Intimate Partner Violence and Contraceptive Use in India: the Missing Discourse on Coercive Control and Personal Autonomy

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In recent years, intimate partner violence in South Asia has gained attention as a cause for concern for policymakers and scholars alike, in part of because of the well-established relationship between intimate partner violence and adverse physical and mental health outcomes. Previous research has identified a relationship between intimate partner violence and reproductive outcomes and decisions (Williams, Larsen and McCloskey 2008; Miller et al. 2010; Maxwell et al. 2015). Reproductive health problems, including urinary tract infections, unplanned or unwanted pregnancy, fibroids, and chronic pelvic pain are among the most common long-term health consequences among women survivors of intimate partner violence (Campbell 2002). This study contributes to existing knowledge of the effects of intimate partner violence by assessing how different types of violence influence reproductive autonomy among Indian women.

India is a relevant case study for the relationship between reproductive autonomy and intimate partner violence for several reasons. First, significant gaps in men's and women's status persist. Women in India are 76 percent as likely as men to enroll in college, but only 36 percent as likely to participate in the workforce (World Bank 2012). Entrenched gender ideologies have reinforced the importance of homemaking and childbearing as priorities for Indian women (Dube 1988; Ghose 2004; Osella and Osella 2000), meaning that resistance to childbearing may be seen as a threat to the gendered power dynamic of the household. Traditional Indian society boasts of a system of joint family, the subordination of women to men within the household, patriarchy, and hierarchy (Derne 1994; Nanda 2000; Tichy et al. 2009). Second, intimate partner violence is common in India, impacting 34% of women in the country (International Institute for Population Sciences and Macro International 2006), and marital rape and wife-battering are among the most common forms of intimate partner violence in India (Bhat and Ullman 2013). Third, divorce in India is legal but extremely rare (Naqvi 2011), meaning that women are less likely to feel able to exit their marriage if it becomes violent or their autonomy becomes undermined by their husband. Social pressures in favor of both marriage and childbearing may make it difficult for women to actualize upon their own fertility preferences or leave their husband if they feel threatened. Studies have shown that going to the police or nongovernmental organizations for help would be considered infeasible and inappropriate; women are often expected to "bear the violence"

and modify their own behavior accordingly (Ragavan, Iyengar and Wurtz 2015; Shirwadkar 2009), leaving them with few options. The stigma associated with intimate partner violence in India means that many woman survivors are subjected to secondary victimization at the hands of family members or their communities (Prasad 1999; Ahmed-Ghosh 2004; Bhat and Ullman 2013.).

This study contributes to our empirical and theoretical understanding of the relationship between intimate partner violence and reproductive autonomy in two ways. First, it looks at the prevalence of coercive control and limits to personal autonomy in a nationally representative sample of Indian women, and identifies patterns of victimization across aspects of violence. Second, it adds to our theoretical understanding of the consequences of intimate partner violence by expanding analysis of the relationship between marital violence and contraceptive usage to include non-violent tactics often used by abusers to control their partners.

Situational Couple Violence, Coercive Control, and Intimate Terrorism

Johnson (1995; 2000) argues that the umbrella term "intimate partner violence" is often used to describe two different (though related) phenomena: situational couple violence, and intimate terror violence. Johnson's typology bridges the seemingly contradictory approaches of family violence theory (Straus, Gelles and Steinmetz 1980; Straus and Smith 1990) and feminist theory (Dobash and Dobash 1979; Stark and Flitcraft 1996; Stets 1988) in explaining intimate partner violence. Family violence theory views intimate partner violence as a matter of conflict, caused by the everyday stresses of family life, while feminist theory conceptualizes intimate partner violence as a matter of control, rooted in patriarchal norms which center male dominance in heterosexual relationships. Johnson (1995) proposes that these are two different forms of intimate partner violence: situational couple violence, and intimate terror violence. Intimate terror violence describes violence embedded in a broader pattern of controlling behaviors, indicating that the perpetrator's goal is to exert control over their partner. Situational couple violence, in contrast, refers to violence which takes place without this broader pattern of control. These two types of violence are not differentiated by violent tactics or severity of tactics; Johnson and Leone (2005) demonstrate that there are cases of severe violence which do not include coercive control techniques, and which therefore do not fall into the category of intimate terrorism. At the same time, perpetrators of intimate terrorism may not use physical aggression frequently, and may not employ severe tactics, in order to exert control over their partner.

Intimate terrorism describes the phenomena commonly referred to as spousal abuse; it is derived from the conceptualization of intimate partner violence put forth by feminist theorists. The best known description is probably that embodied in Pence and Paymar's (1993:185) Power and Control Wheel, which includes the following nonviolent tactics: emotional abuse, isolation, using children, using male privilege, economic abuse, threats, intimidation, and blaming. Other writers working in the feminist tradition have written about these tactics as well (Dobash and Dobash 1979; Johnson 1995; Kirkwood 1993; Lloyd and Emery 2000; Stark and Flitcraft 1996), highlighting how abusers utilize these nonviolent tactics in order to exert control over their partners. Crossman, Hardesty and Raffaelli (2016) demonstrate that women who experience nonviolent coercive control exhibit similar levels of fear compared to women who experience violent coercive control, which underscores the effects that these tactics can have on victims.

Situational couple violence lacks the coercive control elements found in intimate terror relationships. It reflects the conceptualization of intimate partner violence put forth by family conflict theorists (Bradbury, Rogge and Lawrence 2001; Gelles and Straus 1988; Strause and Gelles 1990) in which it is assumed that some conflict is pervasive in family life, and that some forms of family may be considered acceptable, though this varies across cultures. Johnson (2000) argued that this understanding of family violence does describe most of the intimate partner violence uncovered in general social surveys, indicating that it is more common than intimate terrorism.

Using this framework, researchers in the United States and Canada have identified differential consequences of intimate terror violence and situational couple violence. Johnson and Leone (2005) find that post-traumatic stress disorder symptomology is more prevalent and more severe for survivors of intimate terror violence. They also find that victims of intimate terror violence experienced more severe violence and more persistent violence than victims of situational couple violence. Leone, Johnson and Cohan (2007) also find that victims of intimate terror violence are more likely to seek formal support, such as help from the police or nongovernmental organizations, than survivors of situational couple violence, but are less likely to engage in informal support-seeking through their personal networks. Similarly, Ansara and Hindin (2010) find that the likelihood of formal support seeking increases for those experiencing the most severe violence and the most coercive control. This is suggested to be a result of intimate terror victims' increased discomfort and awareness of their need for help (Johnson and Leone 2005).

Research using this framework to examine the consequences of intimate partner violence in non-Western contexts is limited. Studies examining intimate partner violence in developing countries often focus primarily on physical violence, without differentiating between relationships in which coercive control tactics are used and those in which they are not. The evidence from the United States and Canada suggests that this distinction is significant, and that coercive control and restrictions placed on personal autonomy are likely to have separate or additional consequences for those who are experiencing intimate partner violence in other contexts.

Marital Violence in the Indian Context

Social science research on marital violence has only developed in the past 25 years (Anson and Sagy 1995; Bhat and Ullman 2013). Research on marital violence in India and South Asia has been limited, in part due to a perception that such research threatens the traditional patriarchal family as a primary form of social organization (Bhat and Ullman 2013). The topic of marital violence as a research subject often provokes strong cultural and family resistance due to the sensitive nature and intimate context of marital violence (see Panchanadeswaran & Koverola, 2005; Prasad, 1999).

Large multisite studies in India indicate that marital violence against women is prevalent across castes, regions, religious groups, education levels, and socioeconomic status (Bhat and Ullman 2013). Few nationally representative studies in India have explored the issue of marital violence; however, the Indian Ministry of Health and Family in collaboration with the International Institute for Population Studies (IIPS) have conducted three National Family Health Surveys (NFHS) between 1992 and 2006 (IIPS and Macro-International, 2007), and questions about intimate partner violence have been included in the 2005-06 and 2015-16 waves of the Demographic and Health Survey for India.

The 2005–2006 NFHS-3 was the first nationally representative survey that included questions about spousal (marital) violence in a sample of 69,704 married women. The NFHS used a shortened and adapted form of the Conflict Tactics Scale to examine spousal abuse. The study demonstrated that approximately a third of married Indian women experienced some form of physical intimate partner violence. In addition, the NFHS included questions on emotional violence and control; 26% of women reported that their husbands became jealous if they spoke to other men, 18% reported that their husbands did not trust them with money, and 16% reported that their husbands did not allow them to meet with female friends (IIPS and Macro-International 2007).

Intimate Partner Violence and Unmet Need for Contraception

Although intimate partner violence has been linked to a large number of adverse health outcomes, including acute injuries, chronic pain conditions, gastrointestinal disorders, elevated blood pressure, depression, and anxiety (Black et al. 2011; Coker et al. 2000), reproductive health problems remain among the most prevalent health consequences of intimate partner violence for women (Campbell 2002). Globally, intimate partner violence has been connected to increased likelihood of unwanted pregnancy, primarily through restrictions on women's ability to use contraception (Bawah et al. 1999; Krug et al. 2002). Women who experience intimate partner violence are twice as likely to have a male partner refuse to use contraception (Garcia-Moreno et al. 2005). Exposure to intimate partner violence has also been linked to additional adverse reproductive health and autonomy outcomes, including higher likelihood of miscarriage or induced abortion, and higher rates of stillbirth or infant mortality (Okenwa, Lawoko and Jansson 2011).

A significant body of work examining the relationship between intimate partner violence and reproductive autonomy in South Asia has focused on the relationship between violence and the utilization of modern contraceptive methods (Forrest, Arunachalam and Naveneetham 2017; Dawal, Andrews and Dawad 2011; Stephenson, Koenig, Acharya and Roy 2008). Investigating the relationship between intimate partner violence and contraceptive behaviors in Pakistan, Zakar et al. (2012) find that women who experienced severe physical abuse are less likely to have their husbands' support in using contraception, and are more likely to experience unplanned pregnancies and poor prenatal care. In a cross-national study using data from Bangladesh, India, and Nepal, Raj and McDougal (2015) find that intimate partner violence is associated with higher rates of contraceptive failure. Reed et al. (2016) note that women who experience intimate partner violence are more likely to report contraceptive usage that their husbands are not aware of, indicating that women may use contraception to undermine the reproductive control exerted by abusive partners.

Despite this growing body of literature, the relationship between intimate partner violence and contraception remains unclear. Existing research found a varying degree of effect of intimate partner violence on contraceptive usage; some studies have found a significant, positive association between intimate partner violence and the likelihood of using contraception (Dawal, Andrews, and Dawad 2011), while others have found a reduced likelihood of contraceptive usage (Stephenson et al. 2006; Stephenson, Koenig, Acharya and Roy 2008), or a null finding (Martin et al. 1999). Qualitative studies of the link between domestic violence and contraceptive use in the developing world demonstrate that the

potential for violence often serves as a deterrent for contraceptive usage. In studies conducted in India (Khan et al. 1996) and Ghana (Bawah et al. 1999), women report that they lack autonomy with regards to reproductive decisions, and that the threat of physical violence leads them to abstain from the use of modern contraceptives. Other studies have suggested that the use of contraceptives may itself lead to violence. A study of women in Uganda found that husbands often found that a wife's clandestine use of contraceptives was justification for beating her (Kaye 2006); in the Indian context, Rao (1997) suggests that husbands may invoke physical violence after their wives have been sterilized in response to fears that the wife may be unfaithful post-sterilization.

Forrest, Arunachalam and Naveneetham (2017) posit that the relationship between contraceptive usage and intimate partner violence is mediated by disagreements over fertility preferences, but is non-significant in couples whose fertility preferences match. However, because the most common form of family planning used in India is female sterilization, which is non-reversible and therefore cannot be used for spacing purposes, the use of contraceptive uptake as a key outcome for study has hindered understanding the implications of intimate partner violence for reproductive decision-making. Additionally, existing literature tends to focus only on physical violence, or physical and sexual violence, without taking into account other types of violence which might influence reproductive outcomes.

Data and Methods

This study uses data from the 2015-2016 India Demographic and Health Survey (DHS). The DHS is a nationally representative, cross-sectional household-based survey of men and women between the ages of 15 and 49. The survey is administered by a trained interviewer, in a one-on-one setting with individual adults in the household. The 2015-16 India DHS also includes an extensive domestic violence module which asks about different types of violence, control tactics, a woman's fear of her husband/partner, injuries caused by the violence, and help-seeking behavior. The domestic violence module was randomly given to one woman in each of the selected households; a total of 83,397 women were selected to complete the domestic violence module. Of those, 79,729 completed the domestic violence questions as part of their interview. The sample was further restricted to married women, as almost all childbearing and reproductive decisions in India are made within the context of marriage. A relatively small number of observations were deleted due to missing data for the following variables: unmet need for contraception; belonging to a scheduled caste, backward caste, or other backward class;

and control score. Because this caused a reduction in sample size by less than 10%, listwise deletion was used, yielding an analytic sample of 61,963 observations.

Unmet need for contraception is defined by a woman who is fecund and who does not want another child within the next 2 years, not using a contraceptive method to prevent pregnancy. Unmet need for contraception was operationalized in this study using a variable for unmet need in the DHS, and was coded as a binary variable with 1 indicating unmet need for spacing or unmet need for limiting, and 0 indicating no unmet need for contraception. Just over 13% of the sample were classified as currently experiencing unmet need for contraception, with a majority (n=5489) stating that they want no more children and a sizeable minority (n=2720) indicating that they want more children but do not want them in the next two years.

Table 1. Descriptive Statistics by Contraceptive Need

	Unmet Need	**No Unmet Need**
Age	29.48(0.07)***	33.59(0.03)
Husband's Age	34.27(0.09)***	38.25(0.04)
Years of Education	6.67(0.05)***	5.81(0.02)
Parity	2.41(0.02)**	2.45(0.01)
Physical Violence Score	0.68(0.02)	0.72(0.01)**
Control Score	1.15(0.02)***	1.08(0.01)
Autonomy Restriction Score	3.33(0.02)***	3.09(0.01)

There are distinct differences between the women who are currently experiencing an unmet need for contraception and those who are not. Women who are experiencing unmet need are, on average, younger, with younger husbands. They are also in more controlling relationships, with greater restrictions imposed upon their personal autonomy. As women are more likely to utilize sterilization once they have achieved their desired family size, it follows that older couples are less likely to experience unmet need for contraception.

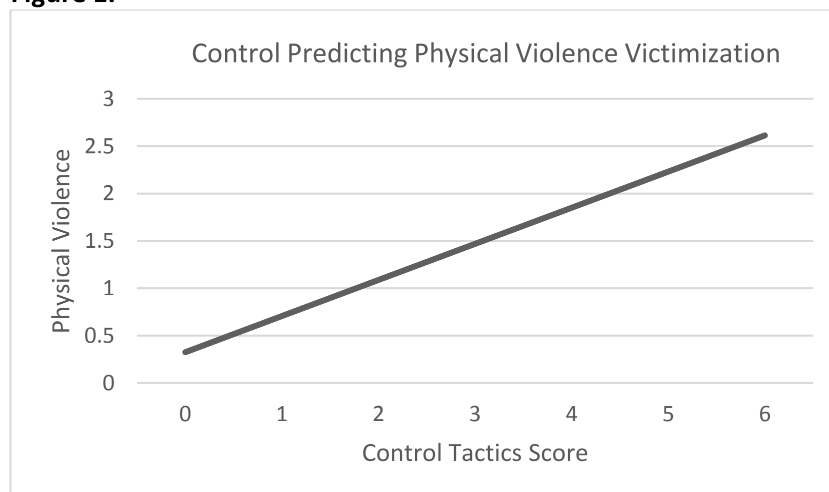
Six measures of physical violence were used to create the scaled physical violence score (alpha=.82). Items included in the physical violence scale match those included in the revised Conflict Tactics Scale (CTS2; Straus et al. 1996). Physical violence questions were asked with a frequency indicator: if a respondent replied that her husband/partner had perpetrated the type of violence in question, the respondent was then asked if their partner had perpetrated the violence (1) not in the last twelve months, (2) sometimes, or (3) often. Each question was coded on a scale of 0 to 3, and the scores

of each question were summed to create a composite score for physical violence. Fear of one's partner was operationalized with the question "How often are you afraid of your husband/partner"? Respondents were able to specify if they felt afraid of their partner "never", "sometimes", or "often". Responses were coded on a scale of 0 to 2. Responses to the six questions were then summed into a scale ranging from 0 to 12.

Six questions were used to operationalize controlling behavior (alpha=.73). Measures of controlling behavior match items in the Psychological Maltreatment of Women Survey (Tolman 1989) used in previous research to operationalize intimate terror violence (Johnson and Leone 2005): (1) does your husband/partner get jealous when you talk to other men? (2) Does your husband/partner accuse you of being unfaithful? (3) Does your husband/partner not permit you to meet with female friends? (4) Does your husband/partner try to limit your contact with your family? (5) Does your husband/partner insist on knowing where you are? And (6) Does your partner trust you with money? These questions were answered as a binary (yes/no) and were combined into a scaled score ranging from 0 to 6.

Six variables were used to create the scaled restricted autonomy score (alpha=.75). Three of the questions were asked with binary responses: (1) Do you have access to your own personal money? (2) Do you have access to a bank account? And (3) Do you have access to a phone? Respondents were also asked if they were allowed to go to the market or the clinic, or to leave town (1) alone, (2) with someone else only, or (3) not at all. Responses were coded such that being permitted to travel without accompaniment was assigned a score of 0, being permitted to travel with someone else was assigned a score of 1, and not being permitted to travel to a given location was assigned a score of 2. Responses to the six questions were then summed into a scale ranging from 0 to 9.

Figure 1.



These three types of violence frequently co-occur in relationships, with individuals experiencing higher levels of control also experiencing higher levels of restricted autonomy and physical violence. Figure 1 (above) illustrates the significant relationship between control tactics and physical violence. This is consistent with theoretical understandings of physical violence as a tool of control, rather than a situational escalation of conflict.

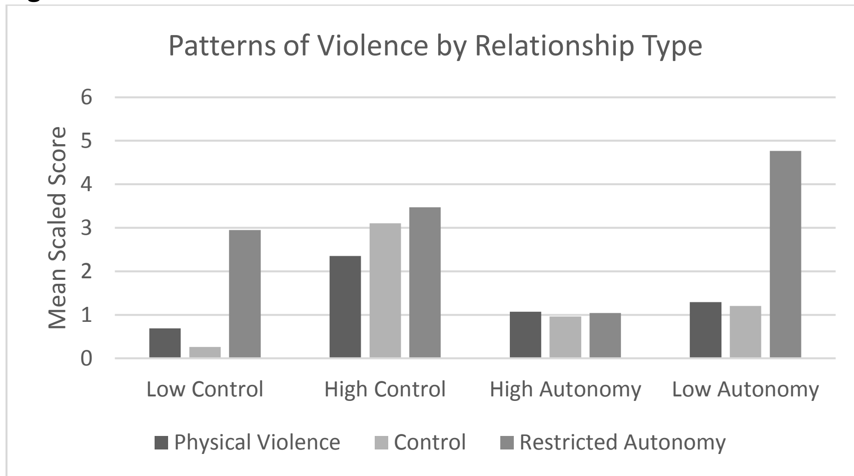
Consistent with prior literature, K-means cluster analysis was used to identify a cut point to distinguish between high and low control cases. K-means cluster analysis indicated that a control score of 2 or higher constituted the “high control” group (n=19,363). Cluster analysis was also used to identify a cut point to distinguish between high autonomy and low autonomy cases, with low autonomy cases having higher restricted autonomy scores. A cut point of POINT was identified. Table X shows descriptive statistics by relationship type.

Table 2.

	Full Married Sample	**Low Control**	**High Control**	**High Autonomy**	**Low Autonomy**
Years of Education	5.94 (.02)	6.34 (.02)	5.14 (.03)***	6.94 (.03)	5.15 (.02)***
Children Ever Born	2.44 (.01)	2.39 (.01)	2.56 (.01)***	2.43 (.01)	2.45 (.01)*
Age	33.03 (.03)	33.29 (.04)	32.5 (.05)***	35.56 (.04)	31.8 (.04)***
Physical Violence Score	1.19 (.01)	.69 (.01)	2.35 (.02)***	1.07 (.01)	1.29 (.01)***
Control Score	1.09 (.01)	.26 (.00)	3.10 (.01)***	.96 (.01)	1.20 (.01)***
Restricted Autonomy Score	3.12 (.01)	2.95 (.01)	3.47 (.02)***	1.04 (.00)	4.77 (.01)***
	N=69,020	n=46,000	n=23,020	n=30,479	n=38,541

The high control and low control groups reflect qualitatively different experiences of women in India. Respondents experiencing high levels of controlling behavior from their husbands are, on average, younger and less educated. They also experience on average significantly greater levels of physical violence and significantly more limits to their personal autonomy. Similarly, women who fall into the low autonomy group are younger and less educated, with a significantly higher mean autonomy restriction score. Figure A below illustrates the patterns with which these three aspects of intimate partner violence manifest within each type of relationship.

Figure 2.



The key differentiating factor in these types of relationships is the presence of high levels of controlling behavior. With the exception of the high autonomy group, almost all women in the sample experienced some limits to personal autonomy; however, only the high control group also experienced higher levels of all three aspects of violence measured in this study. Within the full analytic sample, the most common control item was jealousy, followed by distrust with money. No more than a quarter of the full sample experienced any one control issue. Within the high control group, the most common control item was distrust with money, followed by a husband restricting the respondent from visiting with female friends and jealousy. No less than a quarter of the high control sample experienced any one control item and, as seen in Figure 1, members of the high control group experienced on average three of the included control issues.

Results

Logistic regression analyses were used to assess the relationship between aspects of intimate partner violence and unmet need for contraception. Models 1-3 test the bivariate relationship between each aspect of violence and unmet need for contraception, while Model 4 tests all three aspects of violence together.

Table 3. Predicted Likelihood of Unmet Need for Contraception

	Model 1 (OR)	Model 2 (OR)	Model 3 (OR)	Model 4 (OR)
Physical Violence Score	.9945 (.01)			.9765 (.0073)***
Control Score		1.0758 (.01)***		1.0813 (.0144)***
Autonomy Restriction Score			1.0766 (.01)***	1.0704 (.0087)***
_cons	.1407 (.00)***	.1276 (.00)***	.1095 (.00)***	.1045 (.00)***

As seen in Table 3 (above), no statistically significant relationship was found in the bivariate analyses of physical violence and unmet need for contraception. Both control and autonomy restrictions were found to significantly predict higher odds of experiencing unmet need. In the model including all three forms of violence, physical violence becomes significant, but in the direction of lowered odds of unmet need; however, the effect size is small, particularly when compared to the effects of control and personal autonomy, with which physical violence frequently co-occurs. Even when controlling for the other types of violence, autonomy restriction and coercive control are found to significantly increase the odds of experiencing unmet need for contraception.

Figure 3.

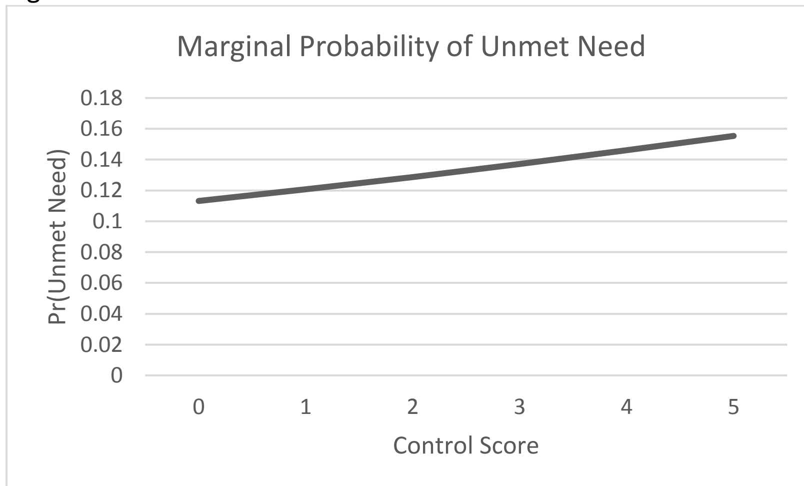


Table 4 (below) contains the full model, including all three forms of intimate partner violence as well as controls commonly associated with intimate partner violence and unmet need for contraception. For religious categories, other religious affiliation was used as the reference group. For scheduled caste, scheduled tribe, and other backwards class, no affiliation was used as the reference group. For wealth quintile, the lowest quintile was used as the reference group. All regions were coded as binaries.

Table 4. Predicted Likelihood of Unmet Need for Contraception

	Model 5 (OR)
Physical Violence Score	0.9924 (.0073)
Control Score	1.0507 (.01)***
Autonomy Restriction Score	1.0633 (.01)***
Years of Education	1.0877 (.005)***
Hindu	0.9821 (.11)
Muslim	1.4045 (.17)**
Scheduled Caste	1.2868 (.09)***
Scheduled Tribe	1.1657 (.09)*
Other Backwards Class	1.3280 (.07)***
# Children Ever Born	0.9783 (.01)
Father Beat Mother	0.9904 (.01)
Wealth Quintile	
2	0.6651 (.04)***
3	0.5293 (.03)***
4	0.4807 (.03)***
5	0.3818 (.03)***
north	1.1709 (.33)
south	0.6517 (.19)
east	1.0978 (.31)
west	1.0056 (.29)
central	0.8915 (.26)
northeast	1.0602 (.32)
urban	1.0167 (.05)
_constant	0.0948 (.03)***

*p<.05 **p<.01 ***p<.001

In the full model, net of other factors, physical violence is not found to significantly predict the likelihood of a woman experiencing unmet need for contraception. Coercive control remains statistically significant, though its effect size is somewhat smaller, with relative odds of 1.05 for each additional

control tactic used. Because women in the high control group experience on average 3 control tactics, this makes a significant difference with regards to likelihood of experiencing unmet need. Similarly, each additional point on the autonomy restriction scale increases the relative odds of experiencing unmet need by a factor of 1.063, which is still significant net of other factors. Women with higher levels of education are more likely to experience unmet need for contraception. Muslim women are more likely than their Hindu counterparts or women of other religions to experience unmet need for contraception. Membership in any of the socially disadvantaged groups—scheduled caste, scheduled tribe, or other backwards class—were all more likely than women who did not belong to such groups to experience unmet need for contraception. Consistent with existing literature on social class and family formation behavior, likelihood of experiencing unmet need decreases significantly as one moves from the lowest wealth quintiles to the highest wealth quintiles. No significant differences were found with regards to geographic location or urban setting.

Figure 4.

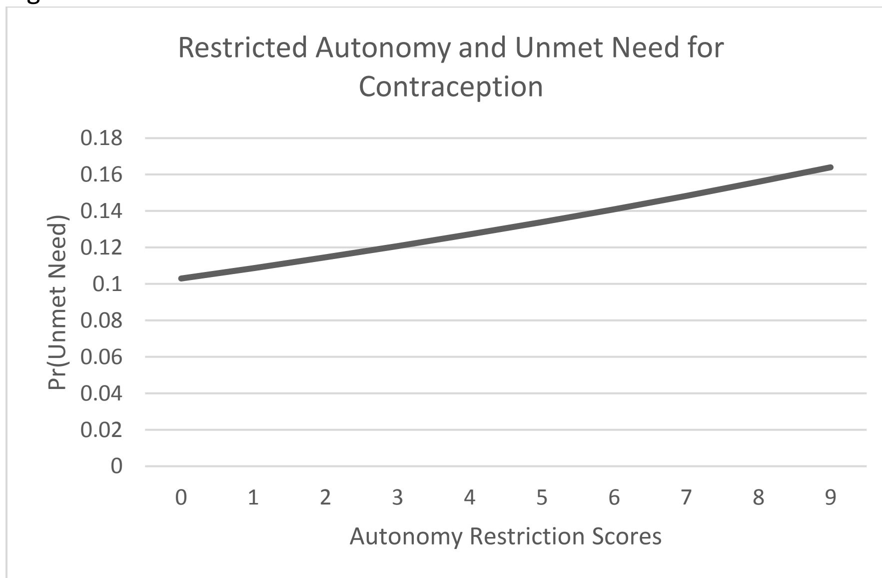


Figure 4 (above) shows the relationship between restricted autonomy and the likelihood of a woman experiencing unmet need, net of other factors included in the full model. Of the types of violence included in this model, restrictions to personal autonomy, which included not being allowed to go to the market or the clinic alone, was linked to the largest increase in the risk of experiencing unmet need. Supplemental analyses (not shown here) found that women belonging to the high control group had statistically higher odds of experiencing unmet need for contraception by a factor of 1.11 ($p<.01$),

even after controlling for physical violence, restricted autonomy, and other forms social and economic disadvantage.

Discussion

This study demonstrates that intimate partner violence is a complex experience, and different aspects of violent relationships impact women in different ways. Prior studies examining the relationship between intimate partner violence and unmet need for contraception focused on the impact of physical and/or sexual violence. This paper adds to our theoretical and empirical understanding by demonstrating that, even when controlling for physical violence, coercive control and restrictions imposed on personal autonomy significantly increase a woman's risk of experiencing unmet need for contraception.

The presence of control issues in intimate relationships, particularly within violent relationships, is not uncommon. As shown in Table 2, approximately one third of the sample falls into the "high control" category, experiencing on average three control tactics by their partners. Findings in this study are consistent with an intimate terrorism model of intimate partner violence, in which one partner uses controlling behavior to exert power over the other, including over their reproductive decisions. While men may use physical violence to exert control over their wives, they may also employ nonviolent tactics, such as limiting access to healthcare professionals or engaging in contraceptive sabotage, in order to maintain power within their marriages.

Limits to autonomy also play a role in a woman's ability to enact her reproductive preferences. While autonomy restrictions are a component of violent relationships, Figure 1 illustrates that women in relationships where they experience significant limits to personal autonomy may not necessarily experience high levels of physical violence or coercive control. The mechanisms driving the relationship between autonomy and unmet need for contraception may therefore be different, but the fact that women in high control, intimate terror relationships experience elevated levels of autonomy restriction, and the fact that it independently influences the risk of experiencing unmet need, makes it worthy of further investigation.

This study has several limitations. First, because it is cross-sectional in nature, the DHS cannot be used to track how changes in relationship dynamics and contraceptive needs may interact over time as couples have children, experience changes in fertility desires, and move towards a desired parity. Older women within the sample experience less coercive control, but more physical violence, and are less likely to experience unmet need for contraception, having undergone sterilization after achieving a desired number of children. Second, because some women selected for the intimate partner violence module were unable to complete it due to privacy concerns, and because some women who participated in the module did not answer questions about coercive control, it is possible that the implications of controlling behavior are underestimated in this study. Third, the use of scales in these analyses may obfuscate the roles of specific elements in predicting unmet need for contraception.

Despite these limitations, this study provides evidence that coercive control and limits to personal autonomy play unique roles in shaping women's risk of experiencing unmet need for contraception in India, even when controlling for physical violence. Researchers concerned with how couple dynamics influence reproductive decision-making and reproductive autonomy should consider how these non-violent aspects of violent relationships contribute to women's outcomes. Future research should examine how coercive control manifests itself in other contexts, and how the use of coercive control and imposed restrictions on women's autonomy shape reproductive and other health behaviors and outcomes.

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