by either her spouse or by anyone other than her spouse. The 1998-99 wave of the survey includes indicators for whether the respondent has ever been beaten since age 15, and specifically whether her husband has ever beaten her. Our indicator for being subjected to any violence is directly based on the survey indicator for whether the respondent has been beaten since age 15. If the respondent indicates having been beaten by her husband, we set the spousal violence variable equal to 1. If the respondent indicates that she has never been beaten by anyone, or that she has been beaten but not by her husband, we set the spousal violence variable to zero.

regressions, the inclusion of interview year dummies should control for any cross-wave differences in reporting.

V. Estimation Strategy and Results

We estimate probit regressions to characterize the impact of the two policy experiments on women's outcomes. The dependent variables include a dummy that takes on the value of 1 if the respondent is employed (a general indicator of women's empowerment), a dummy that takes on the value of 1 if a woman has ever been beaten by her spouse, and a dummy that takes on the value of 1 if she has ever been beaten by anyone. Our baseline regressions include state dummies, interview year dummies, marriage year dummies, religion dummies, and a dummy indicating residence in an urban area. These controls are necessary as the two treatments – the inheritance law and the change to political representation – depend on their values. We also try including additional controls for education level, partner education level, caste, marital status, and whether the respondent was 18 or older at the time of marriage. We cluster standard errors by state.

Table 3 shows our baseline results. The coefficients reported are marginal effects. We report only the results for the two policy variables (full results are available upon request). We find no statistically significant relationship between being treated by the inheritance law and the probability of either being employed or being beaten. However, the point estimates are positive for employment and negative for being beaten. This is in line with Amaral (2013) albeit our results are not significant at conventional significance levels.¹⁰ Being treated by the political representation change is associated with a roughly 8 percentage point increase in the probability of reporting being beaten either by a spouse or by anyone.

Table 4 presents results for the regressions that include additional controls for own and partner education, caste, and whether the respondent was 18+ at the time of marriage. Results are fairly similar, except that political representation is associated with a roughly 3 percentage point increase in the probability of employment (statistically significant at the 10 percent level).

¹⁰ One possible explanation for this difference may be that our explanatory variables are different from Amaral (2013), who uses additional controls for the age gap between the woman and the spouse, dummy for TV ownership, household size and son preference. We prefer our baseline specification with the minimum number of controls as many of these other controls are likely correlated with unobservable factors that also influence domestic violence.

Within our control variables, we find that women with a secondary or higher education (relative to no education), and women who were married at older ages (specifically over the age of 18) are less likely to be beaten.¹¹ Having a spouse with a secondary or higher education (relative to no education) reduces the likelihood of being subjected to violence.

The positive coefficient on political representation has two possible interpretations. First, women may have experienced retaliation by men who feared the erosion of their power and opposed the policy change. In a recent paper, Hughes et al. (2015) cite a number of cases in which economic empowerment has resulted in a higher incidence of abuse against women. For instance, Rahman (1994) finds that 70 percent of women participants in a microfinance initiative reported an increase in violence as a result of their participation in the program. Babonis et al. (2013) showed that a cash transfer program in Mexico increased the number of violent threats that husbands made against their wives.

Second, the policy change may make women more willing to report violence to interviewers. The second explanation is in line with the results in Iyer et al. (2012) who find that reported crimes against women increased with the reservation for women in local Panchayats. A recent paper by Gupta (2014) comparing data from the National Crime Records Bureau and the NFHS finds that even in 2005, there is significant under-reporting of crimes against women. In particular, only about 2 percent of the incidents of physical violence by the husbands were reported. While that suggests that the NFHS is less subject to underreporting than official crime records, it is also possible that even surveys tend to underestimate the extent of violence.

We do not have definitive evidence to distinguish between these two potential explanations. However, the weak evidence that women's employment increased as a result of the political representation change (an indicator of greater empowerment) is suggestive of the second explanation.

VI. Conclusion

This paper investigates whether two legislative changes aimed at empowering women did in fact lower the risk of domestic violence for women in India. We use the National Family

¹¹ In India, early marriages have also been shown to be associated with lower educational attainment, higher maternal mortality and high levels of child malnutrition (Caldwell et al. 1983).

Health Survey, a nationally representative household dataset to explore this issue. The first legislative change we exploit is a natural experiment wherein five states made amendments to their inheritance laws allowing daughters equal status as sons in the right to inherit the joint property of the father. We use this arguably exogenous variation to study whether the improvement in women's autonomy in these states as a result of the passage of this law had any impact on their likelihood of being victims of domestic abuse. The second change was geared at improving political representation of women by reserving at least one-third of seats in the local Panchayats for women. The change to representation was implemented at different dates depending on the timing of elections. Our results suggest that improved representation increased the probability of violence. There are two competing explanations for these results. First, women may have experienced retaliation by men who feared the erosion of their power and opposed the policy change. Second, the policy change may have made women more willing to report violence to interviewers. The second explanation is in line with the results in Iyer et al. (2012) who find that reported crimes against women increased with the reservation for women in local Panchayats. Given our finding that improved representation may have also increased the rate of employment for women (a general measure of empowerment), we speculate that our results are driven by an increase in the willingness of women to discuss violence with interviewers. However, we cannot provide definitive evidence for one explanation over the other.

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Table 1: Summary Statistics, NFHS

Variable	Mean	Std. Dev.	Min	Max
Employed	0.36	0.48	0	1
Beaten by Spouse	0.22	0.42	0	1
Ever Beaten	0.25	0.44	0	1
Treated (Inheritance Law)	0.10	0.30	0	1
Treated (Political Representation)	0.53	0.50	0	1
Age	31.62	8.45	15	49
No Education	0.45	0.50	0	1
Primary Education	0.16	0.37	0	1
Secondary Education	0.29	0.45	0	1
Higher Education	0.09	0.29	0	1
Education Unknown	0.00	0.01	0	1
Partner: No Education	0.25	0.43	0	1
Partner: Primary Education	0.17	0.38	0	1
Partner: Secondary Education	0.41	0.49	0	1
Partner: Higher Education	0.17	0.38	0	1
Partner: Education Unknown	0.00	0.07	0	1
Low Caste	0.61	0.49	0	1
Married	0.94	0.23	0	1
Married at Age 18+	0.46	0.50	0	1
Year of Marriage	1987.80	9.45	1961	2006
Hindu	0.77	0.42	0	1
Muslim	0.11	0.32	0	1
Christian	0.06	0.25	0	1
Sikh	0.02	0.15	0	1
Buddhist	0.01	0.11	0	1
Other	0.01	0.11	0	1
Urban	0.37	0.48	0	1

Notes: All summary statistics based on 153,073 observations. Data are unweighted.

Table 2: Reported Violence in the NFHS

	Fraction
<i>2005-06</i>	
Spouse pushed, shook, or threw something	0.09
Slapped by spouse	0.24
Punched by spouse	0.07
Kicked or dragged by spouse	0.07
Spouse tried to strangle or burn	0.01
Spouse threatened with weapon	0.01
Any violence by spouse (dependent variable)	0.35
Ever physically hurt (dependent variable)	0.38
<i>1998-99</i>	
Ever beaten by spouse (dependent variable)	0.19
Ever beaten (dependent variable)	0.21

Notes: Based on sample of 153,073 women used in regressions, though sample size for sub-categories may be smaller. NFHS sample weights used (individual sample weights for 1998-99 data and domestic violence module sample weights for 2005-06 data).

Table 3: Determinants of Employment and the Probability of Abuse

VARIABLES	Employed		Beaten by Spouse			Ever Beaten			
Treated (political representation)	0.022 (0.022)	0.023 (0.022)	0.079** (0.024)	0.082** (0.024)	0.083** (0.024)	0.084** (0.024)			
Treated (inheritance law)	0.001 (0.020)	0.002 (0.020)	-0.017 (0.013)	-0.014 (0.011)	-0.017 (0.011)	-0.015 (0.010)			
Number of Observations	153,073	150,559	150,559	153,073	150,559	150,559	153,073	150,559	150,559

Notes: Coefficients shown are marginal effects. NFHS sample weights used (individual sample weights for 1998-99 data and domestic violence module sample weights for 2005-06 data). Regressions also include dummies for state, year of interview, year of marriage, religion, and urban/rural residence status. Standard errors clustered by state. Regressions that include the inheritance law treatment drop individuals who were married after 2005.

** p<0.01, * p<0.05, + p<0.1

Table 4: Determinants of Employment and the Probability of Abuse (with additional controls)

VARIABLES	Employed		Beaten by Spouse			Ever Beaten	
Treated (political representation)	0.032+	0.033+	0.080**	0.083**	0.084**	0.086**	
	(0.018)	(0.018)	(0.021)	(0.022)	(0.022)	(0.022)	
Treated (inheritance law)	0.008	0.009	-0.004	-0.002	-0.006	-0.003	
	(0.019)	(0.019)	(0.011)	(0.010)	(0.011)	(0.010)	
Number of Observations	153,073	150,559	153,073	150,559	153,073	150,559	

Notes: Coefficients shown are marginal effects. NFHS sample weights used (individual sample weights for 1998-99 data and domestic violence module sample weights for 2005-06 data). Regressions also include dummies for state, year of interview, year of marriage, religion, urban/rural residence status, own and partner education, caste, and whether the respondent's age of marriage was 18+. Standard errors clustered by state. Regressions that include the inheritance law treatment drop individuals who were married after 2005.

** p<0.01, * p<0.05, + p<0.1