

UCLA

UCLA Previously Published Works

Title

Physical intimate partner violence in India: how much does childhood socialisation matter?

Permalink

<https://escholarship.org/uc/item/6bf77325>

Authors

Sinha, Atreyee
Chowdhury, Biswabandita
Heuveline, Patrick

Publication Date

2022

DOI

10.1080/17441730.2022.2035921

Peer reviewed

**Physical intimate partner violence in India:
How much does childhood socialization matter?**

Atreyee Sinha ^{1*}, Biswabandita Chowdhury ² and Patrick Heuveline ³

¹ Ph.D.; Independent Researcher.

² Ph.D.; Executive - Research, Monitoring and Evaluation, Arpan, Mumbai - 400063

³ Professor, Department of Sociology and the International Institute, University of California; Los Angeles, CA 90095

Abstract

While many studies hypothesize gender socialization that glorifies male supremacy and encourages men to adhere to patriarchal norms leads to partner abuse, statistical evidence on this link is scant in low- and middle-income countries. This article bridges this important research gap by exploring the pathways between childhood socialization and intimate partner violence (IPV) in India, using a sub-sample of 5,573 young married men (15-29 years) from a sub-nationally representative survey, 'Youth in India: Situation and Needs (2006-07)'. A considerable proportion of young men acknowledged gender discriminatory practices and reported exposure to parental violence during childhood. We explore associations between these childhood experiences and IPV with binary logistic regression and fit a path model to further investigate the complex interactions between socialization experiences during childhood and IPV in later life. Finally, results from structural equation modelling indicates that presence of gender discriminations in the family and young men growing up in a violent environment have significant effects on holding non-egalitarian gender attitudes and inflicting physical violence in their own marriage. The study highlights the urgent need to understand the determinants of gender attitudes among young men in order to reduce the intergenerational transmission of patriarchal social norms and reduce violence within marriage. The study also underscores the importance of a violence-free and gender-neutral family environment during boys' and girls' formative years and further calls for a comprehensive program to efficiently address gender inequality and normalization of violence at the family level, to promote positive parenting, and to eliminate IPV.

Keywords: Physical intimate partner violence; Socialization; Discrimination; Gender attitude; Structural equation modeling; India.

**Physical intimate partner violence in India:
How much does childhood socialization matter?**

Introduction

Violence within marriage or, more broadly, intimate partner violence (IPV) is an important international public health concern, acknowledged as a threat to the rights of women as well as to national development, for instance at the 1995 United Nations' Beijing World Conference on Women (United Nations, 1995a). Broadly defined as a pattern of abusive behaviour by one or both partners in an intimate relationship such as marriage, IPV may manifest itself through physical aggression or assault, sexual and emotional abuse, controlling or domineering (Jewkes, 2002; WHO, 2012). Although both men and women can be victims of IPV, its global burden is overwhelmingly borne by women (Krug et al., 2002). In societies with strong patriarchal foundations, IPV is mainly a manifestation of the male dominance legitimated within the family and society through authority and power (Krishnaraj, 1991) and may cut across all socioeconomic, religious, or cultural groups. In such settings, women who are victims of physical, sexual, or emotional abuse learn to accept it as the "husband's right" (Jejeebhoy, 1998; Visaria, 2000). IPV has direct and strong adverse outcomes for the physical, reproductive, and mental health of women and has far reaching consequences for their children as well (Campbell, 2002; Ellsberg et al., 2008; Silverman et al., 2009; Devries et.al., 2011; Devries et.al., 2013; Sinha & Chattopadhyay, 2016; Pines, 2017; Sinha & Chattopadhyay, 2017).

Widespread throughout Southeast Asian, African and Latin American countries, IPV has been apprehended through various theoretical frameworks. One widely used model for understanding IPV is the ecological framework, which proposes that violence within marriage depends on factors operating at multiple levels: individual, familial, relational, social, and communal (Heise, 1998). At the individual level, the most important factors affecting a child's psychology and personality that may lead to aggression in later life are witnessing parental violence as a child and being abused during childhood (Dutton, 1995). As posited by social learning theory and cycle of violence theory, there is considerable evidence from studies in the United States and other developed countries that IPV is a learned social behaviour, with sons of abused women becoming more likely to abuse their intimate partners and daughters of abused women more prone to be abused by their intimate partners (Hotaling & Sugarman, 1986; Ellsberg et.al., 1999; Jewkes, Levin & Penn-Kekana, 2002; Martin et.al., 2002). Men who experienced emotional or sexual abuse or neglect during childhood are at increased risk of perpetuating IPV, rape, or sexual assault (Jewkes et.al., 2006; Burton, Duty & Leibowitz, 2011; Jewkes, Fulu, Roselli & Garcia-Moreno, 2013; Fulu, Jewkes, Roselli & Garcia-Moreno, 2018;). Meanwhile, feminist theories postulate that IPV is manifested in a normative patriarchal social structure embedded with gender power imbalances. In families where men have economic and decision-making power and male dominance is encouraged, male aggression is more pronounced as a mean of settling disputes (Levinson, 1989; Yllo & Straus, 1990; Visaria, 2008; Barker et.al., 2011; Contreras et al., 2012). Male control over family wealth increases the risk of violence being inflicted on economically dependent female partners (Kalmus & Straus, 1984; Levinson, 1989; Schuler, Hashemi, Riley & Akhtar, 1996; Rao, 1997; Jewkes, 2000; Visaria, 2008).

PIPV and childhood socialization

At the social level, violence against women is expected to be more prevalent in families in lower socioeconomic strata (Rennison & Welchans, 2000; Koeing, Ahmed, Hossain & Mozumder, 2003; Rahman, Hoque & Makinoda, 2011). This is because IPV is not merely an expression of male dominance but also reflects ‘a crisis of the masculine identity’ in a society where males are expected to dominate (Gelles, 1974). For unemployed men, economic powerlessness may hinder the successful attainment of the socially desirable roles of provider and protector, and, in turn, violence may result from a sense of failure and as a way to restore a dominant position (Jewkes, 2002; Glinski, Schwenke, O'Brien-Milne, & Farley, 2018). In societies where ‘hyper-masculinity’ equates masculinity with power and dominance (Moscher & Sirkin, 1984), men are encouraged to maintain an adversarial attitude and little empathy towards women (Moscher & Tomkin, 1988) and the physical chastisement of women can be culturally accepted and justified on various grounds (Dobash & Dobash, 1979). Studies suggest that men who strongly adhere to hyper-masculine gender norms are more likely to inflict violence to their female partners (Santana, Raj, Decker, La Marche & Silverman, 2006; Reidy, Shirk, Sloan & Zeichner, 2009; Reidy, Berke, Gentile & Zeichner, 2014). Men's violent actions and aggressive behaviours are overwhelmingly fashioned by rigid cultural as well as social expectations regarding masculinity and related power imbalances (Moore & Stuart, 2005; Vasquez Guerrero, 2009; Hendra, FitzGerald, & Seymour, 2013). Although the extant research generally endorses adverse childhood experiences and inequitable gender attitudes to be key determinants of IPV, the pathways from childhood experience to aggressive adult behaviour are complex and statistical evidence is limited, especially in low- and middle-income countries (LMIC).

Background: IPV in the Indian context

Despite the various laws and national/international conventions in play, IPV cuts across class, caste, religion and geographical boundaries in the Indian sub-continent. According to a national survey, nearly 21 percent of married women between the ages of 15 and 24 years have experienced some form of physical violence in the previous 12 months (IIPS and Population Council, 2010). Another survey reveals that nearly 31 percent of ever-married women (15-49 years) have experienced physical, sexual or emotional violence from their husbands at some point in their lives (IIPS & ICF, 2017). An important gender norm, widespread across Indian society, is the ‘husbands’ authority’ to control their wives through various ways and means (Jejeebhoy, 1998; Visaria, 2008). According to the same national survey, around 52 percent of women and 42 percent of men aged between 15 and 49 years agreed that a ‘husband is justified in hitting or beating his wife’ on certain grounds (IIPS & ICF, 2017). Extant qualitative research highlights a range of factors contributing to the continuing endorsement and enactment of partner abuse, such as the intergenerational transmission of a culture of male dominance, or the adherence to social norms that encourage acceptance and even rationalization of domestic violence (Koeing et. al., 2006). IPV is most often attributed to the patriarchal foundation of Indian society, which is underpinned by the superior rights, privileges, authority, and power conferred to men since childhood (Krishnaraj, 1991; Visaria, 2000). In India, young boys and girls appear to learn early on to conform to the traditional codes of conduct prescribed according to their biological sex at birth (Jejeebhoy, 1998; Visaria, 2008).

PIPV and childhood socialization

A study based on men's reports in Uttar Pradesh found that witnessing parental violence in childhood and the controlling behaviour of husbands were significantly associated with an elevated risk of beating their wife (Martin et al., 2002). In a recent study in six Indian states (Nanda et.al. 2014), about one-third of men exhibited the most rigid 'relationship control' and 'attitudes to gender norms.' They not only exercised excessive control within their intimate relationships, but also believed that women and men were unequal and held somewhat negative views about gender equality. In that study, an experience of discrimination or harassment, often during childhood, and rigid masculinity traits came out as significant predictors for IPV. More broadly, community norms about the acceptance of wife beating are important correlates of IPV in India (Koeing *et. al.*, 2006; Dalal *et. al.*, 2012).

With respect to the cultural and community norms regarding women's position and status in Indian society, there exists a distinct regional divide in India (Dyson & Moore, 1983). Gender power imbalance and gender inequality is more acute in the Northern than in the Southern part of the country (Karve, 1965). Gender bias in family behaviour and adherence to traditional rituals perpetuated through generations, confine women to the domestic sphere and within the four walls of the household dwelling, more so in Northern India, with activities centered on childbearing and rearing and on caring for the family (Chakravarti, 1993). Marriage of girls before the legal minimum age and the dowry system reduce women's negotiating power and contribute to violence within marriage (Bloch & Rao, 1995; Rao, 1997; Jejeebhoy, 1998; Nanda et.al., 2014).

Study's objectives

While the theories linking violence against women and childhood experiences have been established, empirical evidence of their multiple and complex interactions remains limited to date in LMIC, due to the paucity of data. The present study attempts to bridge this gap. In this paper, we present population-level data on men who report different types of childhood trauma, including physical abuse, witnessing the abuse of their mother, and whether they report using physical discipline against their own partners. Using structural equation modelling, we examine the pathways through which one's childhood experiences can lead to violence against women during adulthood. This study aims beyond simple linear associations between childhood socialization and IPV to unravel the complex and intersecting pathways and risk factors that connect them. Most of the studies on IPV are focused on the experience of the victims, their coping mechanisms, their help-seeking behaviour, and the policies and programs required to address the need of the victims, and thus, they may fail to recognize the root causes behind the violent behaviour. The present study attempts to emphasize the relevance and importance of understanding IPV from the perpetrators' perspective in order to develop a more comprehensive understanding of IPV. To develop effective intervention programs and policies, there is urgent need to understand the men's perspectives, along with the factors and circumstances that shape the perception of masculinity, which is critically important and yet has rarely been addressed in the Indian context.

Materials and methods

Data

PIPV and childhood socialization

We used data from the “Youth in India: Situation and Needs” study, the first ever sub-nationally representative survey on youth conducted jointly by the International Institute for Population Sciences (IIPS), Mumbai and the Population Council, New Delhi in six States (Bihar, Jharkhand, Maharashtra, Andhra Pradesh and Tamil Nadu) between 2006 and 2008. The six states, constituting 39 percent of the country’s population, were purposively selected to represent the different geographic and socio-cultural regions of the country (IIPS & Population Council, 2010). A total of 50,848 young individuals between the ages of 15 to 24 years were interviewed in this survey using separate questionnaires for each of the categories of respondents: men and women, married and unmarried. For married males, the upper age limit was increased to 29 years due to the relatively small proportion of men married before age 25.

The survey treated rural and urban areas as independent sampling domains and a systematic multistage sampling design was adopted to draw sample areas independently. In rural areas census list of villages formed the sampling frame and the sample was selected in two stages. In the first stage, villages were selected from the stratified list with selection probability proportional to size (PPS) and complete house listing was done of the selected villages. This list of households provided the necessary frame for selecting households at the second stage. Households to be interviewed were selected with equal probability from the list using systematic sampling. In urban areas census enumeration blocks (CEB) provided the sampling frame and the sample was then selected in three stages. At the first stage of selection, wards were selected systematically with probability proportional to size. At the second stage, within each selected ward, CEBs were arranged by their administrative number and one CEB (designated as a male PSU) was selected using probability proportional to size. For each selected male CEB, an adjacent CEB was chosen to represent the female PSU in the same ward. A complete mapping and household listing operation was carried out in each selected PSU and the resulting list provided the necessary frame for selecting households at the third stage. Households to be interviewed were selected with equal probability from the list using systematic sampling. In each PSU, households to be interviewed were selected by systematic sampling and only one youth per household was interviewed.

Given the sensitive nature of the topics covered in the survey, different sets of primary sampling units were selected for young men and women. Interviews were conducted after following informed consent procedures and data safety protocols were implemented to minimize the risks to confidentiality and privacy.

Study sample

The analyses presented in this paper are based on a sub-sample of 5,573 young (15-29 years) married men, who started cohabiting with their wives. The section of the survey with questions of interest here were only administered to men whose both parents were alive at the time of survey. Those represented 73% of all the married men between the ages of 15 and 29 who started cohabiting with their wives.

Outcome variable

PIPV and childhood socialization

The outcome variable in these analyses is a dummy variable for physical intimate partner violence (PIPV) being reported by these young married men. Five out of seven different acts of physical violence were considered: slapping; twisting the arm or pulling the hair; pushing, shaking or throwing something; punching with the fist or with something that could hurt; and kicking, dragging or beating up. The other two acts of physical violence, i.e., choking or burning, and threatening or attacking with a knife, gun or any other weapon were not included in the construction of variable because either of them was reported by less than 0.1 percent of the respondents. The PIPV dummy variable was coded dichotomous; men who reported use of any one or more of the selected five acts of PIPV were coded as '1' and those who did not report any of the five acts were coded as '0'.

Covariates

Background characteristics. Based on the existing research on IPV, a range of socioeconomic covariates were controlled for in the analyses. These background characteristics include the respondent's age, education, employment status, type of family, wealth index, religion, caste and place of residence. Based on literature review, two important additional behavioral factors - alcohol consumption and involvement in violent activities in the community in the 12 months preceding the interview, were also included as these are considered as having proximate association with IPV.

Exposure variables: Childhood socialization. A few important exposure variables were included in the present paper. Different components, pertaining to a range of experiences respondents reported to have had during their growing up phase, were collectively termed as '*childhood socialization*' and it included three dummy variables. First, *witnessing inter-parental violence* it was based on whether the respondents reported having ever witnessed their fathers beating their mothers during childhood. Second, *Experience of physical abuse as a child* it was based on whether the respondents reported having ever been beaten up by either of the parents during childhood. Third, *Gender discrimination in family* this was based on whether the respondents reported their education was given more importance or that they had more freedom to roam around or go out, or that they were expected to do little house work, compared to their sisters or other girls present in the extended family.

Attitudinal variable: gender attitude of young married men. A couple of attitudinal variables were also included. First, *Belief in husbands' authoritarian role* was constructed from whether the respondents agreed with the statements that only or mainly husbands should decide how to spend money in household matters or that women should always obtain husbands' permission for most of the things they do. Second, *Justification of wife beating* was constructed from whether the respondents agreed that a husband is justified in beating his wife in any of these situations: she goes out without telling him, disagrees with her husband's opinion, refuses to have sexual relations with her husband, or is unfaithful.

Statistical analysis

The analyses were conducted in two stages. In the first stage, we began with descriptive statistics to provide an overall picture of young men's socialization process during childhood, their attitude towards gender and the extent to which they had inflicted physical violence on

PIPV and childhood socialization

their wives. We then estimated a binary logistic regression model to explore the confounding factors that may contribute to IPV.

In the second stage, we turn to structural equation modelling (SEM) to analyze the relationships between the outcome variables and potential determinants reviewed above. Among those, gender biases in childhood socialization or gender attitudes in adulthood are latent constructs that are only apprehended here through one or more Independent Variables (IV). SEM involves specifying a measurement and a structural model, that are estimated simultaneously (Uthman, Moradi & Lawoko, 2011). For this, we used the default estimator for categorical variables in MPlus, the Weighted Least Square Means and Variance (WLSMV). The model fit was examined by three indices: Comparative Fit Index (CFI), Tucker Lewis Index (TLI) and a Root Mean Square Error of Approximation (RMSEA). A CFI value of ≥ 0.96 , TLI of ≥ 0.95 and RMSEA of ≤ 0.05 with a sample size of more than 250 were considered threshold for good model fit (Yu, 2002). The MPlus (Muthén & Muthén, 1998-2001) program was selected for its ability to handle categorical variables (explained in detail in the results).

The analysis involved application of a Confirmatory Factor Analysis (CFA) which yielded factor loadings of the latent factors. For this model, four latent variables were constructed using four measurement models: *Gender discrimination in family* (based on three survey items), *Justification of wife beating* (four survey items), *Belief in husband's authoritarian role* (two survey items), and *Physical IPV in last twelve months*, (5 survey items).

Findings

Characteristics of young married men

As shown in **Table 1**, nearly 60 percent of the respondents in our sample lived in rural areas. Most respondents were Hindu and belonged to castes other than scheduled caste/scheduled tribes (SCs/STs). Wealth quintiles have been calculated using household amenities data and factor analysis for the entire Youth Study sample. As selection criteria to be included in our sample imposed different levels of attrition across the quintiles, our sample is unevenly distributed across these quintiles. Nearly half of the young men belonged to the top wealth quintiles (4th and 5th), 21 percent belonged to the middle wealth quintile whereas around 28 percent were from lowest quintiles. Nearly three quarters of the respondents lived in non-nuclear households. Around 13 percent of these young married men were either illiterate or had no formal schooling, and another 27 percent had only 1 to 7 years of schooling. Only 21 percent had 12 or more years of education. Around 11 percent were not involved in any gainful employment at the time of survey and another one fourth were involved in some kind of unpaid or both paid & unpaid works.

Sample summary statistics

Results presented in **Table 2** provide summary statistics of the variables used in the model at two different points: pre- and post-marriage. We note that over one third of the respondents had witnessed parental violence during childhood, while almost half (48%) of the respondents

PIPV and childhood socialization

experienced physical abuse as a child, i.e., they were beaten by their parents. Experience of gender discrimination and gender-biased parenting were also prevalent; around four in every ten young married men reported that their education was given more importance in the family compared to their sisters' and they were expected to do lesser household works than their sisters. Over 60 percent of young men reported they had more freedom to roam around than their sisters.

A considerable proportion of these young men possessed non-egalitarian gender attitudes. As many as 78 percent of them accepted a husband's authoritative role in family; while 37 percent agreed that the husband alone should be the decision maker, another 72 percent said that a wife should ask for husband's permission for everything. Over half of the respondents justified the act of wife beating on various grounds, such as if 'he suspects his wife of being unfaithful' (37%), if 'his wife goes out without telling him' (29.5%), if 'his wife disagrees with her husband's opinion' (30%) and if 'his wife refuses to have sexual relations' with him (15.4%). Around 17 percent of young married men reported inflicting physical IPV on their wives in the 12 months preceding the survey in some form or another, wherein slapping (16%) was the most common form, followed by twisting of arm (4%).

Determinants of physical intimate partner violence

Bivariate analysis revealed that young men's socialization during childhood, their gender attitude and behavioural characteristics had significant associations with their violent behavior. Infliction of physical violence on intimate partners was most pronounced in Tamil Nadu (27.8%), followed by Bihar (19.3%), Jharkhand (19.6%), Maharashtra (17.9%), and Andhra Pradesh (16%) and Rajasthan (7.2%) (Results not shown). Turning to the binary logistic regression estimates, we can ascertain some of the confounding factors influencing PIPV. The adjusted odds ratios (**Table 3**) indicate that men who grew up in families where gender discriminatory practices were predominant were significantly more likely to indulge in wife beating; men who had more freedom within the household (OR=1.29, $p<0.01$) and whose education was given more importance than their sisters (OR=1.22, $p<0.05$) were also more prone to use physical force on wives. Similarly, other family life stressors such as exposure to violence during childhood, either as a witness of (OR=2.30, $p<0.001$) or a victim (OR=1.62, $p<0.001$), was a significant risk marker. Young men were more likely to beat their wives when they justified the act of wife beating whether in case she is suspected of being unfaithful (OR=1.49, $p<0.001$), she goes out without telling husband (OR=1.30, $p<0.05$), she disagrees with her husbands' (OR=1.36, $p<0.01$) or she refuses to have sexual relations with her husband (OR=1.25, $p<0.10$). Young men residing in rural areas, living in nuclear households, having low education and alcohol addiction were also more likely to inflict physical violence on their wives.

Results from structural equation model (SEM)

In the next step, the significant exposure and attitudinal variables were fit into a structural equation model to examine if there were any causal linkages amongst the variables. The SEM is built on the assumption that all the observable variables linked to the same latent variable should be highly correlated but should be uncorrelated with observed variables linked to other

PIPV and childhood socialization

latent variables. The study variables were tested for its validation and results are presented in **Table 4**.

The factor loadings for each of the latent factors are shown in **Table 5**. *Gender discrimination in family* had factor loadings 0.581, 0.857, 0.693 respectively. *Justification of wife beating* had factor loadings above 0.751, 0.880, 0.894 and 0.781 respectively. *Belief in husband's authoritarian role* yielded factor loadings of 0.707 and 0.489 respectively. *Physical IPV in last twelve months* had factor loadings of 0.873, 0.942, 0.919, 0.908, 0.887. The CFI, TLI and RMSEA values for each of the models conformed to the standard criteria and established a good model fit.

Figure 1 illustrates the significant pathways and associations between men's experiences of child maltreatment, witnessing abuse of their mother, their experiences of gender discrimination, their gender attitude and inflicting IPV themselves. The relationships among latent variables were seen both directly and indirectly influencing the outcome variable. Standardized path coefficients suggest that the experience of physical abuse as a child, witnessing parental violence during childhood and justifications of wife beating were three strong predictors of PIPV: each of these three factors had significant direct effects on PIPV. Young married men who witnessed inter-parental violence before marriage were significantly more likely to be perpetrators of IPV during the past 12 months ($\beta=0.65$, $p<0.001$). Similarly, men who experienced physical abuse as children were at elevated risk of engaging in wife beating ($\beta=0.22$, $p<0.001$). Young men who justified the act of wife beating were also significantly more likely to inflict physical violence on their wives ($\beta=0.32$, $p<0.001$).

SEM results further revealed that exposure to inter-parental violence, history of gender discrimination in family and acceptance of a husband's authoritarian role had significant direct effects in shaping young men's gender attitude. Men who had seen their fathers beating their mothers during childhood were significantly more likely to justify the act of wife beating under various circumstances ($\beta=0.33$, $p<0.001$). Gender discrimination also escalated the likelihood that men would justify the act of wife beating at a later stage in life ($\beta=0.15$, $p<0.001$). Similarly, those who condoned a husband's authority at home were more likely to justify wife beating on various occasions ($\beta=0.29$, $p<0.001$). Moreover, these three factors played a significant role indirectly as well; findings indicated significant indirect effects of witnessing parental violence ($\beta=0.104$, $p<0.001$), gender discrimination in family ($\beta=0.047$, $p<0.001$) and acceptance of husband's authoritarian role ($\beta=0.093$, $p<0.001$) on PIPV, mediating through the young men's attitude towards wife beating and increasing the risk.

Discussion

In this study, we explore the mediating and moderating mechanisms that may operate during critical developmental periods of life and may cumulatively be sustained over time. Across different regions, men were found to engage in violence against their wives to a substantial degree. Even in Tamil Nadu, typically described as more gender equalitarian than other parts of the country, the prevalence of IPV is alarmingly high. This finding is consistent with prior studies that reported similar results and pointed at discordant sociocultural norms such as

PIPV and childhood socialization

acceptability of physical violence at the hands of husbands (Jejeebhoy, 1998; Go, 2003; Visaria, 2008; George et.al., 2016). These studies suggest that a considerable majority of both Tamil women and men accept wife beating as a husband's right and thus subscribe to the gender stereotypes (Sinha and Chattopadhyay, 2016). But our findings also indicate that there are strong links between men's childhood experience of maltreatment and their perpetrating violence in adulthood and they show the pathways through which childhood experiences contribute to violent behaviour in adult life.

Our results clearly bring out that IPV perpetrated by young men is rooted in their adverse childhood experiences (ACE). The prevalence of physical abuse experienced by men is high in childhood, during which a substantial proportion of respondents also witnessed parental violence. Respondents reported experiencing high levels of gender inequality during childhood, with boys receiving preferential treatment over girls. Our findings clearly show that young males who grow up in a violent environment and are exposed to childhood trauma, tend to perpetrate violence on their partners. Consistent with prior research (Kalmuss & Straus, 1984; Hotaling & Sugarman, 1986; Zhu & Dalal, 2010), our SEM results suggest men's own use of physical violence on their partners are significantly driven by their experience of childhood maltreatment and witnessing their mothers being abused, indicating an element of social learning since childhood (Bandura, 1971; Heise, 1998; Coker et.al., 2002). Similarly, those who are beaten up by their parents during childhood may internalize the idea that violence/use of physical force is mandatory or normal in punishment and conflict situations (Jewkes et. al., 2002; Fry & Elliott, 2017; Fulu et al., 2017). Young males used to be treated differently on the basis of their gender during childhood are prone to possess non-egalitarian gender attitudes and are then more likely to exert control on their partners by acting violently (Gil-Gonzalez et.al., 2007).

Most young males subscribed to inequitable gender attitudes; around five in every ten young men legitimized wife beating on several grounds while around seven men in every ten agreed to the authoritarian rights of husbands. Studies suggest that such rigidly masculine attitude are strongly associated with the violent atmosphere in which they grow up (Contreas et.al., 2012; Nanda et al., 2014). The findings are consistent with existing studies which argue that in typical male dominated societies if women fail to fulfill certain expectations, e.g., the traditional wifely duties of satisfying their husbands' and his family's needs, physical punishment is considered as their due (Haj-Yahia, 2003; Fulu et.al., 2017) and that is why those who justify the act of wife beating are more likely to engage in it in their private life. Previous studies have suggested that equitable gender attitudes from both men and women are protective factors against spousal violence (Luke, Schuler, Mai, Thien & Minh, 2007). Thus, the present study contributes to bridge a crucial gap in the field of domestic violence research by testing theoretically derived mechanisms for violent traits, examining variables over different life stages, and establishing significant causal relationships between men's childhood experiences and their adult behaviour.

Limitations

A few caveats need to be acknowledged. First, given the sensitive nature of the topic, the unique approach of the survey to collect IPV information directly from men is vulnerable to social desirability bias, i.e., that the respondents may think that their answer is something

which the society will look down upon, and may be reluctant to report correctly. This may lead to potential under reporting of IPV (Singh, Mahapatra & Dutta, 2008; Sambisa *et. al.*, 2010; Zhu & Dalal, 2010), and under-reporting might be more severe for some groups than for others. Secondly, the information on respondents' childhood was obtained retrospectively and may suffer from recall bias.

While the survey dates to 2006-07, it has unique features that are not present in more recent surveys. In particular, 'Youth in India: Situation and Need' study (2006-07) provides the only available data that captures respondents' childhood experiences using retrospective reports and men's report of PIPV at sub-national level. Although limited to PIPV rather than encompassing all aspects of IPV and are cross-sectional in nature, the retrospective reports allow us to consider the impact of childhood experiences on IPV in later life. Longitudinal data would provide a better understanding of the timing of risk factors and of the causal nature of the relationships between them. Lastly, the data used in this study are limited to six selected States and not necessarily reflect the total population of youths in the country. Although the survey was conducted in areas representing the socio-cultural diversity of the sub-continent, some states where gender-based violence and discriminations might be even more prevalent are not included in this study. Expanding this research to these States might provide additional insights on the key transitions experienced by the youth, their growing up process, attitude and life choices.

Conclusion

The UN Sustainable Development Goals (SDGs) include two zero-based targets aiming to end all forms of violence against women and violence against children. In other words, every country that has committed to these global goals must not only reduce, but eliminate, violence against women and children by 2030 (UN 2015). Towards these goals, the present study clearly points out that IPV does not occur in isolation and it is important to recognize and address its interconnectedness with various forms of inequity and power imbalance operative at the family level. This study highlights the importance of facilitating a violence free and gender-neutral family environment for children so that they can learn the value of equality and respect towards their female partners and shed off the normative beliefs acquired from society. Targeting gender education in schools, sex and family life education among youngsters, at least up to secondary education, could enable them to question the gender stereotypes and break the chain of intergenerational transmission.

Our study also stresses the need for a comprehensive approach that promotes positive parenting practices and addresses inter-parental conflicts which are detrimental to child development. Free counseling of parents, especially newly married couples through community-based programmes are necessary in this context. As suggested by various studies, programmes, designed to prevent relationship difficulties and adopt skills in everyday interactions should target couples in deprived circumstances or those experiencing more complex difficulties (Carroll & Doherty, 2003; Blanchard, Hawkins, Baldwin & Fawcett, 2009; Fawcett, Hawkins, Blanchard & Carroll, 2010; Cowan, Cowan & Barry, 2011; Sinha & Ram, 2018). Interventions are also required to eliminate gender discrimination in families. To encourage parents to welcome female children and provide them with better life opportunities in terms of health and education, more financial incentives in the form of Conditional Cash Transfer (CCT) schemes may prove useful. In order to minimize gender discrimination,

PIPV and childhood socialization

spousal violence and promote egalitarian gender norms, a gender inclusive approach, i.e., the inclusion of young men in various interventions and programmes, needs to be developed. More campaigns, such as *Men Against Rape and discrimination* MARD (2013), *Men's Action for Stopping Violence Against Women* (MASVAW, 2001) or *Parivartan* (ICRW), that actively engage young men in their commitment towards reducing discrimination and violence should be promoted (Nanda *et. al.*, 2014).

Acknowledgement:

An earlier version of the paper was presented at the *Population Association of America (PAA) Annual Meeting*, Austin TX, USA during April 10-13, 2019 (winner of a *Best Poster Award*). The first author acknowledges the financial support received from *The GENDER Project* (Gender Equity and Demographic Research), a Bill and Melinda Gates Foundation funded (BMGF Grant OPP1179208) collaborative research project between the *Center on Gender Equity and Health, UC San Diego* and the *International Institute for Population Sciences, Mumbai*, to attend the conference. The third author benefited from facilities and resources provided by the *California Center for Population Research at UCLA (CCPR)*, which receives core support (P2C-HD041022) from the *Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)*. We are thankful to Dr. Lotus McDougal, Project Scientist, Centre on Gender Equity and Health, Dept. of Medicine, University of California, San Diego for her comments and suggestions on the manuscript. We also thankfully acknowledge the inputs from Dr. Aparajita Chattopadhyay, Professor, Department of Developmental Studies, International Institute for Population Sciences, Mumbai India.

References

- Bandura, A. (1971). *Social Learning Theory*. General Learning Press, New York City. (http://www.jku.at/org/content/e54521/e54528/e54529/e178059/Bandura_SocialLearningTheory_ger.pdf).
- Barker, G., Contreras, J.M., Heilman, B., Singh, A.K., Verma, R.K., & Nascimento, M (2011). *Evolving Men: Initial Results from the International Men and Gender Equality Survey (IMAGES)*. Washington, DC.: International Center for Research on Women (ICRW) and Rio de Janeiro: Instituto Promundo.
- Blanchard, V. L., Hawkins, A. J., Baldwin, S. A. & Fawcett, E. B. (2009). Investigating the effects of marriage and relationship education on couples' communication skills: meta-analytic study. *Journal of Family Psychology, 23*(2), 203-214.
- Bloch, F.S. and Rao, V. (1995). *Domestic Violence as a Bargaining Instrument in Rural India*. William College, Mimeo.
- Burton, D., Duty, K. & Leibowitz, G. (2011). Differences between sexually victimized and non-sexually victimized male adolescent sexual abusers: developmental antecedents and behavioral comparisons. *Journal of Child Sexual Abuse, 20*, 77–93.
- Campbell, J. C. (2002). Health consequences of intimate partner violence. *The Lancet, 359* (9314): 1331–1336.
- Carroll, J. S. & Doherty, W. J. (2003). Evaluating the effectiveness of premarital prevention programs: A meta-analytic review of outcome research. *Family Relations, 52*(2), 105-118.
- Chakravarti, U. (1993). Conceptualizing brahmanical patriarchy in early India: Gender, caste, class and state. *Economic and Political Weekly, 28*, 579-585.
- Coker, A. L., Davis, K. E., Arias, I., Desai, S., Sanderson, M., Brandt, H. M., Paige H. Smith, P. H. (2002). Physical and mental health effects of intimate partner violence for men and women. *American Journal of Preventive Medicine, 24*(4), 260-268.
- Contreras, M., Heilman, B., Barker, G., Singh, A., Verma, R., & Bloomfield, J. (2012). *Bridges to adulthood: Understanding the lifelong influence of men's childhood experiences of violence analyzing data from the International Men and Gender Equality Survey*. Washington, DC: International Center for Research on women (ICRW) and Rio de Janeiro: Instituto Promundo.
- Cowan, C. P., Cowan, P. A. & Barry, J. (2011). Couples' groups for parents of preschoolers: Ten-year outcomes of a randomized trial. *Journal of Family Psychology, 25*(2), 240-250.
- Dalal, K., Lee, M. S., & Gifford, M. (2012). Male adolescents' attitude toward wife beating: a multi-country study in South Asia. *Journal of Adolescent Health, 50*, 437-442.
- Devries, K., Watts, C., Yoshihama, M., Kiss, L., Schraiber, L. B., Deyessa, N., ... & Berhane, Y. (2011). Violence against women is strongly associated with suicide attempts: evidence from the WHO multi-country study on women's health and domestic violence against women. *Social science & medicine, 73*(1), 79-86.
- Devries, K. M., Mak, J. Y., Bacchus, L. J., Child, J. C., Falder, G., Petzold, M., ... & Watts, C. H. (2013). Intimate partner violence and incident depressive symptoms and suicide attempts: a systematic review of longitudinal studies. *PLoS medicine, 10*(5), e1001439.
- Dutton, D. G. (1995). Male abusiveness in intimate relationships. *Clinical Psychology Review, 15*, 567–581.
- Dobash, R.E. & Dobash, R. P. (1979). *Violence against Wives*. NY: Free Press.

- Dyson, T. & Moore, M. (1983). On kinship structure, female autonomy, and demographic behaviour in India. *Population and Development Review*, 9(1): 35–60.
- Ellsberg, M., Jansen, H. A., Heise, L., *et al.* (2008). Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: an observational study. *The Lancet*, 371: 1165–1172.
- Fawcett, E. B., Hawkins, A. J., Blanchard, V. L. & Carroll, J. S. (2010). Do premarital education programs really work? A meta-analytic study. *Family Relations*, 59(3), 232-239.
- Finkelhor D, Ormrod R. and Turner, H. (2007). Poly-victimization: a neglected component in child victimization. *Child Abuse Neglect*, 31, 7–26.
- Fry, D.A. & Elliott, S.P. (2017). Understanding the linkages between violence against women and violence against children. Comment. *The Lancet Global Health*, 5 (5), e472-e473.
- Fulu, E., Jewkes, R., Roselli, T. & Garcia-Moreno, C (2013). Prevalence of and factors associated with intimate partner violence perpetration: findings from the UN Multi-country Cross-Sectional Study on men and violence in Asia and the Pacific. *Lancet Glob Health* 2013; 1: e187–207.
- Fulu, E., Miedema, S., Roselli, T. *et al.* (2017). Pathways between childhood trauma, intimate partner violence, and harsh parenting: findings from the UN Multi-country Study on Men and Violence in Asia and the Pacific. *The Lancet Global Health*, 5 (5), e512-e522.
- Gelles, R.J. (1974). *The violent home: A study of physical aggression between husbands and wives*. Beverly Hills, CA:Sage.
- George, J., Nair, D., Premkumar, N. R., Saravanan, N., Chinnakali, P., & Roy, G. (2016). The prevalence of domestic violence and its associated factors among married women in a rural area of Puducherry, South India. *Journal of family medicine and primary care*, 5(3), 672–676. <https://doi.org/10.4103/2249-4863.197309>
- Gil-González, D., Vives-Cases, C., Ruiz, M. T., Carrasco-Portiño, M., & Carlos Álvarez-Dardet, C. (2007). Childhood experiences of violence in perpetrators as a risk factor of intimate partner violence: a systematic review. *Journal of Public Health*, 30 (1), 14–22.
- Glinski, A., Schwenke, C., O'Brien-Milne, L., & Farley, K. (2018). *Gender equity and male engagement: It only works when everyone plays*. Washington, D.C, ICRW.
- Go, V. F. 2003. When HIV-prevention messages and gender norms clash: The impact of domestic violence on women's HIV risk in slums of Chennai, India. *AIDS and Behaviour*, 7(3):263-272.
- Haj-Yahia, M. M. (2003). Beliefs about wife beating among Arab men from Israel: The influence of their patriarchal ideology. *Journal of Family Violence*, 18, 193-205.
- Hendra, J., FitzGerald, I., & Seymour, D. (2013). Towards a new transformative development agenda: The role of men and boys in achieving gender equality. *Journal of International Affairs*, 67(1), 105-122.
- Heise, L.R. (1998). Violence against women: An integrated ecological framework. *Violence against Women*, 4, 262-290.
- Hotaling, G.T., & Sugarman, D.B. (1986). An analysis of risk markers in husband to wife violence: The current state of knowledge. *Violence and Victims*, 1, 101-124.
- International Institute for Population Sciences (IIPS) and ICF. 2017. National Family Health Survey (NFHS-4), 2015-16: India. Mumbai: IIPS.
- International Institute for Population Sciences (IIPS) & Macro International. 2007. *National Family Health Survey (NFHS-3), India, 2005-06*. Vol. 1, Mumbai: IIPS.

- International Institute for Population Sciences (IIPS) & Population Council 2010. *Youth in India: Situation and Needs, 2006-2007*, Mumbai.
- Jejeebhoy, S.J. (1998). Wife beating in rural India: A husband's right? Evidence from survey data. *Economic and Political Weekly*, 33, 855-862.
- Jewkes, R. (2002). Intimate partner violence: Causes and prevention. *The Lancet*, 359(9315), 1423-1429.
- Jewkes, R., Levin, J., & Penn-Kakana, L. (2002). Risk factors for domestic violence: Findings from a South African cross-sectional study. *Social Science Medicine*, 55, 1603-1617.
- Jewkes, R., Dunkle, K., Koss, MP., et al. (2006). Rape perpetration by young, rural South African men: prevalence, patterns and risk factors. *Social Science Medicine*, 63, 2949-61.
- Jewkes, R., Fulu, E., Roselli, T. & Garcia-Moreno, C. (2013). Prevalence of and factors associated with non-partner rape perpetration: findings from the UN Multi-country Cross-sectional Study on Men and Violence in Asia and the Pacific. *Lancet Global Health*, 1, e208-e218.
- Kalmauss, D.S., & Straus, M.A. (1984). The intergenerational transmission of marital aggression. *Journal of Marriage and Family*, 46, 11-19.
- Karve, I. (1965). *Kinship Organization in India*. Bombay: Asia Publishing House.
- Koenig, M. A., Ahmed, S., Hossain, M. B., & Mozumder, A. K. A. (2003). Women's status and domestic violence in rural Bangladesh: individual-and community-level effects. *Demography*, 40(2), 269-288.
- Koeing, M.A., Stephenson, R., Ahmed, S., Jejeebhoy, S. J., & Campbell, J. (2006). Individual and contextual determinants of domestic violence in North India. *American Journal of Public Health*, 96, 132-138.
- Krishnaraj, M. (ed) (1991): 'Women and Violence – A Country Report: A Study Sponsored by UNESCO', Research Centre for Women's Studies, SNDT Women's University, Bombay.
- Krug, E.G., Dalhberg, L.L., Mercy, J.A., Zwi, A. B., & Losano, L. (2002). *World Report on Violence and Health*. Geneva: World Health Organization.
- Levinson, D. (1989). *Violence in cross cultural perspective*. New Bury Park, CA: Sage.
- Luke, N., Schuler, S. R., Mai, B. T. T., Thien, P. V., & Minh, T.H. (2007). Exploring couple attributes and attitudes and marital violence in Vietnam. *Violence Against Women*, 13, 5-27.
- Martin, S., Moracco, K. E., Garro, J., Tsui, A.O., Kupper, L. L., Chase, J. L., & Campbell, J. C. (2002). Domestic violence across generations: Findings from Northern India. *International Journal of Epidemiology*, 31, 560-572.
- Moore, T. M., & Stuart, G. L. (2005). A Review of the Literature on Masculinity and Partner Violence. *Psychology of Men & Masculinity*, 6(1), 46-61.
- Moscher, D.L., & Sirkin, M. (1984). Measuring a macho personality constellation. *Journal of Research in Personality*, 18, 150-163.
- Moscher, D.L., & Tomkins, S.S. (1988). Scripting the macho man: hypermasculine socialization and enculturation. *Journal of Sex Research*, 25, 60-84.
- Nanda, P., Gautam A., Verma, R., Khanna, A., Khan, N., Brahme, D., & Kumar, S. (2014). "Study on Masculinity, Intimate Partner Violence and Son Preference in India". New Delhi, International Center for Research on Women.

PIPV and childhood socialization

- Pines, E.W. (2017). Intimate partner violence among women and trauma informed care: An international perspective. *Madridge Journal of Womens Health Emancipation*, 1(1), 11-15.
- Rahman, M., Hoque, M. A., & Makinoda, S. (2011). Intimate partner violence against women: Is women empowerment a reducing factor? A study from a national Bangladeshi sample. *Journal of Family Violence*, 26(5), 411-420.
- Rao, V. (1997). Wife Beating in Rural South India: A Qualitative and Econometric Analysis. *Social Science and Medicine*, 44(8), 1169-1179.
- Reidy, D. E., Shirk, S. D., Sloan, C. A., & Zeichner, A. (2009). Men who aggress against women: Effects of feminine gender role violation on physical aggression in hyper-masculine men. *Psychology of Men & Masculinity*, 10(1), 1-12.
- Reidy, D. E., Berke, D. S., Gentile, B., & Zeichner, A. (2014). Man enough? Masculine discrepancy stress and intimate partner violence. *Personality and Individual Differences*, 68, 160-164.
- Rennison, C. M., & Welchans, S. (2000). Intimate partner violence. *Violence against women*, 1993, 98. Special Report of Bureau of Justice Statistics retrieved on March 7, 2018 from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.159.2279&rep=rep1&type=pdf>
- Sambisa, W., Angeles, G., Lance, P.N., Naved, R.T., & Curtis, S.L. (2010). Physical and Sexual Abuse of Wives in Urban Bangladesh: Husbands' Reports. *Studies in Family Planning*, 41(3), 165-178.
- Santana, M. C., Raj, A., Decker, M. R., La Marche, A., & Silverman, J. G. (2006). Masculine gender roles associated with increased sexual risk and intimate partner violence perpetration among young adult men. *Journal of urban health*, 83(4), 575-585.
- Schuler, S. R., Hashemi, S.M., Riley, A.P., & Akhter, S. (1996). Credit programmes, patriarchy and men's violence against women in rural Bangladesh. *Social Science Medicine*, 43, 1729-42.
- Silverman, J. G., Decker, M. R., Gupta, J., *et al.* (2009). Maternal experiences of intimate partner violence and child morbidity in Bangladesh: evidence from a national Bangladeshi sample. *Archives of Pediatrics and Adolescent Medicine*, 163, 700-705.
- Singh, A., Mahapatra, B. & Dutta, S. (2008). Spousal abuse and infant and child mortality in India. *Asia- Pacific Population Journal*, 23(2), 33-54.
- Sinha. A., & Chattopadhyay, A. (2016). Utilization of maternal and child health care services in North and South India: Does spousal violence matter? *International Journal of Population Studies*, 3(1), 1-16. <http://dx.doi.org/10.18063/IJPS.2016.02.001>
- Sinha, A., & Chattopadhyay, A. (2017). Inter-Linkages between Spousal Violence and Nutritional Status of Children: A Comparative Study of North and South Indian States. *Social Crimonol*, 5(2), 1-9. doi: 10.4172/2375-4435.1000171
- Sinha, A. & Ram, F. (2018). Formation of traditional gender attitudes among young married women in rural North Dinajpur district of West Bengal, India: Does religion play a role? *Journal of Population and Social Studies*, 26(2), 83-100.
- UNICEF (2012). *Child marriages in India: An analysis of available data*. United Nations Children's Fund, New York.
- United Nations. (1995a). *Report of the Fourth World Conference on Women, Beijing 4-15 September 1995*. New York: United Nations. Vasquez Guerrero, D. A. (2009). Hypermasculinity, intimate partner violence, sexual aggression, social support, and

PIPV and childhood socialization

- child maltreatment risk in urban, heterosexual fathers taking parenting classes. *Child welfare*, 88(4), 135-155.
- United Nations (2015). *Transforming our world: the 2030 agenda for sustainable development*. Retrieved on January 25, 2021 from: sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf
- Visaria, L. (2000). Violence against women: A Field Study. *Economic and Political Weekly*, 35, 1742-1751.
- Visaria, L. (2008). Violence against women in India: Is empowerment a protective factor? *Economic and Political Weekly*, 43, 60-66.
- World health Organization (2005). *WHO multi-country study on women's health and domestic violence against women: summary report of initial results on prevalence, health outcomes and women's responses*. Geneva, World Health Organization. Retrieved on March 5, 2018 from http://apps.who.int/iris/bitstream/10665/43310/1/9241593512_eng.pdf
- World Health Organization. (2012). *Intimate partner violence: understanding and addressing violence against women*. Retrieved on November 16, 2015 from http://apps.who.int/iris/bitstream/10665/77432/1/WHO_RHR_12.36_eng.pdf?ua=1.
- Yllo, K., & Straus, M.A. (1990). *Patriarchy and Violence against Wives: The Impact of Structural and Normative Factors*. In Straus, M.A. and Gelles, R.J. (eds.) *Physical Violence in American Families: Risk Factors for Adaptations to Violence in 8145 Families*. Transaction, New Brunswick, NJ. 383-399.
- Yu, C. Y. (2002). *Evaluating cut off criteria of model fit indices for latent variable models with binary and continuous outcomes*. Unpublished dissertation retrieved July 14, 2013 from Mplus website. <http://www.statmodel.com/download/Yudissertation.pdf>.
- Zhu, Y., & Dalal, K. (2010). Childhood Exposure to Domestic Violence and Attitude Towards Wife Beating in Adult Life: A Study of Men in India. *Journal of Biosocial Science*, 42, 255-269.

Table 1 Socio-demographic characteristics, sample of young married men (15-29 years), 2006-07

Variables	Percentage
Place of residence	
Urban	40.9
Rural	59.1
Religion	
Hindu	86.0
Muslim	9.5
Others	4.5
Caste	
Scheduled Castes/Scheduled Tribe	30.8
Other Castes including caste not stated	69.2
Wealth quintiles	
1st quintile	11.8
2nd quintile	16.2
3rd quintile	21.0
4th quintile	24.6
5th quintile	26.5
Type of family	
Nuclear family	25.6
Non-nuclear family	74.4
Education (years of schooling)	
Non-literate, Literate with no formal schooling	13.2
1-7 years of schooling	27.1
8-11 years of schooling	38.5
12 and above years of schooling	21.2
Current work status	
Paid work	64.0
Unpaid work	8.2
Both paid and unpaid work	17.3
Not working	10.5
Total, N =	5,573

Table 2 Summary statistics, sample of young married men (15-29 years), 2006-07

Variables	Percentage
<i>Before marriage:</i>	
Violence during childhood	
Witnessed parental violence	30.8
Experience of physical abuse as child	48.2
Gender biased socialization*	77.3
His education given more importance than his sister(s)	40.0
Had more freedom to roam than his sister(s)	67.3
Was expected to do little housework as compared to his sister(s)	44.4
<i>After marriage:</i>	
Belief in husband's authoritarian role*	78.3
Believes that husband alone should take decision	37.4
Believes wife should take husbands permission for all things	72.4
Justification of wife beating*	50.9
If he suspects of wife being unfaithful	36.9
If wife goes out without telling him	29.5
If wife disagrees with her husband's opinion	30.0
If wife refuses to have sexual relations	15.4
Physical IPV in last 12 months*	16.6
Slapped	15.8
Twisted arm	4.2
Pushed	2.3
Punched	2.0
Kicked	1.5
Total, N=	5,573

Note: * Percentages refer to at least one form of gender biased socialization, belief, attitude and physical IPV respectively.

Table 3: Binary logistics regression estimates of infliction of physical IPV in the 12 months before the survey, young married men (15-29 years), 2006-07.

	Odds ratio
<i>Socialization before marriage:</i>	
Gender biased parenting	
His education given more importance than his sister(s)	1.219*
Had more freedom to roam than his sister(s)	1.294**
Was expected to do little housework as compared to his sister(s)	1.138 ^{ns}
Witnessed father beating mother	2.302***
Beaten by parents	1.624***
<i>Gender attitude:</i>	
Justification of wife beating:	
If he suspects of wife being unfaithful	1.489***
If wife goes out without telling him	1.299*
If wife disapproves with husband's opinion	1.360**
If wife refuses to have sexual relations	1.249 ⁺
Agreed that husband alone should take decisions	0.978 ^{ns}
Agreed that women should take husband's permission for all things	0.747**
<i>Behavioural characteristics:</i>	
Alcohol consumption	
Non-drinker ®	
Occasional drinker	2.217***
Habitual drinker	2.191***
Got engaged in violence in last 12 months	
No ®	
Yes	2.162***
<i>Background characteristics:</i>	
Place of residence	
Urban ®	
Rural	1.210*
Type of family	
non-nuclear family ®	
nuclear family	1.381***
Education (years of schooling)	
Non-literate/no formal schooling	1.365 ⁺
1-7	1.326*
8-11	1.088 ^{ns}
12 and above ®	
Constant	0.010

Note: Control variables were age of the respondents, current work status, wealth quintiles, religion, caste group and states.

® Reference category, *** p<0.001, ** p<0.01, * p<0.05, + p<0.10; ^{ns} Not significant

PIPV and childhood socialization

Table 4 Tetrachoric Correlation

	1	2	3a	3b	3c	4a	4b	5a	5b	5c	5d	6a	6b	6c	6d	6e
1	1															
2	0.47291															
3a	0.0167	0.0187	1													
3b	0.0185	-0.0276	0.498	1												
3c	-0.0051	-0.0443	0.403	0.5941	1											
4a	0.0215	-0.047	-0.0533	0.0319	-0.0005	1										
4b	0.0371	-0.0478	0.0234	0.082	-0.0195	0.3526	1									
5a	0.1277	-0.0156	-0.0027	0.1532	0.1554	0.1563	0.1196	1								
5b	0.1463	0.0273	0.0216	0.1182	0.1237	0.1838	0.2045	0.6919	1							
5c	0.226	0.0601	-0.0015	0.1028	0.1132	0.1239	0.1343	0.6463	0.7816	1						
5d	0.1013	-0.0473	-0.0364	0.0636	0.1333	0.1987	0.1369	0.5661	0.6546	0.7319	1					
6a	0.4487	0.3111	0.0791	0.1295	0.0807	0.0183	-0.0157	0.2124	0.2625	0.3026	0.2024	1				
6b	0.4269	0.1995	0.0633	0.0977	-0.0414	0.0436	0.013	0.2607	0.3343	0.3037	0.3035	0.8413	1			
6c	0.4139	0.1473	0.0706	0.1485	-0.0444	-0.0019	0.0471	0.3237	0.303	0.344	0.3329	0.7615	0.8711	1		
6d	0.5438	0.2433	0.0442	0.1732	-0.0314	0.0245	-0.0674	0.3086	0.1435	0.32	0.3083	0.8123	0.8343	0.8187	1	
6e	0.5525	0.2685	-0.0222	0.0105	-0.1052	0.0296	-0.0189	0.2277	0.2365	0.2891	0.3577	0.7279	0.7932	0.8217	0.8594	1

Notes: 1 – Witnessed father beating mother, 2 – beaten by parents since age 12, 3a – Respondent’s education given more importance as compared to his sisters, 3b – Respondent had more freedom to roam than his sisters, 3c – Respondent was expected to do little housework, 4a –Believes that husband alone should take decision, 4b – Believes wife should take husbands permission for all things, 5a – Justifies wife beating if he suspects of wife being unfaithful, 5b – Justifies wife beating if wife goes out without telling him, 5c – Justifies wife beating if wife disapproves with husband's opinion, 5d – Justifies wife beating if wife refuses to have sexual relations, 6a – Slapped wife in last 12 months, 6b – Twisted arm of wife in last 12 months, 6c – Pushed wife in last 12 months, 6d – Punched wife in last 12 months, 6e – Kicked wife in last 12 months.

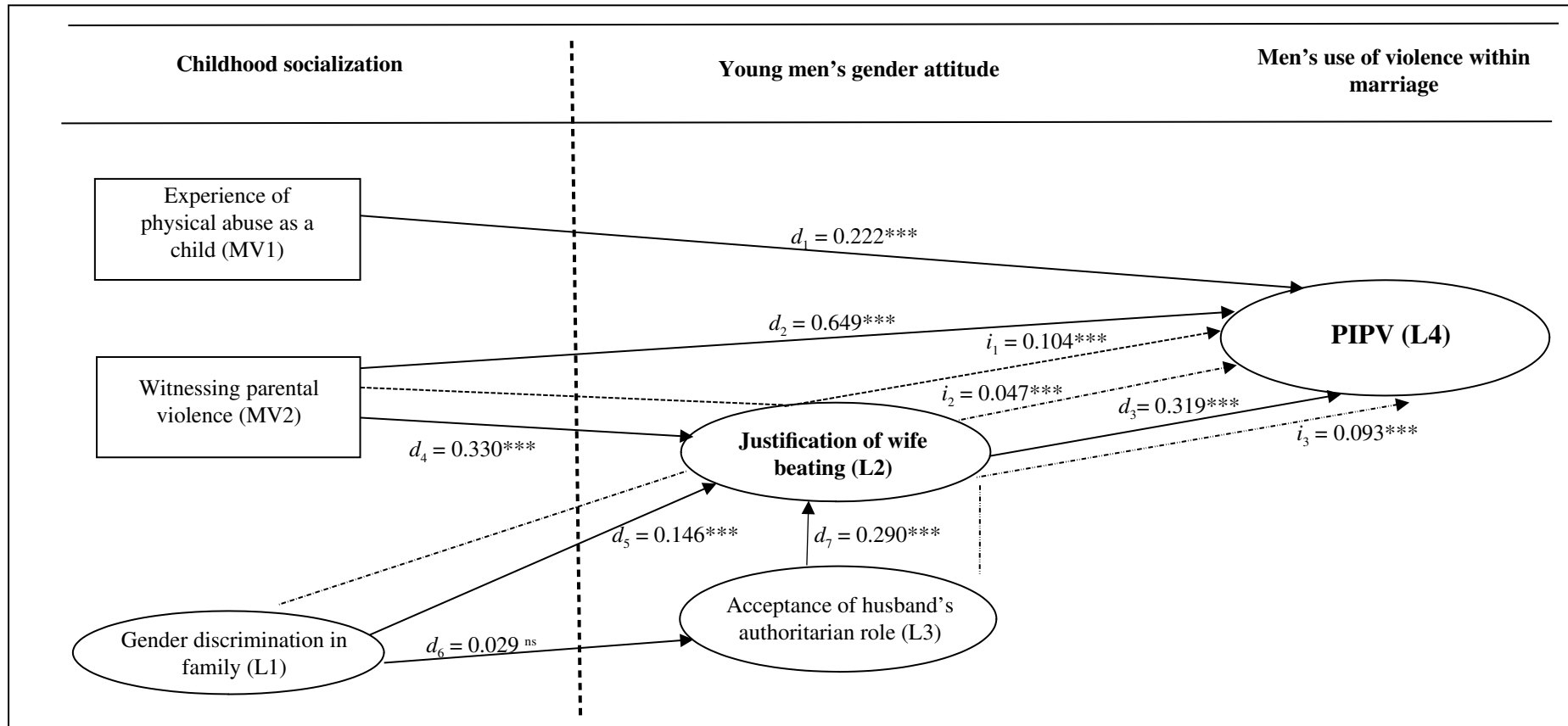
PIPV and childhood socialization

Table 5: Confirmatory factor analysis (CFA) estimates, young married men (15-29 years), 2006-07.

Measurement models	Standardized coefficients	RMSEA	CFI	TLI	chi-square	degree of freedom
Model 1:						
<i>Gender biased parenting</i>		0.000	1.000	1.000	2487.040	3
As compared to his sisters, respondent's education was given more importance	0.581*					
As compared to his sisters, respondent had more freedom to roam around or move out	0.857*					
As compared to his sisters, respondent was expected to do little house work	0.693*					
Model 2:						
<i>Attitude justifying wife beating</i>		0.048	0.998	0.993	11152.780	6
If husband suspects wife of being unfaithful	0.751*					
If wife goes out without telling him	0.880*					
If wife disagrees with husband's opinion	0.894*					
If wife refuses to have sexual relations with him	0.781*					
Model 3:						
<i>Belief in husbands' authoritarian role</i>		0.000	1.000	1.000	274.445	1
Husband alone or mainly should decide how household money is to be spent	0.707*					
Women should obtain husband's permission for most of the things	0.499*					
Model 4:						
<i>Physical IPV in last 12 months</i>		0.023	0.998	0.996	8230.268	10
Slapping	0.873*					
Twisting arm or pulling hair	0.942*					
Pushing, shaking or throwing something at wife	0.919*					
Punching with fist or with something that could hurt	0.908*					
Kicking, dragging or beating up	0.887*					

Note: * $p < 0.05$

Figure 1 Structural equation model (SEM) of pathways to men’s use of intimate partner violence



Model fit statistics: RMSEA = 0.021, CFI = 0.987, TLI = 0.985, $\chi^2 = 18839.172$, df (degree of freedom) = 119

Notes: MV_{1-2} – Measured variables; L_{1-4} – Latent constructs. ‘ $d_1 - d_3$ ’ indicate ‘direct effects’ of experience of physical abuse as child, witnessing parental violence and justification wife beating on PIPV respectively. ‘ $d_4 - d_7$ ’ indicate ‘direct effects’ of witnessing parental violence, gender biased parenting and belief in husband’s authoritarian roles on justification of wife beating respectively. ‘ $i_1 - i_3$ ’ indicate ‘indirect effects’ of witnessing parental violence, gender biased parenting and belief in husband’s authoritarian roles on PIPV respectively.

PIPV and childhood socialization

**** $p < 0.001$, ns = Not significant*