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Spousal Violence and Social Norms in India's North East

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Abstract

A body of extant literature suggests that improvements in wellbeing and empowerment of women in the process of development are hindered by traditional social norms, which are often patriarchic. This paper investigates the link between traditional social norms and women's status, in particular the women's attitude towards violence and incidence of spousal violence. The study context are the tribes of Meghalaya and neighbouring areas, where there is great variation regarding patriarchic versus matriarchic lineage, residence and inheritance customs. For the statistical analysis, we combine information on social norms prevailing among the different tribes from the comprehensive ethnographic atlas People of India with household level data from the National Family Health Survey (NFHS). In addition to individual characteristics, we find the extent to which social norms determine violence against women and under what prevailing norms working women are better-off.

Keywords: Spousal Violence, Social Norms, India

JEL-Codes : Z13, B54, J12

1. Introduction

Spousal violence is a pervasive public health problem, globally. It has severe ill-effects on women's physical, mental, sexual, and reproductive wellbeing. The estimates of costs pertaining to health consequences of spousal violence has been well-documented in the literature in the context of developed countries. Although for India, no such cost estimates are available, there exist a vast literature on the causes and consequences of spousal violence. For example, Saifuddin Ahmed and Michael A Koenig and Rob Stephenson (2006) estimates the effects of domestic violence during pregnancy and its adverse consequences on infant and early-childhood mortality, using survey data from Uttar Pradesh in India. Withholding food as a form of abuse could be a possible mechanism through which spousal violence can carry ill-effects on nutritional outcomes (Leland K Ackerson, and S V Subramanian, 2008). The ongoing strategies to curb the spousal violence essentially lacks the specific cultural context, and thereby reduced to a one-size-fits-all and a sub-optimal policy response. The policies thus need to be tailored to the prevalent ancestral social norms as determinants of spousal violence. Hence we undertake this research.

This paper advance the understanding of the significance of ancestral social norms on the incidence of spousal violence in the Northeastern States of India, where there is considerable variation regarding patriarchic versus matriarchic lineage, residence and inheritance customs. We base our analysis on household level data from the National Family Health Survey (NFHS-3) carried out in 2005-06. The NFHS-3 also presents data on 'Caste/Tribe Responses' indicating to which community, specifically, the respondent belonged to. It is therefore possible to assign ethnic identify to each observation in the household-level and individual-level data containing the remaining socio-demographic information. Relying on the Anthropological Survey of India's People of India Project (1985) we gather the community characteristics and augment those using the linking community identity. For each community, we codify the community characteristics in terms of their marital and separation norms, succession and inheritance rules. The resultant novel dataset permits us to analyse the link between traditional social norms and spousal violence. Other than in African context (Alberto Alesina and Benedetta Brioschi and Eliana La Ferrara, 2016), we are not aware of any study in the literature that utilised the ethnographic data in India that analysed the link between ancestral social norms and spousal violence.

Our paper makes two contributes to the existing literature. First, in Indian context, our work demonstrates one of the possible ways to combine the available NFHS data with the

Ethnographic Atlas People of India that allows us to investigate the link between spousal violence with the ancestral social norms. Second, we explore the link between the social norms and its health effects propagated through spousal violence, especially in the case of working women. The degrees of association between ancestral social norms and women'n attitude towards justification of violence enables us to shed light on this crucial public health issue.

The positive correlates of spousal violence indicators are women's working status, household size, violence witness during childhood and alcoholism of the husband, among others. The factors that ameliorates the violence indicators include, education, wealth and urbanisation. However, the significance of traditional social norms when formulating policies to curb or reduce spousal violence cannot be undermined. Jana Lenze and Stephan Klasen (2017) conjured that community based norms directly affect spousal violence. We find evidence in support of our hypothesis that ancestral social norms are useful in explaining prevalence of spousal violence. In the communities that practices marriage transfers, both dowry as well as brideprice, women face lower probability and reduced intensity spousal violence. Similar violence reduction effects are observed in the communities that practice exogamy, consanguinity, and patrilocal post-marital residency norms. Female employment is an important policy lever to empower women economically. Consistent with the empirical literature in India, (Haimanti Bhattacharyya, 2016), we find taking up employment outside her house may have detrimental effects, specially in terms of spousal violence inflicted on her, and consequential ill-effects on her and her children's health. We therefore analysis the interaction between each prevailing social norms and working status of women. We find statistically significant and inverse relation of these interaction terms with respect to brideprice, exogamy, matrilocality, matrilineal, divorce prohibition and flexible remarriage norms. Societies that observe polygyny, the working status of women is associated with increased incidence of violence.

2. Literature and Hypotheses

2.1 Theoretical Literature

We begin with a brief overview of the theoretical models in economics. Amy Farmer and Jill Tiefenthaler (1997), presents a noncooperative bargaining model that predicts a protective effect of women's economic empowerment on spousal violence. A financially independent women is less likely to continue in an abusive relationship, and thereby lead to a decrease in violence. The changes in family income from low/middle income to high income

has a effect on spousal violence in the noncooperative bargaining model developed by Helen V Tauchen, Ann Dryden Witte and Sharon K Long (1991), where violence can be an instrument for controlling the behaviour of the spouse. In their model, physical violence is built into the utility function of the abusive partner. The abusive partner may derive direct gratification by inflicting violence on his wife. To explain why battered women returns back to their abusive partner, Amy Farmer and Jill Tiefenthaler (1996) presents a model where the battered wife resorts to shelter service to signal that she might leave abusive relationship and subsequently return with a hope that situation gets better. Such divorce threat bargaining model was also developed before by Marilyn Manser and Murray Brown (1980). A variation in this noncooperative bargaining model is the separate sphere bargaining model proposed by Shelly Lundberg and Robert A Pollak (1993), where threat point is not divorce, but a noncooperative equilibrium within the marriage.

2.2 Empirical Literature

Lori L Heise (1998) presented socio-ecological risk factors of spousal violence into four groups, namely, personal history, microsystem, exosystem, and macrosystem. The individual (personal history) factors include witnessing marital violence in childhood, childhood abuse, or father's absence or rejection. Factors, such as, male dominance, male control of wealth, alcohol consumption, falls into the microsystem. Low socio-economic status, isolation of women in the family are the exosystem factors that entails into spousal violence. Various cultural values comprise the macrosystem factors, including, the masculine notion of dominance, inflexible gender roles at individual and societal level, sense of entitlement or women ownership among men, and cultural approval of punishing women in certain context. In the empirical literature, the first strand focuses on a variety of individual, family, and community level determinants have been identified as risk-factors to spousal violence (Michael Koenig and Saifuddin Ahmed and John Haaga ,1999; Michael Koenig, and Rob Stephenson, and Saifuddin Ahmed, and Shireen J Jejeebhoy, and Jacquelyn Campbell, 2006; Dallan F Flake, 2006; Rachel Jewkes, and Jonathan Levin, and Loveday Penn-Kekana, 2002; Lisa M Bates and Sidney Ruth Schuler and Farzana Islam, and Md Khairul Islam, 2004; Murray Arnold Straus, and Gerald T Hotaling, 1980).These determinants can be seen compatible with the broad ecological framework proposed by Lori L Heise (1998). For a multi-country on general prevalence of spousal violence, the works of may be worth referring to (Lori L Heise, and Andreas Kotsadam, 2015, and Garcia-Moreno et.al.

(2006) before statistical profiling on prevalence, risk factors, health outcomes (Sunita Kishor and Kiersten Johnson , 2004).

The other strand in the empirical literature focusses on the effects of spousal violence, and its health effect in particular. Withholding of food could be one possible ways to abuse women who are already subjected to some form of spousal violence. Therefore, the victims of spousal violence are likely to suffer from malnutrition, as suggested by Leland K Ackerson and SV Subramanian(2008).Similarly, Shireen J Jejeebhoy(1998), suggest there is a significant association between spousal violence and infant and fatal loss. The significant and positive correlation between wife-beating and infant mortality measures are stronger in the context where women are extremely powerless in comparison to the context where women enjoy greater autonomy. A more conclusive evidence is put forward by Michael A Koenig, Rob Stephenson, Rajib Acharya, Lindsay Barrick, Saifuddin Ahmed and Michelle Hindin (2010), that women who experienced spousal violence carry significantly greater risk of infant mortality. According to Rob Stephenson, Michael A Koenig and Saifuddin Ahmed (2006), the likelihood of gynaecological morbidity and symptoms are increasingly reported among women who encounter sexual violence. Therefore, both physical violence and sexual violence can carry grave reproductive health consequences for women Md Abdus Salam, Md Abdul Alim, and Toshikuni Noguchi (2006). Overall, the likelihood of a range of ill-effects in terms of health outcomes, including poor health, psychological distress and mental illness are strongly associated with the incidence of spousal violence (Kristin Carbone-López, Candace Kruttschnitt, and Ross Macmillan, 2006).

The third strand in the empirical literature explores the much disputed and ambiguous link between spousal violence and women's employment. Several sociological theories has been accommodated the bi-directional relationship between women's working status and occurrence of spousal violence. Mukesh Eswaran and Nisha Malhotra (2009) suggest that economic empowerment of women will address the issue of spousal violence, after ascertaining two-way causality between spousal violence and female autonomy. In a marital relationship, once this traditional gender role of men gets threatened by economic independence of women, men try to inflict violence as a controlling behaviour. Sociologists refer to it as 'male-backlash' theory. As soon as women start working, the traditional 'bread-earner' role of men gets threatened (Ross Macmillan and Rosemary Gartner,1999), and men inflict various violent action to exert 'control' over the wife. Economists have criticised the

'male-backlash' theory on the grounds that economically empowered women may enjoy greater 'outside-options' and may break away from the abusive marriage in case the husband is violent (Anna Aizer, 2010), (Nancy Luke, and Kaivan Munshi, 2011) As the noncooperative bargaining literature predicts (Shelly Lundberg, and Robert A Pollak, 1994) as women's wage increase, their bargaining power within the household increase and therefore women who are employed would not tolerate the violence. Squarely opposite happens in terms of the 'exposure reduction' theory. Once women choose to work the couple get to spend less time together and scope of violence reduces (Laura Dugan, Daniel S Nagin and Richard Rosenfeld, 2003, Yoo-Mi Chin, 2012).

In the developed country context, (the U.S. , for example) there is a series of empirical literature that find no significant relationship between occurrence of spousal violence and women's employment decision (Susan Lloyd,1997), Susan Lloyd,1999). Angela Browne, Amy Salomon and Shari S Bassuk (1999) examined a small sample of longitudinal observation among extremely poor women to estimate the likelihood of their continuance in their job while facing spousal violence at home. Their study is similar to the effort of Richard M Tolman, and Hui Chen Wang (2005), Taryn Lindhorst and Monica Oxford and Mary Rogers Gillmore(2007) in estimating the effects of spousal violence on women's employment. These empirical studies suffer from limitations on account of small sample data and estimation techniques.

2.3 Hypotheses

A nascent literature examines the roles of ancestral social norms as determinants of spousal violence (For instance, Alberto Alesina, and Benedetta Brioschi and Eliana La Ferrara,2016), and and its link with the women's working status. In this direction, we consider two interdependent hypotheses which we test on Indian data. The first is the role of ancestral social norms as determinants of spousal violence and women's attitude towards justification of violence. To the extent the customs, norms and traditional values are prevailing in a society, the attitude towards women, especially the gender-roles, intra-family violence and family organisations would evolve. And, so will be the outcome for women in those societies. The more restrictive the cultural traits are the worser would be the outcome for women's status in the society, irrespective of the initial conditions of the individuals concerned. The second hypothesis relates to the women's employment and how it interact with the prevalent social norms. Certain customs and cultural traits may be more conducive for a woman to take up

employment outside her home, but certain social norms may work as a deterrents. We test which social norms favours and which customs discourages spousal violence against working women.

3. Data

For statistical analysis in this paper we use the women-only questionnaire data of the third wave of the National Family Health Survey (India National Family Health Survey, 2005-06) (NFHS-3, hereinafter). The Monitoring and Evaluation to Assess and Use Results Demographic and Health Surveys (MEASURE DHS) under the aegis of the United States Agency for International Development (USAID) made the data publicly available. The NFHS-3 survey collected information on demography, health and nutritional aspects of nationally representative sample of 109,041 households, 124,385 women aged 15-49, and 74,369 men aged 15-54. We consider a sub-sample of 20,238 observations from all the 8 northeastern states of India, namely, Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram , Nagaland, Sikkim and Tripura. This subsample has been carved out because a typical mix of matrilineal and patrilineal societies reside in this zone. The women-only questionnaire, in NFHS-3, includes a special section on domestic violence is defined to include violence by spouses. While eliciting information on spousal violence from a randomly selected woman aged 15-49 from within the household, strict privacy was ensured and the respondent women were reassured about the confidentiality of their responses. These women were privately interviewed by women investigators when casting questions about occurrence of spousal violence and women's attitude towards justifying the violence.

In women-only questionnaire each women respondent aged 15-49 was asked the caste/tribe they belong to. These responses enables us to assign each women respondent in the NFHS-3 to her corresponding community in the Ethnographic Atlas, the People of India. For determining the community characteristics, we had to rely on the Anthropological Survey of India's People of India Project (Suresh Kumar Singh, and B Pakem, B and Shibani Roy, Shibani and Arabinda Basu, 1994). This project during October 1985 to March 1992, had identified, located and studied 4635 communities across length and breadth of India, out of 6748 communities listed initially in the Census. About 25 thousand investigators involved in this mammoth survey over 26 thousand field-days stayed on an average 5 days with each community. They conducted interviews in 3581 multi-community villages and in 1011 towns, located across 421 districts and 91 cultural regions. The result of the survey was published and we accessed respective volumes which contains detailed accounts on 210 communities

and communities residing in Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. For each of the major communities, we codify the community characteristics in terms of their ancestral social norms about marriage transfers, marital norms, partner selection, separation norms, lineage, succession and inheritance rules.

The data on caste/tribe names as recorded in the NFHS-3 is not clean and there is a great variety of spelling of the caste/tribe names. We had to adopt specific concordance rules such that the information from ethnographic atlas can be merged and matched to NFHS-3 dataset. In the literature, we could not trace any paper that has used the People of India Ethnographic Atlas and merged ethnographic characteristics with NFHS data. There has been recent instances that similar merging and matching of Murdock's Ethnographic Atlas and DHS dataset. (See for example,Alberto Alesina, and Benedetta Brioschi and Eliana La Ferrara , 2016), Stelios Michalopoulos and Elias Papaioannou, 2013). Thus, in order to match and merge and assign ethnic identity to the observations in NFHS data with the ethnicity variables in People of India Ethnographic Atlas, we adopt four possible methods. Our matching strategies and the resultant matched number of observations and number of ethnicities are presented in Table 1, in order of accuracy.

[insert table 1]

4. Empirical Specification

For estimation of effects of economic correlates and social norms on the spousal violence we construct the following linear probability model :

$$V_{ies}=\alpha_s + \beta \cdot X_{ies} + \gamma \cdot Q_e + \varepsilon_{ies} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

The dependent variable spousal violence V_{ies} represents ever any incidence of spousal violence, violence index, violence attitude, and violence attitude index for i^{th} woman's attitude towards it for with e^{th} ethnic identity in s^{th} state. The actual violence ever inflicted on a woman is indicated by a dummy variable 'violence ever'. The aggregate indicator of one or more types of violent incidence encountered by the women is captured by 'violence index'. It is a count variable. Apart from these two variable that captures the actual experience of violence, we consider another two variable that indicates women's attitudinal measures towards acceptance or justification of violence. Those are indicated by 'violence attitude dummy' and 'violence attitude index. The latter is a count variable. The descriptive statistics of all the 4 dependent variables are presented in table 2.

The set of individual characteristics are represented in X_{ies}, with a vector of control

variables. X_{ies} includes a range of control variables, including, age difference between the spouses, education of both the spouses, wealth index, household size, urbanity, history of violence witnessed, family structure, working status of women, and alcohol consumption patterns. The descriptive statistics of all the 10 control variables are presented in table 3a. The social norms of a given ethnicity e is represented with Q_e . It includes social norms, namely, brideprice, dowry, exogamy, polygyny, consanguinity, residency, divorce, alimony, child custody, remarriage, forced marriage, arranged marriage, love marriage, descent norms, and inheritance norms. The descriptive statistics of all the 15 social norms are presented in table 3b.

We extend the model to estimate the effects of women's employment across all the societies in our sample. In some society, give a set of combination of social norms, it could be more conducive for women to take up a job and stay better off without much of 'male-backlash' , because in those societies the male bread-earner culture could be subdued. In other societies, taking up employment by women can cause detrimental effects due to spousal violence. We can investigate into this heterogenous effects of women's employment across differing social norms by the following empirical specification :

$$V_{ies} = \alpha_s + \beta \, . \, X_{ies} + \gamma \, . \, Q_e + \mu \, . \, working_{ies} + \delta \, . \, working_{ies} \, . \, Q_e + \varepsilon_{ies} \quad (2)$$

As before, the representations for the $V_{ies,}$, X_{ies} and Q_e , remains unchanged. The is a dummy variable that takes the value one of the woman is currently working and zero otherwise. The state fixed effects in both the equation (1) and (2) is represented with α_s and ε_{ies} is the independent and identically distributed (IID) error term that captures the unobservable factors.

4.1 Dependent Variables

In order to ascertain the kinds of violence inflicted on women by men, women's answers to the following questions were considered in NFHS-3: (i) Spouse ever humiliated her, (ii) Spouse ever threatened her with harm, (iii)Spouse ever insult or make feel bad; (iv) Spouse ever pushed, shook or threw something, (v) Spouse ever slapped, (vi) Spouse ever punched with fist or something harmful, (vii) Spouse ever kicked or dragged, (viii) Spouse ever twisted her arm or pull her hair; (ix) Spouse ever tried to strangle or burn, (x) Spouse ever threatened or attacked with knife/gun or other weapon, (xi) Spouse ever attacked with

knife; (xii) Spouse ever physically forced sex when not wanted, (xiii) Spouse ever forced other sexual acts.

(i) ***Violence ever*** is a dummy variable to capture if any types of violence ever has been inflicted on the woman. This dummy variable is called 'violence ever' to capture if the woman was subjected to at least one form of spousal violence.

(ii) '***Violence index***' is constructed as sum of four types of spousal violence to which the woman has been exposed, namely, (a) *emotional violence* if the response was affirmative in questions (i) to (iii) above , (b) *physical aggression* if the response was affirmative in questions (iv) to (viii) above , (c) *severe violence* if the response was affirmative in questions (ix) to (xi) above, and (d) *sexual violence* if the response was affirmative in questions (xii) to (xiii) above. The sum of each forms of violence is captured in violence index. This is a count data ranging between 0 and 4.

Next, we use the data to construct a set of attitudinal measures towards spousal violence and women, in particular. This attempts to measure to what extent the women respondents justify the violence inflicted by their husbands on them. A confirmation was obtained from women respondent those justify violence in one of the following situation, (a) the wife goes out without telling him, (b) the wife neglects their children, (c) the wife argues with him, (d) the wife refuses to have sex with him, and (e) the wife burns the food.

(iii) **Violence Attitude** is a dummy variable that takes the value 1 if the respondent woman believes that spousal violence is justified in at least one of the five circumstances emerge.

(iv) **Violence Attitude Index** is constructed as sum of affirmative responses in which the respondent women justifies and accepts the spousal violence inflicted on her.This is a count data ranging between 0 and 5.

The summary statistics of these measures of spousal violence and women's attitude towards acceptability of violence is presented in table 2.

[insert table 2]

4.2 Independent Variables

A. Control Variables

(i) Age difference is a discrete variable derived from the absolute difference between the age of the wife and the age of her husband.

(ii) Wife's education is measured by number of years of education the wife has undergone.

(iii) Wealth Index is a measure of various indicators available in the dataset are generated by using the principal component analysis which places the respondent on the wealth distribution reflective of relative position in terms of economic status depending on which of the five quintile they belong to.

(iv) Household size indicates the number of persons lived in the household as of preceding night before the data was collected.

(v) Husband's education is measured by number of years of education the husband has undergone.

(vi) Urbanity reports the location of the household in the rural and urban areas indicating the location effects to capture the unobserved heterogeneity between the urban and rural areas. It takes a value 1 if location is urban, and 0 otherwise.

(vii) history of violence is a binary variable that indicates whether wife has witnessed parental violence in her childhood.

(viii) Household structure is a binary variable that takes a value 1 if the the household is nuclear, 0 otherwise.

(ix) Alcoholism captures the habit of drinking alcohol among the marital partners. As a categorical variable, it takes the value 1 if only husband drinks alcohol. If wife drinks alcohol, then the variable is coded 2. In case, both the partner has the habit of drinking alcohol, the variable is takes the value 3.

(x) working status of women is a binary variable that takes the value 1 if the woman has confirmed that she works outside her home for pay. If the woman works inside the household or unemployed, this variable is coded 0.

The control variables are selected from the literature subject to data availability. The descriptive statistics of these 10 control variables are presented in table 3a.

[insert table 3a]

B. Social norms

(i) brideprice : Brideprice is a dummy variable indicating if there is a tradition or social norm of paying money or wealth transfer to bride's family when the marriage is negotiated. As noted in the detailed ethnographic accounts of each communities, sometimes the brideprice can be a token and customary amount. There are 35 communities in our sample,

including, Ao, Lotha, Angami, Nishi, has prevalent practice of brideprice.

(ii) dowry : A dummy variable dowry is set to take a value 1 if in the said community traditionally there is a norm of paying dowry price on part of the family of the bridegroom to the family of the bride. Without going into the detailed social justification of the practice of paying dowry, the ethnographic accounts have indicated in the 6 communities where it is mostly prevalent practice of paying dowry. Those communities include, Bangali, Bihari, Marwari, Muslim and Hajong. It may be noted that the Hajongs, the Deoris, the Gurungs, the Konyaks and the Nepalis have a symmetric practice of paying both the dowry as well as the brideprice. In 80 communities neither payment of brideprice nor payment of dowry is prevalent.

(iii) Exogamy : As per the ethnographic accounts recorded in the People of India, we note that within each communities there exists a number of clans or sub-tribes or *gotra*. The dummy variable clan- exogamy signifies an important marital practice if the bride and the groom mandatorily has to belong to different clans, sub-tribe or *gotra*. In 43 communities such as, Khasi, Bhutia, Jaintia, Chang, Nishi, a marriage among the same clan would be considered a taboo and may amount to un-absolvable sin. Among the Bihari, Marwari, Nepali the norm is to marry within their own caste but outside the clan or gotra. This dummy variable takes a value one if such restrictive martial norms are practiced within the member of the communities.

(iv) Polygyny: is a dummy variable that indicates prevalence of cultural norms that permits men to marry more than one wives. It takes the value 1 if the polygynous marriages are acceptable norm in the society, and zero otherwise in the case of prevalence monogamous marriages. In our sample only the Nishi community follows the polygynous marital norm.

(v) Consanguinity: is a dummy variable that represents prevalence of kinship marriage in the society where the wife is related to her current husband and marriages between first cousin, second cousin and other relatives are permissible and accepted in the society. In our sample there are 19 communities that follows the norm of consanguinity, examples include Ao, Garo, Konyak and Nishi.

(vi) Post-marital Residency norms: is a categorical variable that represent the custom where would the newly married couple with cohabit. The patrilocality is the most prevalent norm that is followed among 80 communities in our sample. The Sumis, the Tamangs, the

Nishis are patrilocal communities that are coded zero for the 'residency' variable. In 10 communities the custom about residency is flexible between dulocal (where husband and wife lives separately at their respective natal houses, Jaintia for example) and neolocal (where the couple cohabits in a different place and house separated from both of their natal households, example, Konyak, Lotha). In this case the variable 'residency' takes a value one. In two societies (Garo and Khasi) in our sample it is customary for the husband to go and live with the family of the wife and are coded two as matrilocal communities.

(vii) Divorce: The variations in divorce norm is captured by a categorical variable that takes integer values from zero to three. In 80 communities, the divorce norm is not prescribed and as a consequence people need to take recourse to legal action. Such communities, namely, Sumi, Mizo Biate, Meitei, are coded with zero in this 'divorce' variable. There are 22 societies, which are liberal about divorce by mutual consent, and they are coded with one. The Khasis, the Aos, the Angamis, the Jaintias follows this custom. In 17 societies in our sample the divorce would require either societal approval or familial approval, Garo, Loi, Tamang, for example. These communities are coded with two. There are 23 communities in our sample that prohibits divorce as they consider marriage is a religious sacrament. In these societies (e.g., Konyak, Lepcha, Phom) divorce is rare and the 'divorce' variable is assigned a code of three.

(viii) Alimony: Whether or not a divorced wife is entitled to receive her subsistence from her former husband is socially prescribed in this norm. This is a dummy variable and takes a value one in the case of 5 communities that has prevailing alimony custom, namely, Chakma, Loi, Khasi, Chetri and Mangar.

(ix) Child custody norms: Who among the divorced couple, the father or the mother gets to keep the children is defined in this social norms, that is a categorical variable. In our sample, the are 80 societies (Mizo Biate, Sangtam, Loi) where custody norms are not prescribed, and the variable 'custody' takes a value zero. In 23 communities (Zeliang, Meitei, Ao, for example), the variable 'custody' is assigned a value one, since in these societies the father gets the custody of the child. In our sample, there are 7 communities, where the mother has the custodial rights of the children after divorce. These communities, namely, Garo, Jaintia, Khasi, are coded two.

(x) Remarriage norms: There are 43 communities that has liberal remarriage norms for

women, permitting flexible remarriage after divorce. In case of such flexibility and acceptability is observed, this dummy variable is coded one. Examples include, the Khasis, the Angamis, and the Aos.

(xi) Forced marriage: In 5 societies the brides are captured, purchased and acquired by intrusion. These communities, including, Adi Pasi, Nishi, Vaiphei, are coded to follow 'forced' marriage custom in a dummy variable that takes the value one.

(xii) Arranged marriage : The usual prevailing norm of partner selection in 56 communities (e.g., Lotha, Lepcha, Phom) in our sample follow the custom of marriage by trial, marriage by service, exchange marriage and marriage by negotiation. These communities are assigned a value one for the dummy variable called 'arranged'.

(xiii) Love marriage : In communities where the the marital partners are selected by mutual consent, elopement or courtship are categorised to take a value one in the dummy variable 'love'. In our sample there are 43 such communities that follows love marriage as heir partner selection norms, the Khasis, the Konyaks, the Garos to name a few.

(xiv) Descent norms: This is a dummy variable that takes the value one if the communities under consideration follows matronymic culture, by which children are treated as part of their mother' lineage and family and therefore carry their mother's surname. In our sample, there are three communities that follows matronymic cultural norms. They are the Garos, the Jaintias and the Khasis.

(xv) Inheritance norms: In the 4 communities in our sample, the Angamis, the Garos, the Jaintias, and the Khasis follow matrilineal inheritance norms, by which either the youngest daughter receives the inheritance or the the men are required to hand down the property to his sister's children. The communities with such inheritance norms are coded with one, and zero otherwise.

In the Annexure tableA1, the prevalence of each social norms in number of societies and number of sample size is presented. The descriptive statistics of all 15 social norms are presented in table 3b.

[insert table 3b]

In the subsequent sections several empirical specifications are estimated in the following order, (a) spousal violence as explained by control variables, (b) spousal violence estimated

using prevailing social norms and control variables, (c) interaction effects of women's working status with the prevailing social norms, and (d) the robustness checks by introducing estimates from probit, poisson and negative binomial models.

5. Results

5.1 Correlates of spousal violence

First we consider the estimation results of linear probability model specified in the equation (1). The likelihood of a woman experiencing spousal violence ever in the past is estimated as dependent variable, as well as indices constructed from the justification responses of women about their spousal violence. Each individual characteristics that correlates with the spousal violence and women's attitude towards its acceptance are presented in table 4. The narrower the age difference among the spouses the greater parity might evolve among them in terms of intra-family bargaining. Thereby, spousal violence is expected to reduce in case spousal age difference is narrower. In Indian context, Pradeep Panda and Bina Agarwal (2005) notes that women's age is expected to be negatively associated with the incidence of spousal violence. We have considered the absolute magnitude of age difference. Although the coefficient of spousal age difference is negative, it is not statistically significantly different from zero, at any conventional level of significance. Thus, similar to the findings of Jana Lenze and Stephan Klasen (2017), we find the effect of spousal age difference on spousal violence is not statistically significant at any conventional levels.

The more is the years of education a woman receives, the more will be the gains in her bargaining power within the household. Therefore, consistent with the findings of Maxine P Atkinson,Theodore N Greenstein, and Molly Monahan Lang (2005), we observe a significant inverse correlation between women's education and occurrence of spousal violence. We observe a protective effect of education on spousal violence. Educated women are also less likely to tolerate violence as the significant coefficient against the violence attitude shows a negative sign. An increase in years of education of wife as well as husband is negatively associated with incidence of spousal violence as well as women's attitude towards it. The effects are statistically significant at conventional levels. When compared to the means of dependent variable the effect of education seem small.

In wealthier households a significant violence reduction effects can be seen. Together we can conclude that for educated women in a wealthier family in their mature age are less likely to be subjected to spousal violence. These findings are meaningful in general that in wealthier and educated families there prevails less stressful and conducive environment that

prevents incidence of spousal violence. The larger the household size, the lower was the reported incidence of spousal violence. The positive correlation between violence index and household size is statistically significant at 1% level. The nuclear families scales up the risk if incidence of violence against woman. Both the coefficients against 'violence ever' and 'violence index' are positive and significant at 1% level. In comparison to stem (extended) families women in nuclear families face greater brunt of spousal violence. From the attitude angle, women is nuclear families tend to accept violence more, as the coefficient against the violence attitude index is positive at significant at 5% level.

The occurrence of violence also increases with the urban location of the household. This finding is in line with the standard argument regarding the stress factor linked to residency in urban areas as compared to pastoral life (Dallan F. Flake, 2005; Michelle J Hindin and , Linda S Adair, 2002; Mohannad Al-Nsour, Marwan Khawaja and Ghadah Al-Kayyali, 2009) that might induce spousal violence. There are two contrasting forces at play resulting into a significant violence reduction in case of urban residency. On the one hand, urban women may be more open to reporting and revealing the violence inflicted on them and less likely to tolerate or accept. On the other hand, in urban localities it is possible that crimes like spousal violence are taken seriously and might get reported to the law-keepers. In contrast , in the rural areas, depending on the social norms, spousal violence might get tolerated in the society and allowed to persist. Therefore, it is meaningful to interpret that the incidence of violence increases with urbanisation and the attitude justifying violence among women also diminishes.

The spousal violence is carried over across the generations as can be inferred from the evidence at galore in Indian context (Michael Koenig. et al., 2006). The family history of violence is inferred from the question whether she ever witnessed her father beating her mother. Grown up in such a situation, women tend to accept violence more and since they can accept and tolerate they might get tortured more than otherwise the case. In this sense, we expect a direct relation between spousal violence, women's attitude towards acceptance of violence and family history of violence. We find all the coefficients are significant at 1% level as reported in all the four columns. Given a family history of parental violence, the chances of getting subjected to violence increase by 0.22, or 22 per cent. This effect is quiet large when compared to the mean of the dependent variable, the 'violence ever' (32 per cent). Similar large effects can be seen across the other measures of violence and attitude towards it.

The another large risk factor that is associated with the incidence of spousal violence is the alcoholic habit of the husband. Relative to a reference category where both husband and wife consumes alcohol, the risks of spousal violence increases significantly. The coefficient against 'violence ever' is statistically significant at 1% level and large compared to the mean of 'violence ever' variable. The effect of alcohol has similar pronounced effect in terms of increasing the intensity of spousal violence, since the coefficient against 'violence index' is positive, large and statistically significant at 1% level.

[insert table 4]

We now proceed to examine how each of the traditional social norms might affect the occurrence of violence and how the attitude towards the violence, as reflected in tolerance and justification of violence, are persistent. Towards this aim, we take up five broad sets of social norms (i) marriage payments, (ii) marital norms, (iii) separation norms, (iv) partner selection,and (v) lineage norms. For brevity, we present the coefficients with respect to the social norms only, although we have included all the control variables in each regression.

5.2 Spousal Violence and Social Norms

I. Marriage Payments

A. Brideprice

Nathan Nunn (2005) advanced a game theoretic model of marriage transfer to explain the simultaneous payments of both brideprice and dowry. In her model, given men will cheat in a relationship, depending on women has better or worser 'outside options', there could be two equilibria. In the first equilibrium, women with better 'outside option' may not be willing to marry unless men commit by offering brideprice. The payment of brideprice by men makes the marriage look a credible commitment, because it lowers men's payoff from cheating to committing. After paying brideprice, if a man needs to cheat and remarry, he has to continue paying brideprice in all his subsequent marriages. In the second equilibrium, women's 'outside options' are worser. Therefore, despite knowing men will cheat, women are better off marrying because otherwise they need to live alone. Woman however can threat to demand brideprice until she agrees to marry. If man fell for this threat he might pay brideprice and stay faithful. But this is incredible threat, given the worser outside options, woman will still marry even without the brideprice. In such a situation, the customs dictate that woman's family makes a transfer of a productive asset to the groom, in the form of a dowry. In this equilibrium, both dowry and brideprices are paid, and not just the net transfer. The payment

of brideprice by the husband (or his family) towards the family of the wife signify that women can be owned. In a sense, entitlement or ownership of women is a general norm, as included by Lori L Heise (1998) in the macrosystem factors. Any sort of violence can be inflicted on her. Therefore, the likelihood of violence is positively associated with the social norm of paying the brideprice. We find support for this hypothesis. The coefficient against 'violence ever' as well as 'violence index' is positive and marginally significant at 10 per cent level. The correlation remains robust irrespective of estimation methods and the magnitude remains stable between 6 to 7 per cent (compare table 5 with table A2 and A3). Therefore, the prevalence of brideprice in a society is associated with 6 to 7 percentage points increase in the probability of a woman ever being subjected spousal violence. This is a modest effect considering the average likelihood of violence in our sample is 32 per cent. When we consider the dependent variable as violence index (column 2), that counts the the types of violent incidents an woman has reported to have faced, the coefficient on brideprice is 13.2, significant at 5 per cent level. This also is a modest effect, representing a 23 per cent increase over the mean of the dependent variable.

B. Dowry

The link between dowry and spousal violence is examined in the literature, but we have not come across the empirical literature linking it with the other forms of marriage payments. Francis Bloch and Vijayender Rao (2002) demonstrate that dowry violence can be an instrument to signal by wife-beating and bargain to extort more dowry money when wife's family is relatively rich. A micro-level study in a village in Tamil Nadu, India by Sharada Srinivasan and Arjun S Bedi (2006) also examined this link. They highlight that, notwithstanding the ill-effects of dowry, women tend to prefer dowry as it tends to provide security and secure status for them in marital household. Therefore, dowry should have a violence reduction effect. Siwan Anderson (2007), has illustrated the prevalence of dowry and brideprice across societies and linked it to economic conditions, societal structures, institutions and family characteristics to establish the determinants of marriage payments. Further, he also linked marriage payments with property rights and welfare of women, while explaining the economics behind soaring dowries and declining brideprices. We have a sample of observations that comes from societies with prevailing norms of paying several forms of marriage payments. Therefore, we consider a sub-model to consider the correlation between different forms of marriage payments and incidence of spousal violence. Although

the coefficients on the societies that follows dowry norms are positive, those are marginally statistically significant at 10 per cent level for 'violence ever' dependent variable. The magnitude 0.119 meaning that likelihood of incidence of violence increases by about 12 per cent if a dowry payment norm prevails in a society. Compared to the average of the dependent variable- 32 per cent, this is large effect. In a society where both brideprices and dowries coexist, the incidence and likelihood of spousal violence decreases. For dependent variable 'violence ever', we note the coefficient is -0.267 and significant at 5 per cent level. The social norm of simultaneous payment of marriage payments is associated with 27 percentage point reduction in likelihood of spousal violence. This is a very large protective effect considering that average probability of spousal violence ever is 32 per cent in our sample. Similarly, the coefficient on violence index is -48.8, significant at 5 per cent level. The large protective effect that we observe in societies with simultaneous marriage payments is results from interplay of the following three factors. First, in societies with unbalanced sex ratio, marriage payments clear the market **(**Gary Becker, 1981). For each groom if less number of brides are available, a man pays brideprice to attract a bride. The practice of brideprice also curbs women's independence due to their inability to pay back the brideprice if a marriage needs to be dissolutes and she wishes to return to her natal family. The wife therefore has limited outside-option on account of her inability to pay back the brideprice and the dowry payments are already sunk. In societies where women are actively engaged in agricultural activities, payment of brideprice prevails, since by paying the brideprice the groom purchases the right to use wife in agricultural activities. Since women are valuable economically due to their labour force useful for agriculture and has already been paid for (through brideprice), it is unlikely that she would be subjected to violence. On the other hand, dowry is a form of wealth transfer to the wife from her parents (J Goody, 1973). According to this theory, sons receive inheritance and daughters receive dowry at the time of their marriage. Women tend to enjoy greater status at her marital home proportional to the quantum of dowry she brought in her marriage. Thereby, we would expect her to be a pliant wife, and less likely to face violence.

II. Marital Norms and Spousal Violence

C. Exogamy

In anthropological literature, Barry Hewlett and Lind Stone (2001) has reported a considerable variety among human societies in the aspect that if marital partners are chosen from the same local community (endogamy) or the partners are selected from different and

outside communities (exogamy). The spouses in exogamy are more mobile as they come from different communities and because of they would have kins in two places they would be adjustable in two communities. In addition to this advantage of exogamy, Gregory K Dow, Clyde G Reed and Simon Woodcock (2016) notes the exogamous communities enjoy access to a greater pool of marriageable partners. The resultant effect could be a couple in societies following exogamous norms might find themselves a better match and who are more open to adjustment in their post-marital families. The antecedent costs of exogamy is, depending on post-marital residency rules, either of the spouses might have to live away from their natal families and as a result might get weaker intra-household bargaining power. The net effect of these costs and benefits are likely to get reflected in the incidence of spousal violence. In our sample, there are 43 communities observe exogamy, implying that they need to marry outside their own clan and communities. The result presented in column 1 of table 5 indicate a negative correlation between spousal violence and exogamy, meaning that the likelihood of violence is reduces with the conformity to the social norm of exogamy. The size of the effect is modest -6.3 percentage points in comparison to the mean of 32 per cent and marginally significant at 10 per cent level. This result is in expected lines and support our hypothesis. Furthermore, beating wife who belongs to other ethnic communities might invite trouble for the abusive husband by way of retaliation from wife's clan. This apprehension of retaliatory inter-ethnic conflict works as a deterrent to spousal violence (J D Fearon and D D Latin, 1996).

D. Polygyny

In polygynous families, co-wives usually find themselves in an uncomfortable or unsatisfactory relationship. These tacit tension among the co-wives might cause increased spousal violence. As explained in Abigail Barr, Marleen Dekker, Wendy Janssens, Bereket Kebede and Berber Kramer, 2017), the polygynous co-wives and husbands are less cooperative relative to the households in societies that follows monogamous norms. Therefore, we hypothesise that polygynous households in general would be less cooperative and more conflict-prone. The likelihood of spousal violence in polygynous household should be increasing in societies that follows polygynous marital norms. We find spousal violence and polygyny is positively associated. This result is consistent with the literature and in line with our expectation. The reporting of violence ever inflicted on the women is also positively correlated with the culture of polygyny. This is consistent with the previous empirical

findings. For example, Dena Hassouneh-Phillips (2001) notes that incidence of emotional, physical and sexual violence is greater in polygynous marriages as compared to monogamous marriages. In South African context, Rachel Jewkes, Jonathan Levin, and Loveday Penn-Kekana (2002) offers further evidence on association of higher occurrence of physical and sexual violence in polygynous households. Consistent with the previous empirically established relationship, we note that coefficient on polygyny is 0.17 which is significant at 5 per cent level. This effect is large, since it represents more than 50 per cent increase over the mean. There could be three counteracting factors that explains the link between polygyny and spousal violence. First, having more co-wives signify lower status of women in the society. Wife beating in such a situation would be more likely. Second, Since polygyny is permissible in a society, the first with might had grudges against her husband marrying again. Such obstruction from the senior wife might also have caused the havoc and made the senior wife the victim of spousal violence. Third, in polygyny, the husband has open option to go to other wives in case he is unhappy with one of the wives. This may reduce the chances of beating the wife. The increased likelihood of spousal violence in a polygynous society stems from the first two factor. However, we must note there is only one community with 105 observations in which polygyny is prevalent.

E. Consanguinity

The marriage between the kins in blood relation is practiced widely in developing countries in South Asia, Africa and Middle East, thereby consanguineous marriage is an acceptable social norm despite it involves incurring risks of encountering genetic disorders and complex health hazards (A. H. Bittles & M.Black, 2010). But there are several overriding benefits of consanguineous marriage as identified by S. Anukriti and S. Dasgupta (2017). Consanguineous marriage involves lower partner search cost and yields greater match and compatibility of spouses and in-laws since they are previously known and connected through their kin network. Women can enjoy greater autonomy and higher status. Even the marriage payments might be lesser (netting-off brideprice and dowry) with lower probability of divorce in consanguineous marriages. These factors taken together might yield a beneficial effect on women and the consanguinity is expected to be negatively correlated with the incidence of spousal violence. With the sample in our analysis comprising 19 communities that permits consanguineous marriage, we find a significant and protective effect on spousal violence. The negative association between consanguinity and incidence of spousal violence is significant at

5 per cent level. This is similar to the findings of M. Al-Nsour, M. Khawaja, & G. Al-Kayyali (2009). However, in a marriage within the family, in the event of spousal violence, women's acceptance towards it might increase, as they may not find an way to vent out their misery. On an average, women tend to accept the justification for violence more in consanguineous marriages. Because the in-laws are closely related, women might find their complaints to fall in deaf ears, because near kins and relatives won't give credence to the complaints against their own nephew or niece. Eventually women give up complaining in despair and end their non-acceptance to spousal violence. It is a situation of learned helplessness. A woman suppressed and discouraged within the family in such a way that she is made to think that she has no other option but to continue with the marriage.

F. Post-marital residency rules

The tendencies among the hunter-gatherer societies to evolve the the patrilocal post-marital residency norms were identified in the early works of anthropologists (Steward, Julian Haynes,1972). Since man's role was dominant in the hunting, protecting and encountering in warfare, the norm of the newly-wed residing in the groom's family evolved. In some societies where occupational alternatives were found, especially the societies in contact with the west, altered the traditional role of men and evolved the matrilocal norms where the couple goes and lives with the bride's family. Adapting to environmental condition a flexibility was also evolved as duolocal or neolocal post-marital residency norms, where the couple finds it advantageous. The economic modelling of this traditional custom was theorised more recently (Matthew J Baker, and Joyce P Jacobsen,2006). The coefficient of patrilocality for both 'violence ever' and 'violence index; are negative and significant at 10 per cent and 5 per cent levels, respectively. The likelihood of violence would reduce by 6 percentage points if a society follows patrilocal residency norms relative to duolocality or neolocality. With reference to duolocality and neolocality, we find protective effect of patrilocal post-marital residency norms as far as occurrence of spousal violence is concerned. Intuitively, we find the result reasonable. In comparison to neolocal households, in patrilocality there are many guardians to look after the married couple, and lesser would be incidence of violence as compare to a household where only the husband and wife cohabit, in complete absence of their guardian and in-laws. In matrilocal residency norms, since the couple lives within the natal family of the wife it is unlikely that the husband will be unconstrained to inflict violence and get away with. Therefore, we do not find the coefficients on violence indicators

significant. For violence attitude, however, the coefficients are significant at 1 per cent level and large positive at 38 percentage point increase in women justifying violence in a matrilocal society. This predictions is counter-intuitive and could have resulted from the under-representation of matrilocal communities, as there are only two communities, in our sample.

III. Partner Selection Norms

G. Forced Marriage

The heterogeneity in partner selection norms that forms evolved at least ten prevalent types of marriage that takes place in the communities in our sample. Depending on degree of force and coercion involved in a marriage we construct three broad categories in which the prevalent types of marriages can be grouped, namely, (a) forced marriage, (b) arranged marriage, and (c) love marriage. The marriages by capture, intrusion and purchase are considered within the ambit of forced marriage. The marital matchmaking that involves the practices of marriage by trial, service, exchange and negotiation are categorised as arranged marriage. In societies where couples select their marital partners by way of consent, elopement, or courtship, are categorised as practicing love marriages. Only the coefficient on violence attitude dummy is marginally significant at 10 per cent level and is negatively associated with the women's acceptance to violence. The effect is small at about 9 per cent, compared to the average likelihood of 67 per cent that a women would justify or accept the violence. The probability of a women justifying violence decreases by 9 per cent in case the forced marriage partner selection norms prevail. Although, this effect is identical and marginally significant at 10 per cent level in the marginal effects estimated with a probit model (TableA2), it is not statistically significant in logit estimation (Table A3).

H. Arranged Marriage

In the arranged marriage other than the marrying couple more parties are involved. Therefore lesser conflicts are expected to occur in the arranged marriage, according to Charles M Becker, Bakhrom Mirkasimov and Susan Steiner (2017). Even if the conflicts occur in an arranged marriage, the families intervene to subside the difficulties, as they themselves negotiated the matchmaking and keen that the arranged marriage should work out well Yunas A Samad, and J J Eades (2002). The effect of prevalence of a specific partner selection norm that are classified as arranged marriage, are not statistically significant. This is possible because we do not possess data about the actual types of marriage that took place among the violent couples.

I. Love Marriage

Societies where the prevailing norm is to marry by mutual consent, elopement or courtship fall into the category of practicing love marriage. In our sample there are 43 communities where love marriage is in vogue. The partners in the love marriage are known to each other prior to their marriage and are less likely to engage into conflict with each other. Therefore, we expect there will be lesser incidence of spousal violence among the couple who had love marriage. The overall effect reflected in the violence ever as well as violence index shows a reduced effect of the prevailing norm of love marriage. Among the women in the love marriage, there could be a tendency to under report the violence as they might feel embarrassed to accept and admit the abuse of their husband and former lover. However, we do not find any statistically significant relationship between prevalence of love marriage norms and incidence or acceptance of violence.

IV. Separation Norms

J. Divorce norms

The customary norms regarding separation or dissolution of marriage comprise four major traits that signify and determine the extent to which a women's threat to end a violent and abusive marriage is credible. These are (i) divorce norms, (ii) maintenance norms, (iii) potestal rights , and (iv) remarriage norms. The categories of divorce norms define the extent to which a married couple can exercise their freedom to end a marriage (a) by mutual consent with frequent divorce rates, or (b) they require society's or family's approval, (c) divorce is rare. In comparison to the societies where there is absence of social norms regarding divorce and it is legalised, we estimate the correlation between the remaining prevailing divorce norms and occurrence of spousal violence. The estimated coefficients in societies where divorce by mutual consent is prevalent, we find significant protective effect with respect to each forms of spousal violence. The size of the effects are large when seen in comparison to the mean of the violence indices and indicators. Similar but less strong protective effects can be inferred from the coefficients with respect to the societies where marriage is a religious sacrament and divorce are rare. The separation norms might indicate whether it is feasible for the woman to exercise her rights towards ending an abusive and violent marriage, especially when she has enhanced 'outside-option' owing to her economic empowerment. The specific separation norms on the degree of ease at which spouses can opt for divorce, child custody rights, entitlement to get maintenance support after divorce, might indicate if it is socially feasible to pose a credible threat of ending the marriage if violence persists. The estimates of

linear probability model yields a marginally significant effect in terms of violence index, where society or family needs to be involved and approve the dissolution of marriage. The interpretation of these coefficients turns tricky as depending on estimation techniques, probit or logit, we get the marginal effects significant (tableA2 and tableA3), which were statistically not significant in the estimates of linear probability model. The large and significant protective effect is reflected in violence index is 49 to 52 per cent decrease in the counts of types of violence the woman was subjected to.

K. Alimony norms

Whether the husband is required by the prevailing norms to pay for subsistence of his divorced wife is captured in the alimony norms. In the societies where women are assured of their subsistence by way of alimony she is entitled to, an abused wife is unlikely to continue with the marriage. Such alimony norms in favour of women while in a cohabiting relationship may lead to stronger negotiating position for them, as their 'outside-options' improve(Marcos A Rangel, 2006). In the event the societal norms grant the abused women with her livelihood subsistence, women are less likely to tolerate the violence and justify in less and less scenarios where violence by husband should acceptable. We find the the coefficient on alimony norms for the dependent variable violence attitude index statistically significant at 1 per cent level. This effect is robust across the poisson model estimates, although the level of significance reduces to 5 per cent level.

L. Child Custody norms

The allocation of custody of the child in the event of divorce is considered the amount of marital surplus the parents can appropriate. Whether the custody allocation is contracted ex-ante or ex-post, it has several consequences on the extent to which parents would invest in their children (Imran Rasul, 2006). If social custom specifies the custody allocation norms prior to the contract of the marriage, it would incentivise parental investment that promotes child quality. In societies where the societal norms are neutral or silent about custody allocation norms, at the time of marriage breakdown, parents would involve themselves in bargaining over child custody along with property, alimony and many other things. The ex-post allocation of custody will keep parents bargaining even if the investment in their children by them is sunk. In this framework, it would be usual to anticipate, irrespective of ex-ante norms that may be assigning the child custody, parents would by and large make it a contentious issue even within marriage or prior to anticipated separation. If by traditional

custom, mother has the custodial rights of children (the marital surplus), it would be the father who would try to use violence on his wife as an instrument to terrify such that she gives up her rights to custody of the children. In the other cases, where father possess the custodial rights of children, the coefficient is only marginally significant at 10 per cent level in the linear probability models. These statistical significance of these coefficient are weak so to say, because those are no longer statistically significant in probit or logit estimates. The direct association between spousal violence and child custody norms are in cases where father has the custodial rights can therefore be disregarded.

M. Remarriage Norms

Whether or not remarriage after divorce has acceptability in the society matters a lot for the women in case she wishes to exit from an abusive relationship. A flexible and acceptable remarriage after divorce essentially enhances women's outside-option, that she might exercise to get rid of violence in her marriage. Women should enjoy a credible exit option provided she is free and flexible to marry someone without having made to suffer to social stigma after divorce. In a society that does not accept the remarriage of divorce women, the exit options are narrow and limited for women in abusive relationships, where they are compelled to withstand the spousal violence. Endowed with an exit option empowers women with credible exit options and thereby has violence reduction effects. The intensity of violence measured in terms of types of violence is inflicted on women, reduces by about 12 percentage points, which is a sizeable impact, albeit marginally statistically significant at 10 per cent level. For working women in societies with flexible and open remarriage options, the similar violence reducing effects can be observed (table 5, panel 13)

V. Lineage Norms

N.Descent norms

Anthropologists advanced a hypothesis that matrilineally is the aboriginal and earliest identifiable stage of kinship structure. The introduction of alienable properties led to gradual demise of matrilineally and transformation into patrilineality. According to Jan Vansina (1990), matrilineally was invented due to adoption of agriculture and sedentary villages that called for a institution such that there are fewer heirs when it comes to succession and inheritance. While it is difficult to establish the paternity, the maternity can be easily observed. In environments where there is high paternity uncertainty, the adoption of matrilineally is advantageous. The continuity in descent can be traced through women in

matrilineal kinship system. Matrilineally coupled with matrilocality leads women to live closer to her relatives that empowers women to gain a greater say in household bargaining framework. The male control and authority over his own children is undermined, since they belong to the lineage of the wife. Men in matrilineally faces a puzzling split of allegiance between his and his wife's lineage. When matrilineally is coupled with exogamy, the children in a marriage with a man outside her kin group belongs to the wife's lineage. The notion of male dominance and male authority over his wife and children gives rise to the matrilineal puzzle (Audrey I. Richards, A.R. Radcliffe-Brown, and D. Forde, 1950). Thus, there would be decrease in spousal cooperation in matrilineal societies. By marriage, men only gets the sexual access to his wife, but not the full authority over her or her children, whose allegiance is split between the marriage and natal kins. Under the assumption of male dominance, faced with conflicting allegiance, it is likely that husbands resort to violence as an instrument to gain control over his wife and children, and cause tension within the marriage. The coefficient on matrilineal descent, where children belongs wife's lineage, is positive for violence ever but are not statistically significant in linear probability model (Table 5, panel V). We observe however a statistically significant inverse relationship with respect to women's attitude towards justification of violence and the extent to which she justifies violence (column (3) and (4). Since women value themselves more in matrilineal societies, the tolerance of violence decreases with prevalence of matronymic descent norms.

O. Inheritance norms

In matrilineal inheritance system a pattern of ultimogeniture is observed in our sample, where the youngest daughter inherits the landed properties and they look after their parents at old age (Singh et.al. 1994). Although the ownership rests with the women, the responsibilities to management and cultivation of land is handled by men. Women's property status, as argued in Pradeep Panda and Bina Agarwal (2005), the possession of property and inheritance rights to women would signal the relative strength of women in the society and her credible exit option from an abusive relationship., Thereby, assigning women with property can deter incidence of spousal violence. In the initial estimates using linear probability model we do not find any statistically significant relationship (table 5, panel V). In poisson and negative binomial estimates (table A2 and A3), however, we find more precise effect of matrilineal inheritance norms on reduced intensity of violence as measured by violence index (column (2)). For working women in societies that follow matrilineal inheritance, we observe a

significant drop in likelihood that she would be subjected to violence.

[insert table 5]

5.3 Women's employment and Social Norms

One of the key take away from these results are the violence amplifying effects of women's economic participation. The coefficients for working status of women for both the indicators of spousal violence are positive and significant at 1% level. The increasing occurrence of violence with women taking part in a job, as reflected in the data, may result from increased reporting of violence by aggrieved women who were ever subjected to any types of violence. In essence, as women are gainfully employed, they 'bring the bacon' (R. Macmillan and R. Gartner, 1999) to the household and threaten the traditional bread-earner gender role of the husband. The husband, in accordance with the male-backlash theory, try to reimpose the dominance within the household, by inflicting violence or by threat of violence. Our findings are consistent with the general patterns of 'male-backlash' observed in Indian setting (see Y M Chin (2012), for instance). To test whether A. Aizer (2010)'s criticism about incredible 'divorce threat' model, we need to include the interaction terms for each social norms and women's working status. Since we have data on the specific culture and customs prevailing in the respective societies of the respondents, it would be possible for us to uncover the effects of several norms on women credibly exercising their 'outside-options' to get rid of an abusive relationship. The working women from communities that follows acceptable remarriage norms enjoy greater flexibility to exercise their 'outside-option'. They do not find themselves stuck in a post-divorce social stigma, especially in communities that follows matrilocal residency norms, and matrilineal inheritance. The separation norms, especially the remarriage flexibility, might indicate whether it is feasible for the woman to exercise her rights towards ending an abusive and violent marriage, especially when she has enhanced 'outside-option' owing to her economic empowerment. It might indicate if it is socially feasible to pose a credible threat of ending the marriage in the event of persistent violence. For the 'violence ever' outcome variable, we find negative and significant coefficient for interaction term of six social norms, namely, exogamy, polygyny, matrilocality, divorce prohibition, remarriage flexibility and matrilineal inheritance norms. Similar tendencies of inverse relationship is found for violence index with respect to divorce prohibition and remarriage flexibility.

[insert table 6]

6. Robustness checks

We test robustness of our results by using several estimation procedures and by expanding the sample size. To begin with, for the empirical specification in equation (1), instead of linear probability model, we experiment with the probit model for the dichotomous dependent variables, and poisson model for count data. We present the alternative estimates in table A2. The columns (1) and (3) shows the marginal effects from probit model for the dummy dependent variables. The incidence rate ratios from the poisson model is presented in columns (2) and (4) with the dependent variable as count variable. Alternatively, in tableA3, we also experiment with the logit model for columns (1) and (3), and negative binomial model for count variables, as reported in column (2) and (4). We did this because there was over-dispersion in violence index and violence attitude index data, that violates the equi-dispersion assumption of poisson model. By the likelihood ratio test we find the dispersion parameter is significantly different from zero, which justifies use of negative binomial model.

Next, we use the full sample estimates, but just keeping aside misspecified 2272 observations that could not be assigned to any ethnic identity (see the bottom row of table 1). In the restricted sample, we had used the observations with communities that had at least thirty observations. As a robustness check, we re-estimate the effect of traditional social norms on the same spousal violence and attitude indicators, as before. By doing so, we are able to figure out whether our previous results were driven by the communities that had larger representation in our sample. The results are reported in appendix tableA4 to tableA6 and are largely similar to our previous findings.

Finally, we re-estimate the equation (1) by excluding the women's working status variable, since this is a potentially endogenous variable. We report the re-estimates using linear probability model in tableA7. A comparison between table 5 and tableA7 would reveal largely the coefficients are similar or identical. Thus, we reconfirm that our results are largely unaffected.

7. Conclusion

We have investigated the link between traditional social norms as well as individual characteristics and incidence of spousal violence and women's attitude towards violence. We have carefully chosen the context of the study in the northeastern region of India, where considerable variation in terms of patriarchic and matriarchic social norms and customs can be observed. We conclude with the following three points.

First, in addition to the individual characteristics, the social norms, especially the

traditional norms regarding marriage payments, marital patterns, post-marital residency patterns, separation norms and lineage norms play a great role in determining the actual outcomes in terms of both incidence of violence and women's attitude towards acceptance of violence. We have shown how and to what extent these traditional social norms can play a role in determining the current violence experienced by women and how they are associated with the women's tolerance of violence.

Second, from the perspective of women's economic empowerment, we considered how women's working status can induce violence against them, given a particular pattern of customs are followed in a society. In the societies where brideprice is paid to acquire a mate, women are valued economically, and therefore, working women in brideprice paying societies justifies violence less. Similarly, working women face lesser probability of violence in exogamous, polygynous, consanguineous, matrilocal, matrilineal, flexible remarriage, and divorce prohibiting societies.

Third, in all the societies in our sample, the economic independence of women threaten the traditional 'bread-earning' gender-role of men and face the 'male-backlash' even when the prevailing social norms seemed tendencies to liberate women more. Even if women's bargaining power should have increased and should have endowed her with a greater say within the household, due to prevalence of traditional social norms the economic empowerment turns perilous for the working women.

These results are from a sub-section of a society where the traditional customs and social norms are still holding women in its grip from being empowered. Definitely, these results are not the finality on this important, difficult and policy-relevant link among spousal violence, women's employment and social norms. The underreporting of spousal violence is well known and could have induced measurement errors. The future research might consider dealing with the remaining methodological issues and extend the work to entire India.

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9. Tables

Table 1: Matching NFHS ethnicities to People of India Ethnographic Atlas

matching method	Number of Observations	Percentage of observations	Number of ethnicities	percentage of ethnicities
Direct matching	8372	41.37%	107	53.50%
Spelling variations	16122	79.66%	169	84.50%
differences in nomenclature	1477	7.30%	3	1.50%
Varna system	1425	7.04%	5	2.50%
Not matched/ Misspecified	2272	11.23%	...	...

Table 2: Summary Statistics of measures of Spousal Violence

	Mean	Std. Dev	Min	Max	N
Attitude towards violence					
Violence attitude	0.67	0.47	0	1	15004
Violence attitude index	1.58	1.55	0	5	13508
Violence justified if the wife					
goes out without telling	0.38	0.49	0	1	14668
neglect the children	0.58	0.49	0	1	14680
argues with the husband	0.33	0.47	0	1	14399
refuses to have sex	0.14	0.35	0	1	14048
burns food	0.18	0.39	0	1	14614
Actual violence experienced					
Violence ever	0.32	0.47	0	1	7687
Violence index	0.55	0.96	0	4	7687

Table 3a: Summary Statistics of Independent Variables

Social Norms	Mean	Std. Dev.	Min	Max	N
brideprice	0.26	0.44	0	1	15004
dowry	0.05	0.21	0	1	15004
exogamy	0.38	0.49	0	1	15004
polygyny	0.01	0.08	0	1	15004
consanguinity	0.15	0.36	0	1	15004
residency	0.27	0.62	0	2	15004
divorce	0.83	1.06	0	3	15004
alimony	0.01	0.11	0	1	15004
custody	0.47	0.70	0	2	15004
remarriage	0.38	0.49	0	1	15004
forced	0.03	0.17	0	1	15004
arranged	0.37	0.48	0	1	15004
love	0.31	0.46	0	1	15004
descent	0.11	0.31	0	1	15004
inheritance	0.13	0.33	0	1	15004

Table 3b: Summary Statistics of Independent Variables

control variables	Mean	Std. Dev.	Min	Max	N
Spousal age difference	6.12	5.13	0	49	8972
Wife's education	6.64	4.68	0	21	15003
Wealth Index	3.50	1.18	1	5	15004
Household size	5.80	2.42	1	20	15004
Husband's education	7.31	4.89	0	20	9691
Urban	1.61	0.49	0	1	15004
History of violence	0.18	0.38	0	1	9455
Family structure	1.44	0.50	0	1	14666
Alcoholic husband	0.41	0.49	0	1	8177
Alcoholic wife	0.07	0.26	0	1	8177
working status	0.43	0.50	0	1	14965

Table 4: Correlates of spousal violence

	Dependent Variable			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
Independent variable	linear probability models			
working status	0.042***	0.083***	-0.032	-0.115*
	(0.015)	(0.029)	(0.023)	(0.064)
spousal age difference	-0.001	-0.003	0.000	0.004
	(0.001)	(0.002)	(0.001)	(0.005)
wife's education (years)	-0.006***	-0.011***	-0.003*	-0.018**
	(0.001)	(0.003)	(0.002)	(0.007)
Wealth Index	-0.023***	-0.056***	-0.034***	-0.122***
	(0.009)	(0.017)	(0.010)	(0.040)
Household size	0.006*	0.017***	0.004	0.026**
	(0.003)	(0.007)	(0.003)	(0.011)
Husband's education	-0.003*	-0.005	-0.001	-0.001
	(0.001)	(0.003)	(0.002)	(0.007)
Urban	0.046**	0.105***	0.006	-0.072
	(0.018)	(0.034)	(0.017)	(0.064)
History of violence	0.222***	0.438***	0.101***	0.361***
	(0.018)	(0.042)	(0.035)	(0.117)
Family structure	0.038***	0.080***	0.009	-0.000
	(0.013)	(0.024)	(0.017)	(0.059)
Husband is alcoholic	0.112***	0.209***	0.020	0.057
	(0.013)	(0.026)	(0.014)	(0.055)
Wife is alcoholic	0.024	0.029	0.012	0.110
	(0.042)	(0.093)	(0.057)	(0.197)
Intercept	0.362***	0.590***	0.394***	1.019***
	(0.045)	(0.087)	(0.042)	(0.160)
state FE included	yes	yes	yes	yes
No. of community clusters	80	80	80	80
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.150	0.135	0.110	0.089

Clustered standard errors in parentheses. ***, **, * denote statistical significance at 1, 5, and 10 per cent levels, respectively. Linear probability model is estimated and coefficient are presented.

Table 5: Social Norms and Spousal Violence

	Dependent Variables			
	(1) Violence Ever	(2) Violence Index	(3) Violence Attitude	(4) Violence Attitude Index
	linear probability models			
	I.Marriage Payments			
Independent Variables				
Marriage payments (reference category: neither brideprice nor dowry)				
Only **brideprice**, no dowry	0.060**	0.132**	-0.070	-0.170
	(0.029)	(0.062)	(0.054)	(0.208)
Only **dowry**, no brideprice	0.119*	0.206	-0.021	-0.074
	(0.063)	(0.171)	(0.077)	(0.286)
Both **brideprice and dowry**	-0.267***	-0.488**	-0.133	-0.537
	(0.079)	(0.189)	(0.101)	(0.366)
	II. Marital Norms			
Exogamy=1, zero else	-0.063*	-0.040	0.003	-0.035
	(0.036)	(0.073)	(0.044)	(0.173)
Polygyny=1, zero else	0.170**	0.215	0.061	0.191
	(0.073)	(0.173)	(0.092)	(0.322)
Consanguinity=1, zero else	-0.044**	-0.094*	0.021	0.278**
	(0.022)	(0.049)	(0.034)	(0.107)
Post-marital Residency norms (reference category: duo/neolocal)				
Patrilocal residency norms	-0.057*	-0.134**	-0.002	-0.093
	(0.032)	(0.060)	(0.039)	(0.144)
Matrilocal residency norms	0.001	-0.003	0.384***	1.715***
	(0.089)	(0.199)	(0.145)	(0.445)
	III. Partner Selection Norms			
forced(capture/purchase/intrusio	-0.056	-0.013	-0.091*	-0.184
n) marriage=1, zero else	(0.053)	(0.120)	(0.053)	(0.203)
arranged(trial/service/exchange	0.037	-0.006	0.036	0.179
/negotiated) marriage=1, zero	(0.051)	(0.118)	(0.082)	(0.257)
love(consent/elopement/courtshi	-0.051	-0.112	0.013	0.002
p) marriage=1, zero else	(0.037)	(0.083)	(0.065)	(0.203)
	IV. Separation Norms			
Divorce Norms (reference category: Legalised/No divorce norms)				
	-0.047	-0.020	-0.024	-0.265
by mutual consent	(0.040)	(0.080)	(0.061)	(0.221)
subject to society/family's	0.051	0.172*	-0.025	-0.149
approval	(0.045)	(0.099)	(0.075)	(0.255)
Divorce is discouraged/	-0.041	-0.052	0.043	-0.097
prohibited	(0.046)	(0.089)	(0.076)	(0.271)
Wife is entitled to alimony	0.067	-0.057	-0.004	-0.576***
	(0.050)	(0.128)	(0.082)	(0.216)
Child Custody Customs (reference category: Neutral/ No ex-ante custody rules)				
Father keeps children	0.050*	0.067	0.023	-0.009
	(0.028)	(0.056)	(0.045)	(0.161)
Mother keeps children	0.092**	0.327***	-0.041	0.273
	(0.046)	(0.122)	(0.086)	(0.243)
Remarriage is acceptable=1,	-0.053	-0.126*	-0.010	-0.022
zero else	(0.034)	(0.075)	(0.050)	(0.184)
	V. Lineage Norms			
Matronymic descent=1, zero else	0.089	-0.125	-0.255*	-1.404***
	(0.113)	(0.246)	(0.134)	(0.448)
Matrilineal inheritance=1, zero	-0.083	-0.138	0.026	0.079
else	(0.058)	(0.113)	(0.076)	(0.260)
Intercept	0.580***	1.094***	0.416***	0.953***
	(0.068)	(0.129)	(0.073)	(0.211)
control variables included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
No. of community clusters	80	80	80	80
Observations	6,358	6,358	6,358	5,907
R-squared	0.158	0.143	0.120	0.105

Clustered standard errors in parentheses. ***, **, * denote statistical significance at 1, 5, and 10 per cent levels, respectively. Linear probability model is estimated and coefficients are presented.

Table 6: Women's Employment with Social Norms and Spousal Violence

	Dependent Variables			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	linear probability models			
1. Women's working status and brideprice				
Independent Variables				
Brideprice	0.019	0.074	-0.060	-0.196
	(0.032)	(0.061)	(0.047)	(0.175)
Working	0.048**	0.105***	-0.012	-0.079
	(0.018)	(0.035)	(0.024)	(0.069)
Brideprice*Working	-0.015	-0.070	-0.091**	-0.203**
	(0.025)	(0.047)	(0.035)	(0.101)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.120	0.103
2. Women's working status and dowry				
Independent Variables				
dowry	-0.030	-0.065	-0.068	-0.298*
	(0.040)	(0.116)	(0.051)	(0.164)
Working	0.046***	0.091***	-0.031	-0.117*
	(0.015)	(0.030)	(0.022)	(0.061)
Dowry*Working	-0.046	-0.082	-0.093	-0.277
	(0.034)	(0.114)	(0.100)	(0.270)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.118	0.103
3. Women's working status and Exogamy				
Independent Variables				
Exogamy	-0.035	0.014	0.041	0.113
	(0.034)	(0.071)	(0.049)	(0.182)
Working	0.060***	0.115***	-0.031	-0.108
	(0.019)	(0.039)	(0.024)	(0.083)
Exogamy*Working	-0.042*	-0.075	-0.015	-0.071
	(0.025)	(0.047)	(0.044)	(0.120)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.117	0.102

Table 6: continued

	Dependent Variables			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	linear probability models			
4. Women's working status and Polygyny				
Independent Variables				
Polygyny	0.185**	0.440**	-0.161*	-0.210
	(0.073)	(0.171)	(0.095)	(0.331)
Working	0.044***	0.089***	-0.039*	-0.138**
	(0.015)	(0.029)	(0.022)	(0.064)
Polygyny*Working	-0.022	-0.381***	0.309***	0.481***
	(0.019)	(0.036)	(0.029)	(0.090)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.118	0.102
5. Women's working status and Consanguinity				
Independent Variables				
Consanguinity	-0.013	-0.029	0.035	0.315***
	(0.030)	(0.050)	(0.036)	(0.117)
Working	0.056***	0.111***	-0.021	-0.086
	(0.014)	(0.031)	(0.023)	(0.063)
Consanguinity*Working	-0.078**	-0.152***	-0.099**	-0.305**
	(0.033)	(0.050)	(0.045)	(0.146)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.157	0.142	0.118	0.103
6. Women's working status and Post-marital Residency				
Independent Variables				
Patrilocality	-0.017	-0.077	-0.045	-0.155
	(0.044)	(0.077)	(0.035)	(0.113)
Matrilocality	0.085	0.151	0.249	1.459***
	(0.092)	(0.203)	(0.160)	(0.517)
Working	0.094***	0.151**	-0.182***	-0.448**
	(0.031)	(0.074)	(0.050)	(0.187)
Patrilocality*Working	-0.047	-0.061	0.151***	0.338*
	(0.034)	(0.079)	(0.053)	(0.196)
Matrilocality*Working	-0.124**	-0.151	0.226*	0.375
	(0.060)	(0.102)	(0.117)	(0.322)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.119	0.102

Table 6: continued

	Dependent Variables			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	linear probability models			
7.Women's working status and Forced Marriage				
Independent Variables				
Forced marriage	-0.010	0.137	-0.079	-0.055
	(0.037)	(0.084)	(0.071)	(0.223)
Working	0.045***	0.092***	-0.038*	-0.135**
	(0.015)	(0.029)	(0.023)	(0.065)
Forced marriage*Working	-0.020	-0.161	0.043	0.039
	(0.056)	(0.135)	(0.085)	(0.137)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.117	0.101
8. Women's working status and Arranged Marriage				
Independent Variables				
Arranged marriage	0.070	0.070	0.019	0.133
	(0.049)	(0.115)	(0.077)	(0.240)
Working	0.050**	0.098**	-0.002	-0.060
	(0.020)	(0.039)	(0.026)	(0.075)
Arranged marriage*Working	-0.016	-0.032	-0.095***	-0.201**
	(0.024)	(0.045)	(0.033)	(0.099)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.119	0.102
9. Women's working status and Love Marriage				
Independent Variables				
Love marriage	-0.075**	-0.172**	0.025	0.017
	(0.033)	(0.070)	(0.066)	(0.203)
Working	0.053***	0.097***	-0.033	-0.111
	(0.017)	(0.035)	(0.022)	(0.071)
Love marriage*Working	-0.028	-0.035	-0.013	-0.074
	(0.027)	(0.047)	(0.049)	(0.129)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.117	0.102

Table 6: continued

	Dependent Variables			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	linear probability models			
10. Women's working status and Divorce Norms				
Independent Variables				
Divorce by mutual consent	-0.000	0.050	-0.041	-0.315
	(0.039)	(0.080)	(0.069)	(0.220)
Needs society/family's approval	0.073	0.200*	-0.027	-0.166
	(0.050)	(0.115)	(0.078)	(0.262)
Divorce is prohibited	0.003	0.055	0.041	-0.116
	(0.051)	(0.090)	(0.075)	(0.236)
Working	0.061***	0.120***	-0.014	-0.064
	(0.020)	(0.043)	(0.021)	(0.078)
mutual divorce*Working	-0.027	-0.024	-0.020	-0.058
	(0.027)	(0.057)	(0.061)	(0.141)
social approve*Working	-0.041	-0.067	-0.042	-0.144
	(0.049)	(0.079)	(0.041)	(0.152)
divorce prohibition*working	-0.052*	-0.160**	-0.106*	-0.322**
	(0.031)	(0.063)	(0.054)	(0.155)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.142	0.118	0.103
11. Women's working status and Alimony				
Independent Variables				
remarriage acceptable	0.042	-0.127	-0.045	-0.762***
	(0.056)	(0.123)	(0.078)	(0.231)
Working	0.043***	0.084***	-0.038*	-0.140**
	(0.015)	(0.029)	(0.023)	(0.065)
Alimony*Working	0.028	0.148	0.071	0.448
	(0.094)	(0.189)	(0.071)	(0.333)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.117	0.102
12.Women's working status and Child Custody Norms				
Independent Variables				
Fathers custody	0.036	0.045	0.045	-0.005
	(0.032)	(0.064)	(0.047)	(0.158)
Mothers custody	0.095*	0.313**	-0.057	0.251
	(0.056)	(0.137)	(0.098)	(0.268)
Working	0.058***	0.107***	-0.023	-0.105
	(0.018)	(0.037)	(0.021)	(0.073)
Fathers custody*Working	-0.031	-0.059	-0.087**	-0.167
	(0.024)	(0.044)	(0.036)	(0.110)
Mothers custody*Working	-0.059	-0.063	0.055	0.079
	(0.050)	(0.077)	(0.094)	(0.237)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.119	0.102

Table 6: continued	*Dependent Variables*			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	linear probability models			
13. Women's working status and Remarriage				
Independent Variables				
remarriage acceptable	-0.008	-0.039	0.013	0.061
	(0.032)	(0.071)	(0.051)	(0.175)
Working	0.061***	0.119***	-0.024	-0.093
	(0.019)	(0.042)	(0.024)	(0.082)
remarriage*Working	-0.044*	-0.083*	-0.034	-0.107
	(0.025)	(0.047)	(0.042)	(0.114)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.142	0.117	0.102
14. Women's working status and Descent norms				
Independent Variables				
Matronymic descent	0.117	-0.119	-0.139	-1.044**
	(0.095)	(0.245)	(0.142)	(0.496)
Working	0.052***	0.095***	-0.044**	-0.137**
	(0.015)	(0.031)	(0.020)	(0.065)
Matronymic*Working	-0.078	-0.085	0.069	0.032
	(0.054)	(0.077)	(0.106)	(0.261)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.117	0.101
15. Women's working status and Inheritance norms				
Independent Variables				
Matrilineal	-0.065	-0.126	-0.005	0.051
	(0.059)	(0.110)	(0.095)	(0.293)
Working	0.053***	0.097***	-0.041**	-0.132**
	(0.015)	(0.031)	(0.020)	(0.065)
Matrilineal*Working	-0.078*	-0.090	0.034	-0.024
	(0.047)	(0.068)	(0.103)	(0.243)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
Observations	6,358	6,358	6,358	5,907
R-squared	0.156	0.141	0.117	0.101

Clustered standard errors in parentheses. ***, **, * denote statistical significance at 1, 5, and 10 per cent levels, respectively. Linear probability model is estimated and coefficient are presented.

10. Appendix

Table A1: Prevalence of Social Norms

Social Norms	Number of communities	Number of observations
I. Marriage Payments		
Brideprice	35	3459
Dowry	6	215
brideprice & dowry	5	490
Neither brideprice nor dowry	80	10840
II. Marital Norms		
Patrilocal residency norms	80	12329
Duo/neolocal residency norms	10	1256
Matrilocal residency norms	2	1419
Exogamous marital norms	43	5755
Polygynous marital norms	1	105
Consanguineous marital norms	19	2315
III.Separation Norms		
No social norms on divorce	80	8072
Divorce by mutual consent	22	3303
Divorce requires society's/family's approval	17	1762
Divorces are rare	23	1867
Neutral child custody norms	80	9847
Father gets the child custody after divorce	23	3329
Mother gets the child custody after divorce	7	1828
Alimony norms	5	181
Remarriage norms	43	5758
IV. Partner Selection Norms		
Forced marriage	5	448
Arranged marriage	56	5616
Love marriage	43	4690
V. Lineage Norms		
matronymic descent	3	1641
matrilineal inheritance	4	1893

Table A2 : Social Norms and Spousal Violence

	Dependent Variables			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	Probit	Poisson	Probit	Poisson
	marginal effects	***incidence rate ratio***	***marginal effects***	***incidence rate ratio***
Independent Variables		**I.Marriage Payments**		
Marriage payments (reference category: neither brideprice nor dowry)				
Only **brideprice**, no dowry	0.078**	0.203	-0.072	-0.120
	(0.039)	(0.172)	(0.063)	(0.121)
Only **dowry**, no brideprice	0.139**	1.050***	-0.026	-0.075
	(0.058)	(0.287)	(0.080)	(0.195)
Both **brideprice and dowry**	-0.332***	-2.456***	-0.117	-0.365
	(0.087)	(0.457)	(0.107)	(0.234)
		II. Marital Norms		
Exogamy=1, zero else	-0.074**	-0.168	0.010	-0.050
	(0.034)	(0.158)	(0.047)	(0.104)
Polygyny=1, zero else	0.144**	0.515	0.063	0.246
	(0.065)	(0.330)	(0.094)	(0.252)
Consanguinity=1, zero else	-0.036	-0.096	0.017	0.169***
	(0.023)	(0.099)	(0.033)	(0.065)
Post-marital Residency norms (reference category: duo/neolocal)				
Patrilocal residency norms	-0.071*	-0.514***	-0.002	-0.087
	(0.036)	(0.116)	(0.039)	(0.089)
Matrilocal residency norms	-0.000	-0.164	0.252***	1.490***
	(0.100)	(0.448)	(0.077)	(0.351)
		III. Partner Selection Norms		
forced(capture/purchase/intrusio	-0.044	0.173	-0.094*	-0.143
n) marriage=1, zero else	(0.049)	(0.283)	(0.057)	(0.117)
arranged(trial/service/exchange/	0.053	0.262	0.031	0.135
negotiated) marriage=1, zero else	(0.050)	(0.242)	(0.081)	(0.234)
love(consent/elopement/courtshi	-0.057	-0.142	0.019	-0.000
p) marriage=1, zero else	(0.039)	(0.188)	(0.066)	(0.121)
		IV. Separation Norms		
Divorce Norms (reference category: Legalised/No divorce norms)				
by mutual consent	-0.067	-0.487**	-0.022	-0.197
	(0.043)	(0.235)	(0.061)	(0.207)
subject to society/family's	0.083*	0.334	-0.027	-0.147
approval	(0.046)	(0.210)	(0.074)	(0.217)
Divorce is discouraged/	-0.053	-0.465*	0.043	-0.101
prohibited	(0.048)	(0.241)	(0.074)	(0.223)
Wife is entitled to alimony=1,	0.040	-0.276	-0.000	-0.341**
zero else	(0.055)	(0.349)	(0.078)	(0.164)
Child Custody Customs (reference category: Neutral/ No ex-ante custody rules)				
Father keeps children	0.056	0.095	0.022	0.029
	(0.036)	(0.152)	(0.049)	(0.090)
Mother keeps children	0.110**	0.739**	-0.056	0.199
	(0.053)	(0.330)	(0.091)	(0.162)
Remarriage is acceptable=1,	-0.079**	-0.427***	-0.009	0.011
zero else	(0.037)	(0.165)	(0.055)	(0.123)
		V. Lineage Norms		
Matronymic descent=1, zero else	0.117	-0.897*	-0.232*	-1.278***
	(0.131)	(0.526)	(0.135)	(0.329)
Matrilineal inheritance=1, zero	-0.088	-0.610***	0.034	0.062
else	(0.059)	(0.237)	(0.080)	(0.147)
Intercept	0.354	0.468**	-0.192	-0.124
	(0.222)	(0.215)	(0.223)	(0.155)
control variables included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
No. of community clusters	80	80	80	80
Observations	6,358	6,358	6,358	5,907
Pseudo R-square				

Clustered standard errors in parentheses. ***, **, * denote statistical significance at 1, 5, and 10 per cent levels, respectively. Probit marginal effects are presented in columns 1 and 3. Poisson incidence rate rations are reported in columns 2 and 4.

Table A3 : Social Norms and Spousal Violence

	Dependent Variables			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	logit	negative binomial	logit	negative binomial
	marginal effects	***incidence rate ratio***	***marginal effects***	***incidence rate ratio***
Independent Variables		**I.Marriage Payments**		
Marriage payments (reference category: neither brideprice nor dowry)				
Only **brideprice**, no dowry	0.075*	0.269	-0.073	-0.113
	(0.040)	(0.196)	(0.062)	(0.114)
Only **dowry**, no brideprice	0.136**	1.081***	-0.026	-0.058
	(0.057)	(0.302)	(0.077)	(0.185)
Both **brideprice and dowry**	-0.341***	-2.481***	-0.112	-0.370*
	(0.090)	(0.508)	(0.103)	(0.221)
		II. Marital Norms		
Exogamy=1, zero else	-0.077**	-0.137	0.011	-0.039
	(0.033)	(0.161)	(0.047)	(0.099)
Polygyny=1, zero else	0.145**	0.623*	0.059	0.221
	(0.064)	(0.329)	(0.096)	(0.255)
Consanguinity=1, zero else	-0.038	-0.113	0.018	0.173***
	(0.024)	(0.101)	(0.034)	(0.064)
Post-marital Residency norms (reference category: duo/neolocal)				
Patrilocal residency norms	-0.074**	-0.528***	-0.001	-0.085
	(0.038)	(0.118)	(0.038)	(0.084)
Matrilocal residency norms	0.011	-0.395	0.242***	1.467***
	(0.103)	(0.420)	(0.075)	(0.352)
		III. Partner Selection Norms		
forced(capture/purchase/intrusion)	-0.041	0.142	-0.088	-0.127
marriage=1, zero else	(0.049)	(0.271)	(0.057)	(0.118)
arranged(trial/service/exchange/n	0.061	0.149	0.029	0.123
egotiated) marriage=1, zero else	(0.050)	(0.233)	(0.082)	(0.234)
love(consent/elopement/courtship)	-0.062	-0.046	0.018	0.004
marriage=1, zero else	(0.039)	(0.187)	(0.067)	(0.122)
		IV. Separation Norms		
Divorce Norms (reference category: Legalised/No divorce norms)				
by mutual consent	-0.065	-0.521**	-0.022	-0.206
	(0.042)	(0.235)	(0.060)	(0.203)
subject to society/family's	0.091**	0.276	-0.027	-0.163
approval	(0.045)	(0.217)	(0.075)	(0.214)
Divorce is discouraged/ prohibited	-0.047	-0.533**	0.040	-0.118
	(0.048)	(0.260)	(0.073)	(0.220)
Wife is entitled to alimony=1,	0.031	-0.135	-0.002	-0.370**
zero else	(0.057)	(0.411)	(0.080)	(0.179)
Child Custody Customs (reference category: Neutral/ No ex-ante custody rules)				
Father keeps children	0.054	0.121	0.022	0.028
	(0.036)	(0.170)	(0.049)	(0.087)
Mother keeps children	0.113**	0.666*	-0.058	0.227
	(0.055)	(0.379)	(0.092)	(0.165)
Remarriage is acceptable=1, zero	-0.083**	-0.415**	-0.006	0.019
else	(0.038)	(0.182)	(0.052)	(0.113)
		V. Lineage Norms		
Matronymic descent=1, zero else	0.113	-0.739	-0.227*	-1.294***
	(0.135)	(0.589)	(0.131)	(0.345)
Matrilineal inheritance=1, zero	-0.095	-0.556**	0.035	0.065
else	(0.058)	(0.254)	(0.080)	(0.142)
control variables included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.321	0.553	0.672	1.584
No. of community clusters	80	80	80	80
Observations	6,358	6,358	6,358	5,907
Pseudo R-square				

Clustered standard errors in parentheses. ***, **, * denote statistical significance at 1, 5, and 10 per cent levels, respectively. Logit marginal effects are presented in columns 1 and 3. Negative binomial incidence rate ratios are reported in columns 2 and 4. Results from Poisson are robust in Negative binomial.

Table A4: Correlates of spousal violence (Full Sample)

	Dependent Variable			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
Independent variable	linear probability models			
working status	0.045***	0.089***	-0.022	-0.080
	(0.013)	(0.027)	(0.021)	(0.059)
spousal age difference	-0.001	-0.002	0.001	0.003
	(0.001)	(0.002)	(0.001)	(0.004)
wife's education (years)	-0.006***	-0.012***	-0.004**	-0.019***
	(0.001)	(0.003)	(0.001)	(0.006)
Wealth Index	-0.028***	-0.061***	-0.034***	-0.132***
	(0.008)	(0.015)	(0.009)	(0.035)
Household size	0.007***	0.021***	0.005*	0.027**
	(0.003)	(0.006)	(0.003)	(0.010)
Husband's education	-0.002*	-0.006**	-0.002	-0.004
	(0.001)	(0.003)	(0.002)	(0.006)
Urban	0.042**	0.083**	0.003	-0.063
	(0.017)	(0.034)	(0.016)	(0.056)
History of violence	0.230***	0.457***	0.099***	0.357***
	(0.017)	(0.041)	(0.030)	(0.100)
Family structure	0.045***	0.100***	0.014	0.013
	(0.011)	(0.022)	(0.015)	(0.051)
Husband is alcoholic	0.127***	0.246***	0.030**	0.076
	(0.013)	(0.026)	(0.012)	(0.048)
Wife is alcoholic	0.050	0.159	0.006	0.095
	(0.042)	(0.105)	(0.051)	(0.174)
Intercept	0.328***	0.540***	0.394***	1.098***
	(0.040)	(0.076)	(0.038)	(0.143)
state FE included	yes	yes	yes	yes
No. of community clusters	187	187	187	187
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.154	0.143	0.134	0.107

Clustered standard errors in parentheses. ***, **, * denote statistical significance at 1, 5, and 10 per cent levels, respectively. Linear probability model is estimated and coefficient are presented.

Table A5: Social Norms and Spousal Violence (Full Sample)

	Dependent Variables			
	(1) Violence Ever	(2) Violence Index	(3) Violence Attitude	(4) Violence Attitude Index
	linear probability models			
	I.Marriage Payments			
Independent Variables				
Marriage payments (reference category: neither brideprice nor dowry)				
Only **brideprice**, no dowry	0.051**	0.141***	-0.050	-0.053
	(0.025)	(0.052)	(0.041)	(0.159)
Only **dowry**, no brideprice	0.046	0.134	-0.053	-0.153
	(0.040)	(0.089)	(0.043)	(0.161)
Both **brideprice and dowry**	-0.205***	-0.456***	-0.102	-0.474**
	(0.048)	(0.101)	(0.062)	(0.232)
	II. Marital Norms			
Exogamy=1, zero else	-0.056*	-0.042	0.009	-0.088
	(0.031)	(0.062)	(0.036)	(0.140)
Polygyny=1, zero else	0.103	0.094	0.053	0.146
	(0.073)	(0.159)	(0.074)	(0.254)
Consanguinity=1, zero else	-0.038*	-0.090*	0.013	0.214*
	(0.021)	(0.049)	(0.032)	(0.109)
Post-marital Residency norms (reference category: duo/neolocal)				
Patrilocal residency norms	-0.068**	-0.167***	-0.010	-0.052
	(0.033)	(0.063)	(0.038)	(0.141)
Matrilocal residency norms	-0.061	-0.132	0.210**	0.991***
	(0.087)	(0.179)	(0.106)	(0.353)
	III. Partner Selection Norms			
forced(capture/purchase/intrusio	-0.074	-0.056	-0.097*	-0.279
n) marriage=1, zero else	(0.053)	(0.119)	(0.049)	(0.173)
arranged(trial/service/exchange/	-0.032	-0.133	-0.050	-0.122
negotiated) marriage=1, zero else	(0.047)	(0.095)	(0.056)	(0.174)
love(consent/elopement/courtshi	-0.030	-0.063	0.053	0.113
p) marriage=1, zero else	(0.031)	(0.066)	(0.048)	(0.156)
	IV. Separation Norms			
Divorce Norms (reference category: Legalised/No divorce norms)				
	0.018	0.062	0.001	-0.125
by mutual consent	(0.041)	(0.070)	(0.039)	(0.132)
subject to society/family's	0.090**	0.220***	-0.002	0.011
approval	(0.045)	(0.083)	(0.047)	(0.165)
Divorce is discouraged/	0.027	0.045	0.058	0.051
prohibited	(0.046)	(0.077)	(0.047)	(0.171)
Wife is entitled to alimony	0.103*	0.073	-0.008	-0.324
	(0.055)	(0.143)	(0.069)	(0.252)
Child Custody Customs (reference category: Neutral/ No ex-ante custody rules)				
Father keeps children	0.034	0.045	0.011	-0.026
	(0.026)	(0.053)	(0.037)	(0.130)
Mother keeps children	0.031	0.138	-0.073	0.026
	(0.052)	(0.135)	(0.069)	(0.214)
Remarriage is acceptable=1,	-0.037	-0.090	0.026	0.104
zero else	(0.029)	(0.062)	(0.041)	(0.147)
	V. Lineage Norms			
Matronymic descent=1, zero else	0.054	-0.125	-0.101	-0.441
	(0.097)	(0.219)	(0.111)	(0.493)
Matrilineal inheritance=1, zero	-0.076*	-0.114	0.009	-0.147
else	(0.042)	(0.090)	(0.058)	(0.258)
Intercept	0.414***	0.755***	0.403***	1.158***
	(0.055)	(0.108)	(0.054)	(0.189)
control variables included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
No. of community clusters	187	187	187	187
Observations	7,596	7,596	7,597	7,107
R-squared	0.161	0.150	0.143	0.120

Clustered standard errors in parentheses. ***, **, * denote statistical significance at 1, 5, and 10 per cent levels, respectively. Linear probability model is estimated and coefficients are presented.

Table A6: Women's Employment with Social Norms and Spousal Violence (Full Sample)

	Dependent Variables			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	linear probability models			
1. Women's working status and brideprice				
Independent Variables				
Brideprice	0.028	0.098*	-0.023	-0.016
	(0.029)	(0.057)	(0.037)	(0.140)
Working	0.053***	0.112***	-0.002	-0.039
	(0.015)	(0.032)	(0.021)	(0.062)
Brideprice*Working	-0.024	-0.080*	-0.100***	-0.246**
	(0.023)	(0.047)	(0.033)	(0.097)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.149	0.143	0.119
2. Women's working status and dowry				
Independent Variables				
dowry	-0.027	-0.033	-0.077*	-0.291**
	(0.036)	(0.090)	(0.041)	(0.134)
Working	0.051***	0.101***	-0.023	-0.086
	(0.013)	(0.028)	(0.019)	(0.054)
Dowry*Working	-0.065**	-0.135	-0.047	-0.177
	(0.031)	(0.088)	(0.102)	(0.301)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.149	0.142	0.119
3. Women's working status and Exogamy				
Independent Variables				
Exogamy	-0.022	0.012	0.055	0.081
	(0.031)	(0.064)	(0.041)	(0.149)
Working	0.061***	0.116***	-0.017	-0.058
	(0.016)	(0.035)	(0.021)	(0.071)
Exogamy*Working	-0.042*	-0.068	-0.026	-0.118
	(0.023)	(0.044)	(0.040)	(0.107)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.148	0.141	0.118

Table A6: continued

	Dependent Variables			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	linear probability models			
4. Women's working status and Polygyny				
Independent Variables				
Polygyny	0.147**	0.333**	-0.128*	-0.197
	(0.064)	(0.154)	(0.067)	(0.231)
Working	0.048***	0.096***	-0.028	-0.101*
	(0.013)	(0.027)	(0.020)	(0.058)
Polygyny*Working	-0.061*	-0.374***	0.278***	0.461***
	(0.033)	(0.060)	(0.035)	(0.101)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.148	0.142	0.118
5. Women's working status and Consanguinity				
Independent Variables				
Consanguinity	-0.005	-0.016	0.041	0.288**
	(0.029)	(0.048)	(0.033)	(0.114)
Working	0.060***	0.119***	-0.010	-0.052
	(0.012)	(0.029)	(0.020)	(0.057)
Consanguinity*Working	-0.091***	-0.184***	-0.112**	-0.326**
	(0.030)	(0.051)	(0.043)	(0.142)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.161	0.149	0.142	0.119
6. Women's working status and Post-marital Residency				
Independent Variables				
Patrilocality	-0.032	-0.108	-0.062*	-0.131
	(0.043)	(0.079)	(0.035)	(0.113)
Matrilocality	0.031	0.060	0.101	0.867**
	(0.090)	(0.173)	(0.130)	(0.422)
Working	0.086***	0.148*	-0.174***	-0.387*
	(0.031)	(0.078)	(0.052)	(0.202)
Patrilocality*Working	-0.035	-0.050	0.153***	0.311
	(0.032)	(0.082)	(0.054)	(0.208)
Matrilocality*Working	-0.116*	-0.161	0.218*	0.326
	(0.059)	(0.105)	(0.118)	(0.333)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.148	0.143	0.118

Table A6: continued

	Dependent Variables			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	linear probability models			
7.Women's working status and Forced Marriage				
Independent Variables				
Forced marriage	-0.018	0.112	-0.073	-0.110
	(0.035)	(0.085)	(0.067)	(0.187)
Working	0.048***	0.098***	-0.027	-0.098*
	(0.013)	(0.027)	(0.020)	(0.059)
Forced marriage*Working	-0.030	-0.174	0.027	0.013
	(0.059)	(0.143)	(0.083)	(0.127)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.148	0.141	0.118
8. Women's working status and Arranged Marriage				
Independent Variables				
Arranged marriage	0.007	-0.030	-0.066	-0.134
	(0.042)	(0.076)	(0.049)	(0.153)
Working	0.056***	0.106***	0.004	-0.029
	(0.017)	(0.035)	(0.022)	(0.064)
Arranged marriage*Working	-0.025	-0.037	-0.086***	-0.196**
	(0.021)	(0.041)	(0.031)	(0.093)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.148	0.143	0.118
9. Women's working status and Love Marriage				
Independent Variables				
Love marriage	-0.042	-0.107*	0.056	0.086
	(0.030)	(0.061)	(0.050)	(0.154)
Working	0.058***	0.109***	-0.022	-0.076
	(0.015)	(0.033)	(0.018)	(0.060)
Love marriage*Working	-0.039	-0.054	-0.013	-0.075
	(0.024)	(0.044)	(0.044)	(0.120)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.148	0.141	0.118

Table A6: continued

	Dependent Variables			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	linear probability models			
10. Women's working status and Divorce Norms				
Independent Variables				
Divorce by mutual consent	0.045	0.112	-0.009	-0.124
	(0.044)	(0.078)	(0.049)	(0.148)
Needs society/family's approval	0.090*	0.207**	-0.002	0.023
	(0.051)	(0.097)	(0.050)	(0.181)
Divorce is prohibited	0.047	0.121	0.053	0.067
	(0.049)	(0.085)	(0.049)	(0.164)
Working	0.067***	0.128***	-0.000	-0.013
	(0.017)	(0.038)	(0.019)	(0.066)
mutual divorce*Working	-0.042*	-0.048	-0.039	-0.121
	(0.024)	(0.053)	(0.060)	(0.137)
social approve*Working	-0.041	-0.048	-0.059	-0.205
	(0.047)	(0.082)	(0.038)	(0.141)
divorce prohibition*working	-0.066**	-0.181***	-0.109**	-0.359**
	(0.030)	(0.063)	(0.052)	(0.148)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.149	0.142	0.119
11. Women's working status and Alimony				
Independent Variables				
Alimony	0.104*	0.059	-0.033	-0.421
	(0.062)	(0.147)	(0.064)	(0.265)
Working	0.047***	0.092***	-0.027	-0.100*
	(0.013)	(0.027)	(0.020)	(0.059)
Alimony*Working	-0.025	0.062	0.037	0.180
	(0.091)	(0.173)	(0.076)	(0.393)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.148	0.141	0.118
12.Women's working status and Child Custody Norms				
Independent Variables				
Fathers custody	0.037	0.047	0.048	0.036
	(0.031)	(0.063)	(0.041)	(0.134)
Mothers custody	0.046	0.133	-0.069	0.067
	(0.059)	(0.146)	(0.073)	(0.208)
Working	0.064***	0.119***	-0.008	-0.046
	(0.015)	(0.034)	(0.018)	(0.062)
Fathers custody*Working	-0.046**	-0.086*	-0.107***	-0.245**
	(0.021)	(0.045)	(0.035)	(0.107)
Mothers custody*Working	-0.074	-0.087	0.030	-0.025
	(0.047)	(0.072)	(0.092)	(0.233)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.148	0.143	0.118

Table A6: continued

	Dependent Variables			
	(1)	(2)	(3)	(4)
	Violence Ever	Violence Index	Violence Attitude	Violence Attitude Index
	linear probability models			
13. Women's working status and Remarriage				
Independent Variables				
remarriage acceptable	-0.004	-0.025	0.051	0.204
	(0.032)	(0.067)	(0.043)	(0.145)
Working	0.063***	0.122***	-0.009	-0.037
	(0.016)	(0.037)	(0.021)	(0.070)
remarriage*Working	-0.046**	-0.082*	-0.048	-0.175*
	(0.023)	(0.044)	(0.039)	(0.102)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.148	0.141	0.118
14. Women's working status and Descent norms				
Independent Variables				
Matronymic descent	0.071	-0.128	-0.061	-0.345
	(0.093)	(0.217)	(0.117)	(0.476)
Working	0.055***	0.102***	-0.031*	-0.095
	(0.013)	(0.029)	(0.018)	(0.059)
Matronymic*Working	-0.087	-0.099	0.053	-0.029
	(0.053)	(0.075)	(0.105)	(0.264)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.148	0.141	0.118
15. Women's working status and Inheritance norms				
Independent Variables				
Matrilineal	-0.043	-0.086	0.007	-0.102
	(0.047)	(0.088)	(0.078)	(0.283)
Working	0.056***	0.104***	-0.028	-0.093
	(0.013)	(0.029)	(0.018)	(0.059)
Matrilineal*Working	-0.084*	-0.105	0.021	-0.044
	(0.045)	(0.066)	(0.102)	(0.235)
controls included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
Observations	7,596	7,596	7,597	7,107
R-squared	0.160	0.148	0.141	0.118

Clustered standard errors in parentheses. ***, **, * denote statistical significance at 1, 5, and 10 per cent levels, respectively. Linear probability model is estimated and coefficient are presented.

Table A7: Social Norms and Spousal Violence

	Dependent Variables			
	(1) Violence Ever	(2) Violence Index	(3) Violence Attitude	(4) Violence Attitude Index
	linear probability models			
	I.Marriage Payments			
Independent Variables				
Marriage payments (reference category: neither brideprice nor dowry)				
Only **brideprice**, no dowry	0.060**	0.131**	-0.069	-0.167
	(0.030)	(0.063)	(0.056)	(0.216)
Only **dowry**, no brideprice	0.126**	0.231	-0.017	-0.063
	(0.061)	(0.166)	(0.078)	(0.291)
Both **brideprice and dowry**	-0.269***	-0.504***	-0.141	-0.561
	(0.077)	(0.184)	(0.102)	(0.371)
	II. Marital Norms			
Exogamy=1, zero else	-0.063*	-0.036	0.006	-0.023
	(0.036)	(0.072)	(0.044)	(0.175)
Polygyny=1, zero else	0.170**	0.212	0.058	0.182
	(0.072)	(0.173)	(0.093)	(0.327)
Consanguinity=1, zero else	-0.045**	-0.096*	0.020	0.278**
	(0.022)	(0.049)	(0.034)	(0.109)
Post-marital Residency norms (reference category: duo/neolocal)				
Patrilocal residency norms	-0.057*	-0.134**	-0.002	-0.092
	(0.032)	(0.060)	(0.039)	(0.146)
Matrilocal residency norms	0.019	0.039	0.370**	1.669***
	(0.089)	(0.202)	(0.145)	(0.445)
	III. Partner Selection Norms			
forced(capture/purchase/intrusion	-0.058	-0.015	-0.087	-0.170
) marriage=1, zero else	(0.053)	(0.120)	(0.054)	(0.208)
arranged(trial/service/exchange/	0.038	0.001	0.036	0.176
negotiated) marriage=1, zero else	(0.051)	(0.118)	(0.083)	(0.260)
love(consent/elopement/courtship	-0.053	-0.115	0.015	0.007
) marriage=1, zero else	(0.037)	(0.084)	(0.065)	(0.205)
	IV. Separation Norms			
Divorce Norms (reference category: Legalised/No divorce norms)				
by mutual consent	-0.047	-0.024	-0.026	-0.272
	(0.038)	(0.079)	(0.062)	(0.225)
subject to society/family's	0.046	0.161	-0.026	-0.150
approval	(0.044)	(0.100)	(0.076)	(0.259)
Divorce is discouraged/	-0.041	-0.055	0.042	-0.102
prohibited	(0.044)	(0.089)	(0.077)	(0.276)
Wife is entitled to alimony	0.060	-0.074	0.003	-0.553**
	(0.053)	(0.134)	(0.084)	(0.217)
Child Custody Customs (reference category: Neutral/ No ex-ante custody rules)				
Father keeps children	0.051*	0.072	0.021	-0.016
	(0.027)	(0.055)	(0.046)	(0.168)
Mother keeps children	0.097**	0.340***	-0.043	0.270
	(0.047)	(0.125)	(0.084)	(0.240)
Remarriage is acceptable=1,	-0.054	-0.132*	-0.013	-0.030
zero else	(0.034)	(0.074)	(0.050)	(0.188)
	V. Lineage Norms			
Matronymic descent=1, zero else	0.075	-0.163	-0.250*	-1.383***
	(0.111)	(0.244)	(0.136)	(0.452)
Matrilineal inheritance=1, zero	-0.078	-0.122	0.026	0.072
else	(0.057)	(0.111)	(0.077)	(0.267)
Intercept	0.444***	0.790***	0.378***	1.062***
	(0.061)	(0.120)	(0.059)	(0.199)
control variables included	yes	yes	yes	yes
state FE included	yes	yes	yes	yes
mean dependent variable	0.325	0.561	0.643	1.504
No. of community clusters	80	80	80	80
Observations	6,368	6,368	6,368	5,917
R-squared	0.156	0.141	0.118	0.103

Clustered standard errors in parentheses. ***, **, * denote statistical significance at 1, 5, and 10 per cent levels, respectively. Linear probability model is estimated and coefficients are re-estimated by excluding women's working status, which is a potentially endogenous variable.