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The Relationship Between Marriage Payments and Domestic Violence in India

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The Relationship Between Marriage Payments and Domestic Violence in India

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Bachelor of Arts
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2013

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An abstract of
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Abstract

The Relationship Between Marriage Payments and Domestic Violence in India

By Kathleen M. Gibson

Background. The respective harmful and protective associations between dowry and bridewealth traditions and domestic violence in India have been established. However, few studies have addressed the relationship between bridewealth size and domestic violence, and little is known of the relationship between dowry size and sexual violence. This is problematic because domestic violence likelihood may be experienced differently across varying sizes of bridewealth and dowry payments. Higher dowry payment sizes and higher levels of women's autonomy have been associated with lower reporting of physical violence. We expect that that higher payments of dowry will be associated with lower reporting of domestic violence, and that higher payments of bridewealth will be associated with higher reporting of domestic violence.

Objectives. To determine the relationship between estimated village bridewealth and dowry sizes, and experiences of domestic violence among married Indian women.

Methods. Data from the India Human Development Survey (2011-12) and domestic violence module of the National Family Health Survey (2005-06) were combined to provide information on village marriage practices and reports of physical and sexual violence experiences of married Indian women ages 15-49, on a sample size of 68,484 women. Descriptive statistics, chi-square, t-tests, and logistic regression analyses were conducted to identify these associations.

Results. Higher bridewealth payments are 72% more likely to result in experiences of any violence, 20% more likely to result in severe physical violence, and 73% less likely to result in sexual violence. Higher dowry payments are 18% less likely to result in experiences of any violence, and 64% more likely to result in sexual violence. Associations between dowry and severe physical violence were not significant.

Conclusion. Results of associations between marriage payment size and domestic violence were consistent with our hypotheses on reports of physical violence and any violence, however not for reports of sexual violence. These findings suggest that physical and sexual domestic violence is experienced differently across varying sizes of bridewealth and dowry payments. Our results have implications for public health policy related to the regulation of marriage payment laws, and interventions targeted at the community level addressing social norms surrounding marriage practices and violence.

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INTRODUCTION

Domestic violence is a form of physical, sexual, or psychological violence committed by one person living in a household against another, commonly occurring between intimate partners. Violent acts may include the threat of harm, physical aggression, sexual coercion, psychological abuse, or controlling behaviors that occur in public or in private life(Kapoor & United Nations Children's Fund, 2000; "WHO: WORLD REPORT ON VIOLENCE AND HEALTH," 2002). Domestic violence is a violation of human rights on a scale of global proportions(Kapoor & United Nations Children's Fund, 2000). Due to recent estimates of dowry related violence reporting 25,000 death or serious injuries per year, considerable attention has been drawn to domestic violence in India("Understanding and Addressing Violence Against Women," 2012). Studies show that violence against Indian women is normalized, justified, and wide-spread(Rani & Bonu, 2009). It is estimated that 1 in 3 Indian women have experienced some form of physical and/or sexual domestic violence in their lifetime(International), however it is difficult to grasp the full magnitude of this problem due to the underreporting of crimes of this nature(Koss, 1992).

Exposure to domestic violence perpetrated by an intimate partner can have long lasting physical, psychological, and social health consequences. Common conditions associated with abuse include depression, anxiety, and suicidal behaviors; sexually transmitted infections, unwanted pregnancy, and sexual dysfunction; restricted access to resources and services, and isolation from social networks(Krug, Mercy, Dahlberg, & Zwi, 2002).

Domestic violence is not experienced equally throughout India. Studies show that differences in kinship structure, such as marriage customs and marriage transactions, can impact the likelihood of a woman to experience spousal violence(Goody & Tambiah, 1973; Mogford, 2011; Sharma & Hirschon, 1984; Srinivasan & Bedi, 2007).

There are two types of marriage transactions practiced in India known as dowry and bridewealth, or bride-price. The most common marriage payment is the dowry. A dowry is the transfer of property or wealth from the family of the bride to that of the groom upon marriage (Anderson, 2007). The dowry has been implicated in numerous crimes of violence against wives in India. In 2011, it was linked to 8,618 female homicides, 3,239 suicides, and 99,135 cases of cruel treatment. The main cause of dowry violence is dissatisfaction with the size of the dowry provided. A bride that provides an unsatisfactory dowry may face harassment, maltreatment, and in extreme situations, suicide or murder by her in-laws (Banerjee, 2014; Onyango, 2016).

In the instance of bridewealth, property or wealth is transferred from the groom's family to the bride's upon marriage (Anderson, 2007). This tradition was most commonly practiced in the southern states of India (Goody & Tambiah, 1973; Uberoi & Madan, 1998), however in recent years a transition from bridewealth to dowry has taken place (Caldwell, Reddy, & Caldwell, 1983; Srinivasan, 2005). Research on bridewealth tends to focus on associations with greater status of women, and not on domestic violence. Studies in India have been conducted that attempt to link bridewealth to domestic violence with the use of variables related to women's status such as autonomy, or the ability to make decisions for one's self (Bourey, Stephenson, & Hindin, 2013; Dyson & Moore, 1983; Sabarwal, Santhya, & Jejeebhoy, 2014; Tambiah, 1989). Women living in societies that practice bridewealth in India experience greater economic and social autonomy and less restrictions on behavior and sexuality compared to those living in dowry societies (Dyson & Moore, 1983; Goody & Tambiah, 1973; Uberoi & Madan, 1998). These forms of independence have been associated with a lower risk of experiencing physical spousal violence, and an increased risk of experiencing sexual spousal violence (Bourey et al., 2013; Dyson & Moore, 1983; Sabarwal et al., 2014; Tambiah, 1989).

Many studies have noted the relationship between higher payments of dowry and lower experience of physical domestic violence in India (Banerjee, 2014; Rao, 1993; Samuel, 2002; Wojcicki,

van der Straten, & Padian, 2010), however there is a gap in the literature examining the association between bridewealth payments and domestic violence. We hypothesize that women living in villages where higher bridewealth payments are made will be associated with a higher likelihood of experiencing domestic violence. We also hypothesize that women living in villages where higher dowry payments are made will be associated with a lower likelihood of experiencing violence. Despite evidence building in African literature on the qualitative effects and perceptions of bridewealth on violence (Hague, Thiara, & Turner, 2011; Tambiah, 1989), little effort has been made to quantify the relationship between bridewealth payment size and domestic violence against women in India. Understanding the direction and magnitude of a woman's likelihood to experience violence when bridewealth payments are made will be important for two reasons. Primarily, this study will provide insight on relationships rarely explored in India. Secondly, access to this information could lead to implications for public health policy and interventions surrounding domestic violence prevention.

Articles call for the exploration of the link between bridewealth and domestic violence (Fuseini, 2013), however few have addressed this link using quantitative data. This paper will explore the relationship between village bridewealth payment size and experiences of any, physical, or sexual domestic violence against married women in India. The objectives of this study are:

1. Determine the relationship between estimated village bridewealth payments and experiences of domestic violence including: any violence, severe physical violence, and sexual violence among married Indian women.
2. Determine the relationship between estimated village dowry payments and experiences of domestic violence including: any violence, severe physical violence, and sexual violence among married Indian women.

REVIEW OF THE LITERATURE

Domestic Violence

Domestic violence is a form of cruelty and control committed by one person living in a household against another. This may include violence against children, the elderly, or an intimate partner such as a significant other or spouse. Typically, domestic violence manifests in the form of physical, sexual, or emotional abuse (Kapoor & United Nations Children's Fund, 2000). In a recent multi-country study conducted by WHO, domestic violence was found to be widespread across the 10 countries evaluated. Between 13-61% of women who had ever been in an intimate relationship reported experiences of physical violence, 4-49% reported severely physical experiences of violence, and 6-59% reported sexual violence ("Understanding and Addressing Violence Against Women," 2012).

A study conducted in 2012 using NFHS-III data demonstrated the issue of domestic violence in India. Approximately 31% of ever-married Indian women reported experiencing physical violence 12 months prior to being interviewed, while 8.3% reported experiences of sexual violence. Key risk factors associated with spousal abuse included low household wealth, urban residence, young wife's age at marriage, wife's employment, and beliefs that wife beating was justified. Education was discovered to be a risk factor for sexual violence, but not physical violence (Kimuna, Djamba, Ciciurkaite, & Cherukuri, 2013).

Another article addressing the prevalence of domestic violence in India found that 31% of ever-married women had experienced less severe physical violence, 10% had experienced severe physical violence, and 8% had experienced sexual violence. The study also identified women in scheduled castes, Muslim women, and women with controlling husbands to be at higher risk for domestic violence (Dalal & Lindqvist, 2012).

Physical Violence

Physical violence is a type of domestic violence that may include abusive actions ranging from slaps, punches, and kicks to burns, assaults with a weapon, or homicide(Watts & Zimmerman, 2002). Events such as these are also commonly referred to as, "wife-beating," or "battering." Health consequences related to physical violence are not limited to, but may include: bruises and welts, lacerations and abrasions, fractures, ocular damage, reduced physical functioning, and disability("WHO: WORLD REPORT ON VIOLENCE AND HEALTH," 2002).

Levinson et. al. found that physical domestic violence occurs most often in societies where men experience greater control over economic and household decision-making compared to women(Levinson, 1989). These factors are common measures of autonomy, or independence in making informed decisions of daily life(Eswaran & Malhotra, 2011). Dyson and Moore explained that women with higher levels of autonomy were more likely to have greater freedom of movement, stronger support systems, economic independence, and control over their sexuality(Dyson & Moore, 1983). Another article linking domestic violence to autonomy explored risk factors associated with wife-beating in India and found that low education status of women, young wife's marital age, wife's lack of control over economic resources, and wife's lack of mobility were significant predictors of physical violence(Jejeebhoy & Cook, 1997).

In a study on intimate partner violence and women's status, women with higher economic autonomy and freedom of movement, as well as higher educational attainment were less likely to experience violence. However, those involved in the workforce were more likely to experience abuse(Mogford, 2011). Of working women, those who were self-employed or employed by a family member were less likely to experience violence than those who were employed by someone they did not know. (Eswaran & Malhotra, 2011). A similar study stated that higher education increased a woman's ability to run a household, provided the possibility to leave an abusive relationship, and raised the husband's value and respect for her. Higher levels of education of women were associated with

lower likelihood of experiencing intimate partner violence(Ackerson, Kawachi, Barbeau, & Subramanian, 2008).

Sexual Violence

Sexual violence is another element of domestic violence that may take the form of forced sex within marriage or a dating relationship, unwanted sexual advances or sexual harassment, forced marriage or cohabitation, or coercion of any sexual acts. Health consequences related to sexual violence may include gynecological disorders, infertility, mental health issues, pregnancy complications, sexually transmitted infections, unwanted pregnancy and unsafe abortion("WHO: WORLD REPORT ON VIOLENCE AND HEALTH," 2002). Marital rape in India is not a crime against women over the age of 15 in India(Santhya & Jejeebhoy, 2005).

In 1998, Lori Heise outlined many community level factors contributing to sexual violence, which included a male dominated workforce, the observance of rigid gender roles, and societies that equated manhood to dominance (Heise, 1998). Another study found that, unlike the protection observed against physical violence, higher educational attainment and economic empowerment put women at risk for sexual violence. This was attributed to women's resistance to patriarchal norms(Jewkes, Levin, & Penn-Kekana, 2002). Larsen et al. found that younger married women experience higher rates of sexual violence victimization compared to older women, while older women were most likely to experience physical violence(Larsen, Hilden, & Lidegaard, 2015).

In a study using 1998-99 NFHS data, Ackerson, et. Al. found that socioeconomic status (SES) was a significant contributor to both physical and sexual domestic violence. Indian women living in poor households, and from marginalized castes were more likely to report violence, as well as women from households with unequal power dynamics between spouses (ex. a man with less education than his wife, or an employed wife and unemployed husband). Those living in states with higher gender equality were less likely to report domestic violence(Ackerson & Subramanian, 2008). Martin et al. conducted

research in 1999 focused on the characteristics of wife abusers in India. They found that variables related to stress, such as number of children and SES, had a positive correlation to perpetration of wife abuse(Martin, Tsui, Maitra, & Marinshaw, 2009).

Marriage Practices and Domestic Violence

Dowry

One of the most common marriage practices of India is the tradition of dowry. A dowry is a transfer of wealth from the bride's family to the groom's family at the time of marriage. Traditionally, this gift was in the form of clothing, goods, or jewelry(Banerjee, 2014). The dowry was created with the intentions of providing a better life for female children(Rastogi & Therly, 2006). Since women did not typically work, dowry was a payment to the bride's new family in exchange for a life of care. It was also a form of pre-mortem inheritance that a bride could take into marriage for a prosperous start(Goody & Tambiah, 1973). The dowry was protective of violence against women in ancient times. Hindu traditions cherished women in their child bearing years for their potential to bring forth children(Banerjee, 2014).

Over time, the traditional meaning and reason for dowry has begun to fade. Instead of protecting the future of a daughter, the dowry has become a determinant of who a woman will be allowed to marry and how she will be treated within that marriage depending on the amount of dowry her family can afford(Sharma & Hirschon, 1984). An economic analysis of dowry found that prices have inflated drastically over the years, and demands from groom's families are being made. In 1920 Goa, a dowry for a high-quality groom was around 2,000 rupees. In 1980, that number sky rocketed to around 500,000 rupees(Anderson, 2007). Instead of clothing or goods, the payments are almost exclusively cash gifts or extravagant consumer items(Banerjee, 2014). The transaction is calculated taking into account the groom's education and future earning potential. The price increases steeply with more desirable qualities in a husband, such as wealth, education, property, urban employment, etc. It is not uncommon

for a bride's family to pay over a full year's salary in dowry. In 2004, dowries were calculated at six times the average male salary of 66,322 rupees(Anderson, 2007).

With the increase in cost and demand for dowry payments from 1920 to 1980, the dowry has become a glaring factor of violence against women in India. Physical violence has been linked to the amount of dowry paid. One study found that if a family was unhappy with the amount, the bride could be subjected to beatings by her spouse and in-laws in an attempt to earn more money from the bride's family in exchange for her safety(Rao, 1993). Another study found that in extreme situations, brides have been driven to suicide by their in-laws unrelenting demands or murdered by a family that was unhappy with the amount of dowry provided and hoped to secure a second dowry through re-marriage. The term dowry death was coined to represent the death of a bride by a domestic incident within 7 years of marriage(Sharma & Hirschon, 1984). The adoption of this term only further devalued women. In the event of a dowry death, the punishment may be a sentence as few as 7 years, whereas homicide is punishable by death. It is estimated that as many as 25,000 women are either killed or seriously maimed each year due to dowry related violence("Understanding and Addressing Violence Against Women," 2012).

In an attempt to reduce violent crimes related to dowry, the Dowry Prohibition Act of 1961 was created to prohibit the giving or taking of dowry. This act defines "dowry" as, "any property or valuable security given or agreed to be given directly or indirectly by one party to a marriage to the other party, or by the parents of either party to a marriage(Awasthi, 1992)." The act had little impact on preventing exchanges of dowry though because it was rarely enforced(Rastogi & Therly, 2006).

According to a qualitative study on marriage in India, men among higher castes in North India aspired to become highly educated and find work in urban areas with a steady salary. The wives of these men did not normally work outside of the home, contrary to southern India. The payment of a dowry was

thought to guarantee an easy life, free of the hard labor that came with agricultural work(Caldwell et al., 1983).

Prior to 1950, the dowry was predominantly practiced in northern India. This region of India proscribed to a set of customs much different than that of the south. Marriages were exogamous in the north. A bride was married outside of her immediate family, and moved in with her husband's family upon marriage, typically miles away from her natal village. Marriages were also hypergamous, or arranged between a bride and groom of different castes or social classes. The bride was normally of a lower caste to the groom. (Goody & Tambiah, 1973; Uberoi & Madan, 1998). Upon marriage, the parents of the bride would extend gifts and throw extravagant feasts for the groom's family as a sign of respect, without partaking in them and receiving nothing in return(Dyson & Moore, 1983). Purity of the bride was cherished; therefore, marriages took place at an early age. Risk for mortality in childbirth is much higher in younger mothers. Compared to women in their early twenties, girls between the ages of 15 and 19 are twice as likely to die in childbirth, and those younger than 15 are five times as likely("Marry Me Later Preventing Child Marriage and Early Pregnancy in India," 2014). New brides in these societies were allowed few freedoms. They were rarely allowed to travel alone or work for wages outside of the home(Uberoi & Madan, 1998). Women were confined to domestic chores or work that involved only contact with other females. Daughters did not receive an inheritance from their parents, as dowry was a placeholder for inheritance(Dyson & Moore, 1983). Studies have demonstrated these customs are strongly linked to patriarchy norms of rigid gender roles and lower levels of autonomy in women(Dyson & Moore, 1983; Martin et al., 2009).

Bridewealth

Similar to dowry, bridewealth, or bride-price is another marriage payment tradition in India. With bridewealth, transactions are made in the opposite direction of dowry. The groom's family pays the bride's family a bride-price upon marriage(Goody & Tambiah, 1973). Traditionally, this payment was

in the form of livestock or goods. The original intent of bridewealth was to show respect and appreciation to the parents of the bride; to thank them for nurturing and caring for the bride. This gave value and status to women and protected them from both family and domestic abuse(Hague et al., 2011). Bridewealth was most common among societies where women had high economic value(Goody & Tambiah, 1973). Another purpose of bridewealth was to compensate the bride's family for lost wages in regions where women were part of the labor force or work on family farms. The bride-price was usually a small payment meant to reciprocate the expense of bringing up the bride(Goody & Tambiah, 1973).

Bridewealth in India was most commonly practiced in the southern regions, prior to 1950(Srinivasan, 2005). At this time, the cultural traditions of the south were much different than those of the north. The most common traits within this system were endogamous, cross-cousin marriages, accompanied by the payment of bridewealth to the bride's family by the groom's. Marriage was used to bring families closer together and occurred primarily between families of the same caste or social status. Since marriages were consanguineous, or within the family, women typically married and lived in the village where they were raised. Therefore, wives were not separated from their parent's for long periods of time, and typically knew their spouse before marriage. It was assumed that these close knit family relations provided a social support system for women that those in the north lacked(Uberoi & Madan, 1998).

As a result of better social support systems, generally women experienced greater autonomy in the south(Bourey et al., 2013; Uberoi & Madan, 1998). Participation of women in the work force ranged from 13-24% in the south, compared to 1-19% in the north. Literacy rates were also much higher for women in the south, ranging from 16-54% compared to 9-26% in the north(Dyson & Moore, 1983). Women in the south were also allowed to inherit property and experienced less restrictive control over their behavior and sexuality. Honor related to chastity of women was not as highly valued in the south.

The average age at first marriage for women living in the south in 1961 was between 15 and 20 years old. In the north, women were married between the ages of 14 and 18(Dyson & Moore, 1983).

Contrary to South Indian studies of bridewealth, literature focused on the African bride-price has identified potential positive associations with domestic violence. One study found that similar to dowry prices, bride-price has also become inflated. Instead of the traditional exchange of livestock, bridewealth transactions often include consumer goods, such as a car, and money(Hague et al., 2011). With the inflation of prices, bridewealth has been equated to the buying and selling of wives. Qualitative interview respondents in a Ugandan study felt that bride-price caused women to be viewed and treated as property. Since the price was negotiated by men, and took into consideration a wife's duties and behaviors in marriage, women felt that bridewealth regulated their empowerment and reduced autonomy. One woman from the study felt that a husband could do whatever he wanted to his wife, because he paid for her. If women did not live up to their 'value,' husbands had a right to dominate and control them by using violence(Hague et al., 2011). Research on focus group discussions in Uganda found that if bridewealth was perceived as the purchase of a wife, a woman's power within the household and independence may be limited(Kaye, Mirembe, Ekstrom, Kyomuhendo, & Johansson, 2005). Another study on the negative consequences of bridewealth in Africa, noted a correlation between poverty and forced marriage of young girls. Poor families were noted to "sell" female children as early as possible to obtain bridewealth. In violent relationships, it was difficult for poor women to escape abuse because the bride-price had to be repaid (Onyango, 2016). Research conducted on the size of bridewealth paid in Ghana in the form of no payment, partial payment, and full payment, found that a woman whose bridewealth is paid in full is more likely to be beaten than a woman who pays a partial amount, which is also more likely to be beaten than a woman who pays no bridewealth(Fuseini, 2013).

Expansion of Dowry

Recent studies show that dowry payments have become widespread across India(Caldwell et al., 1983; Rao, 1997; Srinivasan, 2005; Srinivasan & Bedi, 2007). This shift to a more dowry prominent culture began in the 1950's and was seen primarily in the upper classes and castes. Two theories as to the cause of this change are based on factors related to a surplus of brides in the marriage market and the universal acceptance of hypergamy(Caldwell et al., 1983).

A surplus in the marriage market of potential brides in India occurred between the years 1930 to 1970. This surplus was generated by a dramatic decrease in infant mortality during this time, introducing a significantly larger number of potential brides for older cohorts of men. Over this time frame, the remarriage of widows also became more commonplace. Together, these factors created a temporary surplus of potential wives in the marriage market. It is theorized that this shift in society from a lack of eligible wives to a surplus of eligible wives drove the conversion of bridewealth payments made by the groom's family to dowry payments made by the bride's family in the south(Caldwell et al., 1983; Srinivasan, 2005).

Another possible reason for the dowry expansion in southern India was the spread of hypergamy. Endogamy was highly valued in the south prior to the introduction of dowry. Families were close knit and land consolidation was a way to enhance family wealth(Uberoi & Madan, 1998). Over time these arrangements became less favorable and hypergamy, a tradition primarily practiced in the north, became a preference in the south. Hypergamy allowed for mobility across caste and region. Women had the opportunity to gain social status, and men could increase their economic status through marrying outside of the family. This practice, along with the spread of taboo surrounding consanguineous marriages, strongly influenced the decline in cross-cousin marriages in the south(Caldwell et al., 1983; Rao, 1997).

In hopes of obtaining a larger dowry than the modest amount exchanged between relatives, men expanded their search for a wife to women who were not their cross-cousins. Similarly, educated

husbands were seen as an investment and a way to prevent wives from laboring in the predominantly agricultural workforce of South India. A dowry was given to secure such a husband and to ensure a better lifestyle for the wife (Caldwell et al., 1983). Only the more fortunate upper classes could afford to make these payments initially. However, over time, the dowry made its way into every caste and class of India (Caldwell et al., 1983; Rao, 1997; Srinivasan, 2005; Srinivasan & Bedi, 2007).

METHODS

Data

The information necessary to test our hypotheses were not available in any single dataset. For this reason, data for this study were obtained from two national health surveys conducted in India. The National Family Health Survey provided information regarding women's experiences of spousal violence, as well as household and individual level characteristics. The India Human Development survey contributed data regarding marriage practices. The two datasets were combined to test the effect of marriage practices on domestic violence experiences of married Indian women.

National Family Health Survey

The National Family Health Survey-III (NFHS) of India is a nationally representative household survey conducted by the International Institute for Population Sciences, Mumbai. The survey used a stratified, multistage cluster sample design that covered 29 states to provide a samples size that was 99% representative of India's population. During cycle three, data were collected over the years 2005-2006. A total of 124,385 women ages 15-49 were interviewed, with a 95% overall response rate.

Within the women's questionnaire, a module on domestic violence was incorporated. This module gathered information on physical and sexual violence perpetrated against a woman by her most recent husband. One eligible woman from each household was randomly selected and invited to participate in the survey, yielding a sample of 83,703 participants. Informed consent was obtained before each survey and women were guaranteed anonymity and confidentiality. Interviewers were

trained to conduct surveys only if privacy was attainable. The distribution of women's characteristics in the domestic violence subsample were essentially identical to the entire women's sample.

India Human Development Survey

The India Human Development Survey-II (IHDS) is a nationally representative panel survey conducted by the National Council of Applied Economic Research in New Delhi and the University of Maryland. Data from this survey were collected over the years 2011-2012, from 42,152 households across 33 states and territories in India through a stratified, multistage cluster design. The household surveys were conducted typically with the head of household on socio-economic and social issues. Only respondents who lived in states also represented by the NFHS were included in analyses.

Variables

Violence Indicators

Domestic violence was measured using three outcome variables derived from the NFHS: severe physical violence, sexual violence, and any violence. These three types of violence were defined by the NFHS through categorized questions regarding lifetime exposure to violence, perpetrated by a woman's current husband.

Severe physical violence measured forms of aggressive physical violence experienced by participants. Women were asked, "Does your husband ever do any of the following things to you: Try to choke you or burn you on purpose? Threaten or attack you with a knife, gun, or any other weapon?" The variable for severe physical violence was dichotomously coded with a 0 if no severe physical incident had occurred, and 1 if the respondent answered yes to any type of severe violence.

Often women who reported severe violence also reported experiences of less severe violence as well. Questions related to less severe violence were, "Does your husband ever do any of the following things to you: Slap you? Twist your arm or pull your hair? Push you, shake you, or throw something at you? Punch you with his fist or with something that could hurt you? Kick you, drag you or beat you up?"

Respondents were also asked to report experiences of sexual violence. Questions included, “Does your husband ever do any of the following things to you: Physically force you to have sexual intercourse with him even when you did not want to? Force you to perform any sexual acts you did not want to?” The variable for sexual violence was coded dichotomously with a 0 to indicate no experience of sexual violence, and 1 to indicate any experience of sexual violence.

The indicator for any violence was used to measure experience of any type of less severe, severe, or sexual violence. The variable was coded dichotomously with a 0 to indicate no experience of any type of violence, and 1 if a participant answered yes to any of the previously mentioned questions regarding less severe, severe, or sexual violence.

Marriage Practice Variables

Marriage practices were measured using four variables obtained from head of households in the IHDS regarding village permissibility of consanguineous marriages, endogamous and exogamous marriages, bridewealth (groom’s family contribution), and dowry (bride’s family contribution). The purpose of these survey questions were to gather information from the head of household on communal norms surrounding marriage customs.

The two questions regarding consanguineous marriages and endogamy/exogamy were, “In your community for a family like yours is it permissible: to marry a girl in her natal village? To marry a girl to her cousin?” These variables were coded dichotomously with a 0 to indicate a non-permissible occurrence, and 1 to indicate a permissible occurrence.

For reasons of comparison and analysis with NFHS data, these variables were aggregated to the state level. States with less than 50% overall permissibility of a marriage custom were coded with a 0, and those with greater than 50% were coded with a 1.

The two questions related to marriage expenses were, “At the time of a boy’s marriage, how much money is usually spent by the boy’s family? At the time of a girl’s marriage, how much money is

usually spent by the girl's family?" Respondents were asked to provide a low and high value for these questions.

These values were aggregated to represent a median low and high value for each state. The low and high values were then averaged to produce a mean wedding contribution from each family at the state level.

Household Characteristics

The analysis included a number of control variables identified in the literature as relevant to domestic violence. These variables were taken from the NFHS and categorized into household and participant characteristics. The household characteristics included indicators for region, place of residence, net state domestic product (NSDP), wealth index, and religion.

Following the regional distribution of states exhibited by Dyson and Moore (Dyson & Moore, 1983), the region variable places each of the 29 states of India into one of four regions: north, east, south, and other. The northern region included the states Punjab, Uttar Pradesh, Uttaranchal, Haryana, Rajasthan, Madhya Pradesh, Chhattisgarh, Gujarat, and the national capital territory of Delhi. The south was comprised of Maharashtra, Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu. The east represented Bihar, Jharkhand, West Bengal, and Orissa. While the category other included the outlying states, Jammu and Kashmir, Himachal Pradesh, Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya, Assam, and Goa. The northern, southern, and eastern states followed the division described by Dyson and Moore with an exception to states formed after 1983. To remain consistent with the original regional analysis of Dyson and Moore, the states Uttaranchal (previously Uttar Pradesh), Chhattisgarh (previously Madhya Pradesh), and Delhi were included as northern states and Jharkhand (previously Bihar) was included in the east. Place of residence was used to denote urban and rural environments. Net state domestic product values were obtained from the 2011-2012 India Ministry of Statistics and Programme Implementation to coincide with the data collected in the IHDS.

The wealth index was measured in 5 levels ranging from poorest to richest. Religion was separated into four categories Hindu, Muslim, Christian, and a combination of religions including Sikh, Buddhist, Jewish, and those with no affiliation, among others.

Women's Characteristics

Participant characteristics included age, education, occupation, age at first marriage, spousal age difference, and number of children. Age was measured in 5 year increments from 15 to 49. Education was measured on four levels to describe participants that had no education, primary education, secondary education, or higher education. Occupation was categorized into three groups: not working or unemployed, non-manual labor, and manual labor. Non-manual labor included professional, technical, managerial, clerical, and sales work. Manual labor included agricultural, services, and skilled and unskilled manual work. Age at first marriage was separated into three categories: younger than 18, 18 to 20, and 21 and older. Spousal age difference was a continuous variable calculated by subtracting participant's age from current husband's age. Number of children were measured on four levels including none, 1-2, 3-4, and 5 or more. The average values of the variables age, age at first marriage, spousal age difference, and number of children were used as measures for analyses.

Statistical Analyses

Merging Datasets

In order to analyze the variables described, the NFHS and IHDS datasets were combined. The predictor variables in the IHDS were adjusted using survey weights, aggregated to the state level, and merged with the NFHS data on a common state id variable. All women residing in a state from the NFHS dataset were attributed identical values for the marriage custom data: permissibility to marry a girl to her cousin, permissibility for a girl to marry within her natal village, and mean of median high and low values for bride's family contribution at marriage and groom's family contribution at marriage.

Analyses

The analyses were conducted using STATA 14. Of the 83,703 respondents to the NFHS domestic violence module, only married women were selected for analysis, providing a total sample size of 69,484. Descriptive statistics, tests for associations and regression models were conducted using survey-adjusted data to be nationally representative. Distributions and relationships were analyzed using t-tests, chi-square tests, proportions, means, and linearized standard error (SE). T-tests and chi-square analyses were conducted to test the relationship between the study variables and experience of any violence.

We conducted three logistic regression models to measure the associations between marriage practices on women's experience of violence while controlling for background characteristics. All models included household and women's characteristics as well as marriage practices. Outcome indicators included any violence, severe physical violence, and sexual violence. The first model assessed the relationship between marriage practices and reports of any experience of physical or sexual violence. The second model measured the association between marriage practices and severe physical violence, and the third explored the relationship between marriage practices and sexual violence. Marginal analyses were conducted on these models to graphically represent the predictive probabilities of violence by marriage contribution and size.

RESULTS

Descriptive Results

Marriage Practices

Graph 1 shows the average marriage payments across Indian states. States are in order of increasing net state domestic product per capita. Across India, the average reported dowry payment was about 190,000 rupees while the average reported bridewealth payment was closer to 127,000 rupees. In all states, average bridewealth payments were less than or equal to average dowry payments.

The state with the highest estimated village dowry was Kerala at 400,000 rupees. The states with the highest estimated village bridewealth were Jammu and Kashmir, Goa, Manipur, and the capital of Delhi, at 250,000 rupees. The lowest average payment was the same for dowry and bridewealth and was reported in Nagaland, at 30,000 rupees. The largest difference between dowry and bridewealth payments occurred in Kerala, where on average the estimated village bridewealth was 275,000 rupees less than the estimated village dowry. States where dowry and bridewealth payments were made included Arunachal Pradesh, Nagaland, and Mizoram. The states with payments most similar to the net state domestic product (NSDP) per capita values were Maharashtra and Goa at 126% NSDP for dowry payment and West Bengal at 103% NSDP for bridewealth payment. The state with the largest difference between NSDP and price is Manipur at 931% NSDP for dowry payment and 665% NSDP for bridewealth payment.

Graph 1. Average Marriage Payments Across Indian States

Table 1 shows that nationwide, the estimated village payments for dowry were greater than estimated village payments for bridewealth. The average estimated village dowry was between 152,000 and 213,000 rupees. The average village estimated bridewealth was between 99,000 and 140,000 rupees. Overall, the estimated village dowry was approximately 183,000 rupees, while the estimated village bridewealth was roughly 119,000 rupees. Generally, household heads felt it was not permissible in their village for a girl to marry her cousin. At the state level, only 35% agreed that this was an acceptable practice. A slight majority, nearly 56% of states, believed that marrying a girl within her natal village was permissible.

Background Characteristics

Table 1 shows the characteristics of married women of India ages 15-49. Within this population, approximately 75% identified as Hindu and 12% as Muslim. Nearly 43% of women had received no education, while roughly 35% had reached a secondary level education. On average, over half of women

(54%) were married before they turned 18 to a spouse that was nearly six years their elder. Less than 10% of the population were childless. About 41% reported one to two children, while nearly 49% reported over three children. Approximately 55% of women were not working, while 35% worked in manual labor. Around 34% of the population lived in North India and roughly 27% in the south. Nearly 68% of women resided in rural areas.

Table 1. Distribution of Background Characteristics of Married Indian Women

Experiences of Domestic Violence

The domestic violence module of the NSFH-III provided information on women's experiences of violence. According to the 2005-06 data, roughly 1 in 3 women (33%) in India reported ever being physically or sexually abused by their spouse. Nearly 31% of women reported experiences of less severe violence and 11% reported forms of severe violence. Approximately 8% reported being forced to have unwanted sex or perform sexual acts.

Data in table 2 show that for women who did not report any incidents of any type of violence, the village average village dowry estimate was about 188,000 rupees. This payment was less for women who did experience domestic violence, at roughly 172,000 rupees. Payments made by the groom's side were far less. For women with no experiences of violence, the village average bridewealth estimate was almost 122,000 rupees. This value was also lower for women who experienced any form of violence, at around 114,000 rupees. Women experienced higher rates of physical or sexual violence at 34% if household heads reported that it was not permissible in their village for a girl to marry her cousin, compared to those who felt the practice was acceptable (30%). If it was perceived that marrying within the natal village was not permissible, women experienced slightly higher rates of violence (34%) compared to 32% where the practice was agreeable.

The highest rates of domestic violence were reported by women living in eastern India (43%). Nearly 36% of women living in the north and 31% of women living in the south reported some form of

violence. Those residing in rural areas were more affected by violence (36%) compared to those living in urban environments (27%). Wives from lower social classes reported higher rates of domestic violence than upper class wives. Experiences of violence were reported by nearly half of the poorest and poorer women (47% and 43%), over one third of the middle class (37%), and 29% of the richer women. Approximately 16% of the richest women experienced violence. Generally, those living in states with higher net state domestic product per capita experienced less violence. Over one third (34%) of Hindu women, 37% of Muslim women, and nearly 23% of Christian women were affected by violence. Between age groups, women over the age of 19 had similar experiences of violence ranging from 31% to 35% reports of any violent incident. Younger women ages 15-19 experienced violence at slightly lower rates (28%). The average age for women who experienced violence was less than one year older than women who did not experience violence. Women who were not educated reported the highest rates of physical or sexual violence at 43%. Nearly 37% of those with only a primary education, and 24% with a secondary education experienced some form of violence. Less than 10% of women with a higher education reported violence. Wives who were not working outside of the home reported the lowest rates of physical or sexual violence (28%). Over 31% of those working in non-manual labor, and nearly 42% working in manual labor experienced violence. Two out of five women married before age 18 reported experiencing some form of violence by their partner. Approximately 29% of brides married between ages 18 and 20, and nearly 20% of those married after age 20 reported experiences of violence. On average, wives who experienced violence were about a year and a half younger than those who did not. The mean age difference between women who did and did not report domestic violence was only slightly larger for those who reported any type of violence. Reports of violence were higher according to the number of children a woman had. Only 24% of those who were childless reported violence, while nearly 45% of those with 5 or more children reported experiences of physical or sexual violence. The

average number of children for wives who did not experience violence was 2.6, and 3.2 for those who did.

Table 2. Distribution of Married Indian Women by Experiences of Domestic Violence

State Characteristics

Table 3 shows the distribution of average net state domestic product per capita (NSDP), average minimum and maximum marriage contribution, and percent of reported physical or sexual domestic violence by region and state. Domestic violence rates varied greatly across Indian states. The most highly concentrated rates of violence were observed in the eastern states. The states with the highest rates of reported domestic violence were Bihar, located in the east, where violence affected nearly 60% of women. Followed by Rajasthan and Madhya Pradesh, in the north, at 46%. Bihar's average NSDP was nearly 22,000 rupees. The average village bridewealth estimate was between 80,000 and 100,000 rupees, while the average dowry village estimate was between 100,000 and 150,000 rupees. The states with the lowest rates of violence were Himachal Pradesh where only 6% of women reported violence, followed by Jammu and Kashmir and Meghalaya where roughly 13% reported violence. These states were all from the other category. The average NSDP of Himachal Pradesh was approximately 88,000 rupees. The average village bridewealth estimate was between 150,000 and 200,000 rupees, while the average village dowry estimate was between 200,000 and 250,000 rupees.

Table 3. Average NSDP, Marriage Payments, and Reporting of Any Domestic Violence by State

Logistic Regression: Any Violence and Severe Physical Violence

The results from the two logistic regression models, pertaining to any violence and severe physical violence, can be seen in table 4. Marriage payments were significantly related to experiences of violence for the any violence model, however only bridewealth was marginally significant in the severe violence model. With a 1 Lakh increase in estimated village dowry, women were 18% less likely to experience any violence. Though not significant, an increase in estimated village dowry was also related to a 6% higher

likelihood of experiencing severe physical violence. With a 1 Lakh increase in bridewealth, women were 72% more likely to experience any violence, and 20% more likely to experience severe physical violence. Village permissibility to marry a girl to her cousin was associated with a 38% higher likelihood for women to experience severe physical violence. Village permissibility to marry within the natal village was associated with a 30% higher likelihood of experiencing any violence and 16% higher likelihood of experiencing severe physical violence.

Women in the south were less likely to experience violence than women in the north. Married women living in rural areas were less likely to experience violence than those living in urban areas. At the state level, as NSDP per capita increased, likelihood for experiencing violence was lower. Following a similar trend, women from households that ranked higher on the wealth index were less likely to experience violence compared to those from households classified as poorest. When considering religion, compared to Hindu women, Christian women were significantly less likely to experience violence, while Muslim women were more likely to experience violence. In both models, women with a secondary or higher education were less likely to experience violence. Women participating in the labor force had significantly higher odds of experiencing violence compared to those who were unemployed. Women married at a younger age had a higher odds of experiencing violence compared to those married later. There was a significantly positive association between violence and the number of children. The likelihood of violence was higher for each additional child born.

Logistic Regression: Sexual Violence

Table 4 also displays the results of the sexual violence logistic regression model. All marriage practice variables showed a significant relationship to sexual violence occurrence. With a 1 Lakh increase in village dowry estimate, women were 64% more likely to experience sexual violence. With a 1 Lakh increase in village estimated bridewealth, women were 73% less likely to experience sexual violence. Village permissibility to marry a girl to her cousin was associated with a 59% lower likelihood for a

woman to experience sexual violence. Village permissibility to marry within the natal village was associated with a 32% higher likelihood of experiencing sexual violence.

Married women living in South India were 155% more likely to experience sexual violence compared to married women living in the north. On the state level, as NSDP per capita increased, the likelihood for experiencing violence was lowered. Women from households classified as richer and richest on the wealth index were less likely to experience violence than the poorest households. Compared to Hindu women, Muslim women were significantly more likely and Christian women were significantly less likely to experience sexual violence. There was a negative association between age and violence. Older wives were less likely to experiencing sexual violence than younger wives. Across education levels, only women with a primary education were more likely to experience sexual violence compared uneducated and higher educated women. Those with a secondary education or higher were significantly less likely to experience violence compared to those with none. Wives involved in the work force were more likely to experience violence than those who were not working outside of the home. Among working women, those in non-manual positions experienced a higher likelihood of violence than those in manual labor jobs. Similar to other models, a younger age at first marriage was associated with a higher likelihood for experiencing sexual violence. With each additional child, the odds of a woman experiencing violence were 4% higher.

Table 4. Logistic Regression Models for Reports of Any Violence, Severe Physical Violence, and Sexual Violence

Domestic Violence Prediction

Graph 2 displays the predictive probabilities for a married woman in India to experience violence based on the size of marriage contribution. Dowry payments ranged from 0.75 to 3.75 lakhs and bridewealth payments ranged from 0.50 to 2.5 lakhs. Linear relationships were observed between

marriage practices and any or severe physical violence, while an exponential relationship appeared between marriage practices and sexual violence.

The graphs showed that as dowry payments increased, the probability of experiencing any violence fell from approximately 36% to 27%, while the probability of experiencing severe physical violence and sexual violence was raised respectively from roughly 9% to 11% and 5% to 19%. As bridewealth payments increased, the probability of experiencing any violence was raised, from nearly 26% to 47% and severe physical violence was raised from around 9% to 12%, while the probability of experiencing sexual violence was lowered from approximately 11% to 5%.

Graph 2. Impact of Indian Marriage Payments on Likelihood of Any Violence, Physical Violence, and Sexual Violence.

DISCUSSION

Findings

Higher estimated village bridewealth payments were associated with a higher likelihood for a woman to experience any and severely physical violence, and a lower likelihood to experience sexual violence. Higher estimated village dowry payments were associated with a lower likelihood for a woman to experience any violence, and a higher likelihood to experience sexual violence. Dowry was not, however, significantly associated with reports of severe physical violence. These findings suggest that physical and sexual domestic violence is experienced differently across varying sizes of bridewealth and dowry payments.

These results for any violence and severe physical violence were consistent with our hypotheses, supporting studies that showed a negative correlation between physical violence and autonomy as well as dowry studies noting the association between higher values of dowry and higher likelihoods for physical violence experience (Bourey et al., 2013; Dyson & Moore, 1983; Sabarwal et al., 2014; Tambiah, 1989).

The associations between marriage payments and sexual violence were positive for dowry payments and negative for bridewealth payments. One possible explanation for this finding could be related to the levels of women's autonomy in the respective villages. One study found that higher levels of women's autonomy, such as education and employment, were associated with higher reports of sexual violence (Jewkes, 2002). This study provides justification for the directionally unexpected association between sexual violence likelihood and marriage payment size.

Our study also examined the relationship between domestic violence and village acceptability of marriage customs including: permissibility to marry a girl to her cousin, and permissibility to marry within the natal village. The literature demonstrated that these customs were more common among southern states that practiced bridewealth, and were protective against violence (Dyson & Moore, 1983; Uberoi & Madan, 1998). We found that the likelihood of severe physical violence was higher and sexual violence was lower when marrying a girl to her cousin was permissible in a village. The likelihood of any, severe physical, and sexual domestic violence was higher when marrying within the natal village was permissible.

There is no obvious reason for women in consanguineous marriages or women married in their natal village to experience higher likelihood for domestic violence. However, one study finding similar results for physical violence in consanguineous marriages, attributed this outcome to reported dowry demands (Aswar N.R., 2013). Though dowry has expanded into communities that were once bridewealth, it is possible that traditions such as cross-cousin marriages and natal village marriages have been retained. However, in the presence of dowry, the previously protective nature of these factors may be lost. (Dyson & Moore, 1983; Uberoi & Madan, 1998).

On a final note, when respondents were asked to provide an estimated wedding contribution for a bride's family and for a groom's family, nearly all participants gave an amount greater than zero for both questions regardless of state residence. Few answered that only one form of payment was

customary, suggesting that across India most marriage ceremonies involve exchanges from both the bride's family and the groom's family. This leads us to believe that bridewealth and dowry payments co-exist within the same communities and possibly within the same weddings. Goody found reciprocal exchanges to be common in bridewealth societies, however it is unusual to find this type of exchange in dowry practicing regions (Goody & Tambiah, 1973). Across Indian states, the average dowry payment was about 190,000 rupees, and the average bridewealth payment was closer to 127,000 rupees. The dowry was greater than or equal to bridewealth in every state. Given that the continued practice of bridewealth is contradictory with current literature, it may be more plausible to explore net payment values, in which bridewealth payments are never greater than zero and therefore, non-existent (Banerjee, 2014; Caldwell et al., 1983; Srinivasan, 2005).

Strengths and Limitations

The main limitation to this study is that the data from the NFHS-III and IHDS-II datasets were obtained over different years. We must assume that the marriage practice data collected from the 2011-12 IHDS survey did not change from the year 2005-06 when the NFHS variables were collected. Due to marriage practice variables from the IHDS being merged with women in the NFHS on the state level, there is no way to show variance of marriage practices within the state.

A strong point of this thesis is the use of nationally representative quantitative data in the explorations of rarely studied relationships between domestic violence and marriage payment size. The NFHS-III and IHDS-II are highly reliable, consistent, and validated datasets that allowed us to accomplish our objective. The level of detail included in these surveys on information regarding marriage customs and domestic violence in India could not be found elsewhere. Furthermore, the quantification of these relationships between domestic violence outcomes and marriage transactions begins to address a knowledge gap related to factors of domestic violence against women.

Conclusion and Recommendations

Marriage payments are significant predictors for domestic violence experience in married Indian women. This study also identified a number of potential avenues for future research, including the continued exploration of the relationship between marriage payment size and domestic violence. Studies focused on underlying factors of marriage payments in relation to violence may provide more insight on the nuance between physical and sexual violence and marriage payments. The study of associations between bridewealth and dowry traditions in other countries may assist with identifying underlying risk factors of violence related to marriage payments. A better understanding of these associations could lead to improved public health programming and violence prevention. The development of a comprehensive survey instrument to address marriage practice data as well as domestic violence data is a priority for future studies. A tool such as this could allow for more accurate interpretation and estimation of marriage payments and violence likelihood.

Our results have implications for public health policy related to regulations of marriage payment laws, and interventions targeted at the community level addressing social norms surrounding marriage practices and violence. Though there are no clear benefits of a dowry or bridewealth system associated with reducing violence against women, our results indicate that across payment sizes, dowry and bridewealth are both significantly associated with experiences of domestic violence. It is not possible to favor one system over another if at some level of payment, both are risk factors for physical or sexual violence.

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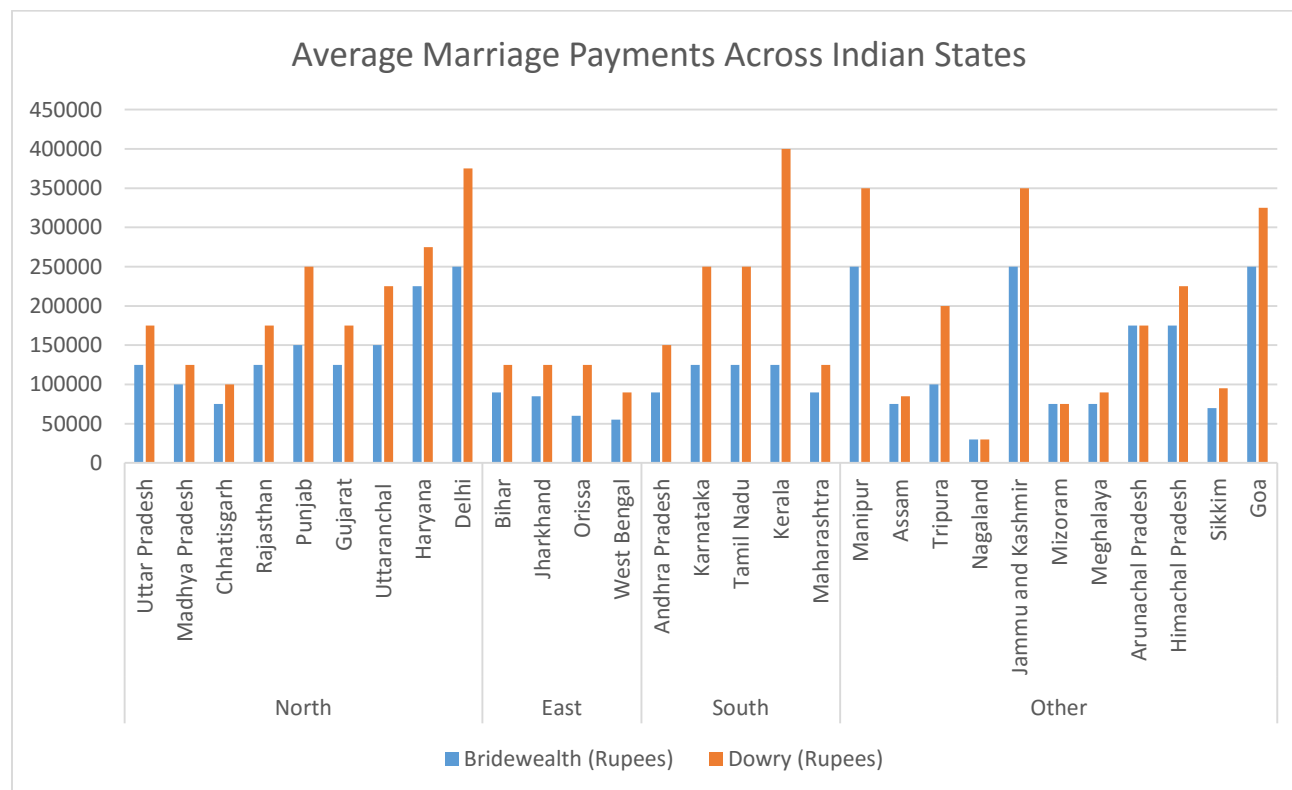
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Tables and Graphs

Graph 1. Average Marriage Payments Across Indian States



Source. Data from India Human Development Survey 2011-2012. 1.00 USD=66.72 Rupees.

Table 1. Distribution of Background Characteristics of Married Indian Women

Variable	Mean or Percentage	Standard Error
Experiences of Violence		
Less Severe Violence	30.96%	0.003
Severe Violence	10.46%	0.002
Sexual Violence	8.52%	0.002
Village Marriage Customs[^]		
Estimated Dowry Payment in Village (Rupees)	182,512.20	338.360
Minimum	151,884.30	281.073
Maximum	213,140.00	402.906
Estimated Bridewealth Payment in Village (Rupees)	119,259.20	212.577
Minimum	98,867.98	164.265
Maximum	139,650.40	267.516
Village Permissibility to Marry Cousin		
Not permissible	65.42%	0.003
Permissible	34.58%	0.003
Village Permissibility to Marry within the Natal Village		
Not permissible	44.34%	0.003
Permissible	55.66%	0.003
Household Characteristics		
Region		
North	34.36%	0.003
East	15.47%	0.002
South	27.27%	0.003
Other	22.91%	0.002
Place of Residence		
Urban	32.15%	0.003
Rural	67.85%	0.003
NSDP [†] (Rupees)	73,426.03	164.079
Wealth Index		
Poorest	15.87%	0.003
Poorer	18.24%	0.003
Middle	20.99%	0.003
Richer	21.58%	0.003
Richest	23.32%	0.004
Religion		
Hindu	75.24%	0.005
Muslim	11.94%	0.005
Christian	8.12%	0.002
Other	4.71%	0.002
Women's Characteristics		
Age Group		
15 to 19	5.81%	0.001
20 to 24	16.51%	0.002
25 to 29	19.55%	0.002
30 to 34	18.14%	0.002
35 to 39	16.45%	0.002
40 to 44	13.49%	0.002
45 to 49	10.05%	0.002

Education			
	No education	42.72%	0.004
	Primary	16.19%	0.002
	Secondary	34.53%	0.003
	Higher	6.56%	0.002
Occupation			
	Not working	55.47%	0.004
	Non-manual labor	9.21%	0.002
	Manual labor	35.32%	0.004
Age at First Marriage			
	1 < 18	53.66%	0.003
	18 to 20	27.06%	0.002
	21+	19.29%	0.003
Spousal Age Difference		5.70	0.017
Number of Children			
	None	9.89%	0.002
	1 to 2	41.29%	0.003
	3 to 4	32.42%	0.002
	5 or more	16.41%	0.002

Source. Data from National Family Health Survey 2005-2006. ^Data from India Human Development Survey 2011-2012, reported by head of household. †Data from Ministry of Statistics and Programme Implementation 2011-2012. N= 69,484.

Note. Estimates are survey adjusted. NSDP is net state domestic product per capita. Age distributions are in years. Distributions may not sum to 100% due to rounding. 1 USD = 66.72 Rupees.

Table 2. Distribution of Married Indian Women by Experiences of Domestic Violence

	No Violence	Any Violence	
	Mean or Percentage	Mean or Percentage	Significance
Village Marriage Customs^A			
Estimated Dowry Payment in Village (Rupees)	187,596.50	172,144.40	<0.0001
Estimated Bridewealth Payment in Village (Rupees)	121,967.40	113,736.80	<0.0001
Village Permissibility to Marry Cousin			
Not permissible	65.60%	34.40%	<0.0001
Permissible	69.83%	30.17%	
Village Permissibility to Marry within the Natal Village			
Not permissible	65.62%	34.38%	0.0001
Permissible	68.21%	31.79%	
Household Characteristics			
Region			
North	64.50%	35.50%	<0.0001
East	56.90%	43.10%	
South	69.40%	30.60%	
Other	74.99%	25.01%	
Place of Residence			
Urban	72.63%	27.37%	<0.0001
Rural	64.42%	35.58%	
NSDP [†] (Rupees)	77,825.51	64,451.30	<0.0001
Wealth Index			
Poorest	53.22%	46.78%	<0.0001
Poorer	57.26%	42.74%	
Middle	63.51%	36.49%	
Richer	70.67%	29.33%	
Richest	84.01%	15.99%	
Religion			
Hindu	66.40%	33.60%	<0.0001
Muslim	62.88%	37.12%	
Christian	77.13%	22.87%	
Other	70.77%	29.23%	
Women's Characteristics			
Age Group			
15 to 19	72.16%	27.84%	<0.0001
20 to 24	68.63%	31.37%	
25 to 29	66.56%	33.44%	
30 to 34	66.15%	33.85%	
35 to 39	65.15%	34.85%	
40 to 44	66.92%	33.08%	
45 to 49	67.48%	32.52%	
Mean	31.95	32.26	<0.001
Education			
No education	57.35%	42.65%	<0.0001
Primary	63.40%	36.60%	
Secondary	76.31%	23.69%	
Higher	90.66%	9.34%	

Occupation				
	Not working	72.21%	27.79%	<0.0001
	Non-manual labor	68.95%	31.05%	
	Manual labor	58.48%	41.52%	
Age at First Marriage				
	1 < 18	60.40%	39.60%	<0.0001
	18 to 20	70.69%	29.31%	
	21+	80.51%	19.49%	
	Mean	18.18	16.77	<0.0001
Spousal Age Difference		5.66	5.79	<0.01
Total children ever born				
	0	76.48%	23.52%	<0.0001
	1 to 2	72.43%	27.57%	
	3 to 4	63.22%	36.78%	
	5 or more	55.48%	44.52%	
	Mean	2.57	3.19	<0.0001

Source. Data from National Family Health Survey 2005-2006. ^Data from India Human Development Survey 2011-2012, reported by head of household. †Data from Ministry of Statistics and Programme Implementation 2011-2012. N=69,484. Note. Estimates are survey adjusted. NSDP is net state domestic product per capita. Distributions may not sum to 100% due to rounding. Significance was calculated using chi-square and t-tests. 1.00 USD=66.72 Rupees.

Table 3. Average NSDP, Marriage Payments, and Reporting of Any Domestic Violence by State

State	NSDP [†] (Rupees)	Estimated Bridewealth Range in Village [^] (Rupees)		Estimated Dowry Range in Village [^] (Rupees)		Percent Reported Physical or Sexual Violence
		minimum	maximum	minimum	maximum	
North						
Punjab	85,577	100,000	200,000	200,000	300,000	25.36%
Uttaranchal	101,128	100,000	200,000	200,000	250,000	27.85%
Haryana	107,343	200,000	250,000	250,000	300,000	27.30%
Delhi	185,044	200,000	300,000	300,000	450,000	16.27%
Rajasthan	57,427	100,000	150,000	150,000	200,000	46.30%
Uttar Pradesh	31,886	100,000	150,000	150,000	200,000	42.29%
Chhatisgarh	55,177	70,000	80,000	100,000	100,000	29.88%
Madhya Pradesh	36,658	100,000	100,000	100,000	150,000	45.68%
Gujarat	85,814	100,000	150,000	150,000	200,000	27.57%
East						
Bihar	21,918	80,000	100,000	100,000	150,000	59.49%
West Bengal	53,383	50,000	60,000	80,000	100,000	40.12%
Jharkhand	41,254	80,000	90,000	100,000	150,000	36.91%
Orissa	47,019	50,000	70,000	100,000	150,000	38.38%
South						
Maharashtra	98,910	80,000	100,000	100,000	150,000	30.73%
Andhra Pradesh	80,265	80,000	100,000	100,000	200,000	35.27%
Karnataka	89,717	100,000	150,000	200,000	300,000	19.98%
Kerala	97,912	100,000	150,000	300,000	500,000	16.37%
Tamil Nadu	93,042	100,000	150,000	200,000	300,000	41.92%
Other						
Jammu and Kashmir	51,382	200,000	300,000	300,000	400,000	12.62%
Himachal Pradesh	87,721	150,000	200,000	200,000	250,000	6.23%
Sikkim	130,127	70,000	70,000	90,000	100,000	16.28%
Arunachal Pradesh	73,082	100,000	250,000	150,000	200,000	38.82%
Nagaland	51,314	30,000	30,000	30,000	30,000	15.23%
Manipur	37,589	200,000	300,000	300,000	400,000	43.81%
Mizoram	57,654	50,000	100,000	50,000	100,000	22.06%
Tripura	50,859	100,000	100,000	200,000	200,000	44.22%
Meghalaya	59,754	50,000	100,000	80,000	100,000	12.85%
Assam	41,154	70,000	80,000	80,000	90,000	39.43%
Goa	258,666	200,000	300,000	300,000	350,000	16.82%

Source. Data from National Family Health Survey 2005-2006. [^]Data from India Human Development Survey 2011-2012, reported by head of household. [†]Data from Ministry of Statistics and Programme Implementation 2011-2012.
 Note. Estimates are survey adjusted. NSDP is net state domestic product per capita. N=69,484. 1.00 USD=66.72 Rupees.

Table 4. Logistic Regression Models for Reports of Any Violence, Severe Physical Violence, and Sexual Violence

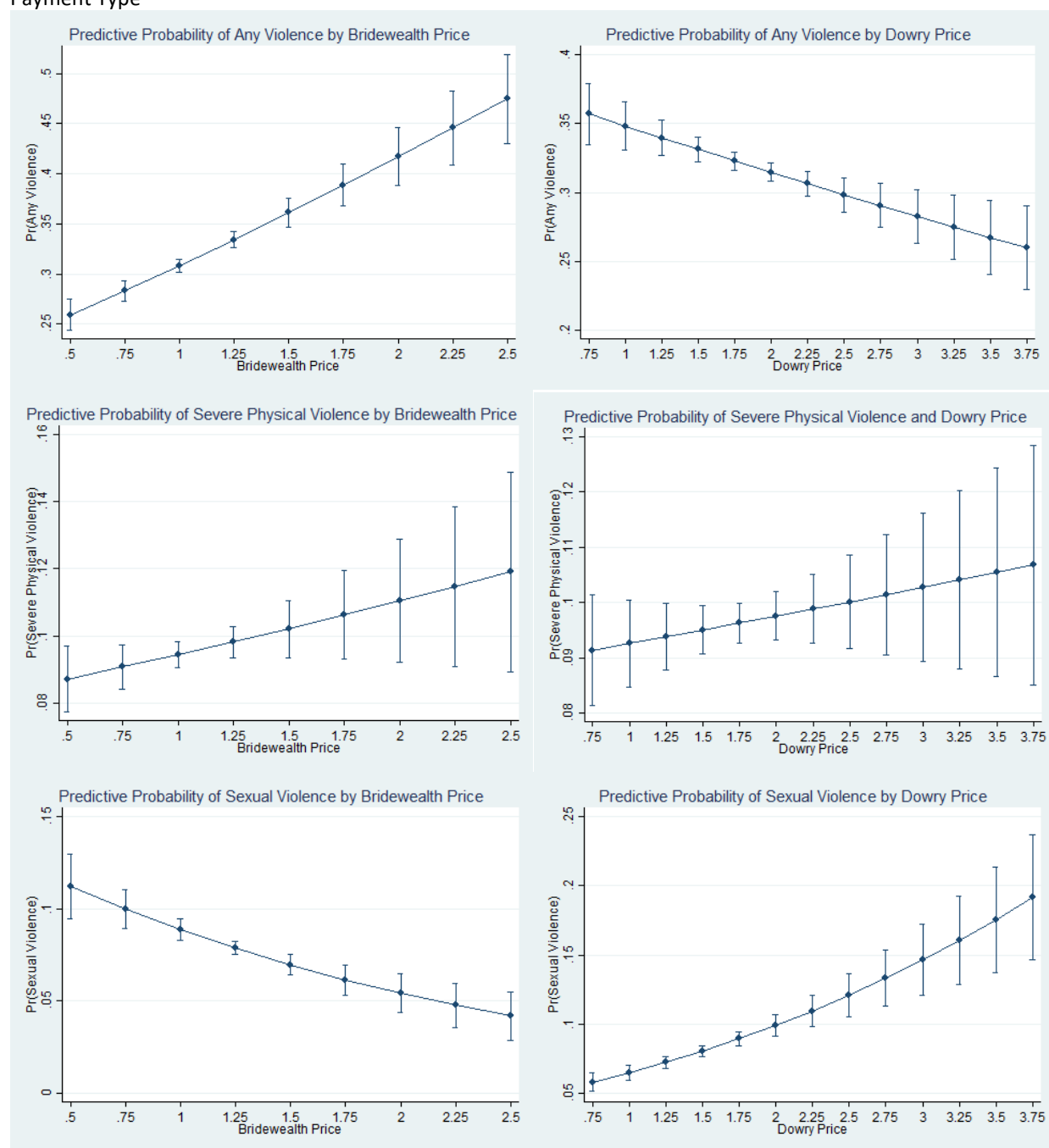
	Odds Ratio Any	Odds Ratio Severe Physical	Odds Ratio Sexual
Village Marriage Customs[^]			
Estimated Dowry Payment in Village (Lakhs)	0.846***	1.062	1.637***
Estimated Bridewealth Payment in Village (Lakhs)	1.723***	1.200*	0.577***
Village Permissibility to Marry Cousin	1.063	1.380***	0.631***
Village Permissibility to Marry within the Natal Village	1.304***	1.160***	1.315***
Household Characteristics			
Region (ref = North)			
East	1.191***	1.038	1.726***
South	0.968	0.882	0.393***
Other	0.566***	0.612***	0.830**
Place of Residence (ref = Urban)			
Rural	0.751***	0.741***	0.920
NSDP [†] (Lakh)	0.512***	0.588***	0.516***
Wealth Index (ref = Poorest)			
Poorer	0.972	0.964	1.037
Middle	0.844***	0.899*	0.981
Richer	0.681***	0.607***	0.822**
Richest	0.402***	0.305***	0.570***
Religion (ref = Hindu)			
Muslim	1.048	1.053	1.161**
Christian	0.790***	0.889	0.570***
Other	1.161**	1.217**	0.919
Women's Characteristics			
Age	0.998	1.003	0.987***
Education (ref = No education)			
Primary	1.014	1.053	1.096*
Secondary	0.762***	0.710***	0.890*
Higher	0.361***	0.270***	0.439***
Occupation (ref = Not working)			
Non-manual labor	1.520***	1.566***	1.536***
Manual labor	1.260***	1.310***	1.233***
Age at First Marriage	0.969***	0.972***	0.973***
Age Difference	0.998	0.999	1.004
Total Children	1.093***	1.094***	1.040***

Source. Data from National Family Health Survey 2005-2006. [^]Data from India Human Development Survey 2011-2012. [†]Data from Ministry of Statistics and Programme Implementation 2011-2012, reported by head of household. N = 69,484.

Note. Estimates are survey adjusted. NSDP is net state domestic product per capita. 1.00 USD=66.72 Rupees, 1 Lakh=100,000 Rupees.

***Denotes significance at the 0.01 level **Denotes significance at the 0.05 level *Denotes marginal significance at the 0.1 level

Graph 2. Predictive Probabilities for Any Violence, Severe Physical Violence, and Sexual Violence by Marriage Payment Type



Source. Data from National Family Health Survey 2005-2006 and India Human Development Survey 2011-2012. Note. Probabilities are based on logistic regression models accounting for background characteristics. Monetary values are in lakhs. 1.00 USD=66.72 Rupees, 1 Lakh=100,000 Rupees.