

# **Women's Autonomy and Experience of Physical Violence within Marriage in Rural India: Evidence from a Prospective Study**

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## **ABSTRACT**

We investigated the role of changes in women's autonomy over time in influencing risk of marital violence (MV) using prospective data. We used data on 4,904 rural Indian women drawn from two linked studies: the NFHS-2, conducted in 1998-99 and a follow-up study for a subgroup of women carried out in 2002-03. Three dimensions of autonomy were used: financial autonomy, freedom of movement and household decision-making. MV was measured as experience of physical violence in the year prior to the follow-up survey. Findings indicate the protective effects of financial autonomy and freedom of movement in reducing the risk of MV, with financial autonomy exerting the strongest effect. Our study provides more conclusive evidence on the importance of increased autonomy among women. Results argue for an increased focus on strategies aimed at improving women's financial status through livelihood skill-building opportunities, development of a strong savings orientation and asset building options.

## INTRODUCTION

Over the years, the concept of women's autonomy and its relationship with the health of women and children has been extensively examined,<sup>1-9</sup> especially in developing countries. Women's autonomy, defined as the capacity to manipulate one's personal environment through control over material and social resources,<sup>1,4,10</sup> has been found to be associated with a range of reproductive health outcomes including low fertility,<sup>11</sup> use of contraception<sup>12-14</sup> and use of antenatal care.<sup>6</sup> To date, however, few studies have examined the influence of specific aspects of women's autonomy on the risk of marital violence (MV). Evidence from these studies, moreover, remains inconclusive. For example, studies from India and Nepal found that control over financial resources was associated with reduced risk of experiencing MV.<sup>3,22</sup> In contrast, studies from Bangladesh and Brazil found that higher autonomy as measured by overall household autonomy and financial autonomy respectively, was associated with elevated risks of violence from intimate partners.<sup>8,23</sup> In addition, a multi-country analysis showed that in Bolivia, Haiti and Malawi, women who took decisions regarding their own health care independently were more likely than those who took decisions jointly with their husband to report experiencing violence from their husband.<sup>24</sup> Existing research is entirely based on cross-sectional surveys and perhaps, as a result, has measured autonomy as a static construct, although it is widely acknowledged that in traditional settings women's autonomy changes over time, for example as women age, become mothers, and assume the role of a mother-in-law.<sup>9,25</sup> Moreover, because of the cross-sectional nature of the design, these studies cannot establish the temporality of the relationship between autonomy and risk of MV.

In India, several studies have documented the limited control exercised by women over their own life including their lack of control over material resources, their constrained authority to make decisions and their lack of physical mobility.<sup>4,7,15</sup> Similarly, numerous studies have highlighted the pervasiveness of intimate partner violence<sup>19</sup> (for a synthesis of available evidence see Jejeebhoy *et al.*).<sup>20</sup> While a substantial body of research has examined the role played by such measures of women's empowerment as education and employment in reducing the risk of MV,<sup>21</sup> few studies have explored the links between women's autonomy and the risk of MV in India; indeed, after an extensive search of peer-reviewed literature, we could locate two papers that had specifically examined this association.<sup>2-3</sup>

Drawing on data from a prospective study, this paper examines the relationship between women's autonomy and their experiences of physical violence within marriage in India. To our knowledge, this is the first study to prospectively examine this relationship in India.

## METHODS

### Study Setting and Design

The study draws on data from rural women in four economically and culturally diverse states of India: Bihar, Jharkhand, Maharashtra and Tamil Nadu. Tamil Nadu and Maharashtra are among the more economically progressive states in the country, accounting for 7 and 13% each of the national Gross Domestic Product, while Bihar and Jharkhand are among the lesser developed states, accounting for 2-3% each.<sup>26</sup> In terms of key indicators of women's status, Bihar and Jharkhand have lower levels of female literacy (33% and 39%, respectively) as compared to Maharashtra and Tamil Nadu (67% and 64%, respectively).<sup>27</sup> State-wise differences in the experience of MV among women of reproductive ages are narrow but are nevertheless present. MV was experienced by 35-56% of women from Jharkhand and Bihar, compared to 29-37% of women in Maharashtra and Tamil Nadu.<sup>19</sup>

We used data from two linked studies: the National Family Health Survey-2, a nationally representative population based survey conducted in India in 1998-99 by the International Institute for Population Sciences (IIPS) and Macro International,<sup>28</sup> and a follow-up study of women interviewed in NFHS-2 in four states carried out in 2002-03 by IIPS and Johns Hopkins Bloomberg School of Public Health.<sup>29</sup> The follow-up study was restricted to married women who were between 15-39 years of age and were the usual residents of the household at the time of NFHS-2 survey. High re-interview rates were achieved in all four states, ranging from 76% in Maharashtra to 94% in Tamil Nadu. The reinterviewed sample was similar to the non-reinterviewed sample in terms of most characteristics.<sup>29</sup> 6,437 women completed the follow-up survey and of these, 89% were selected for the domestic violence module. The domestic violence module was administered only to the youngest woman in households with multiple eligible respondents.<sup>29</sup>

Two percent of women were further excluded from the present study due to missing data. Around 12% of women who reported having experienced life-time violence at NFHS-2 did not report such violence in the follow-up study and hence, were also excluded from the analysis, yielding a final sample size of 4,904 women.

### Measures

A similar set of questions was used to assess the extent of women's autonomy at baseline and at follow-up. The three dimensions of autonomy examined were - women's financial autonomy, freedom of movement and decision-making autonomy. Women's financial autonomy was measured with a question about whether or not they were allowed to have money set aside for them to use as they wished (yes/no). Women's freedom of movement was measured using 2 items - whether they needed permission to a) go to the market and b) to visit friends or relatives. Possible responses included: yes, no and not allowed to go. Women who reported not needing permission to visit either of the two places were coded as having freedom of movement. Women's household decision-making autonomy was assessed using an index generated from questions concerning whether the woman took decisions on the following: seeking healthcare for herself, the purchase of jewelry and visiting relatives/friends. Possible responses included: took the decision independently, took the decision jointly with her husband, took the decision jointly with others in the family, others in the family took the decision and finally husband alone took the decision. Those reporting the first two options were assigned a score of 2, those reporting taking decisions jointly with others in the family were assigned a score of 1 and those reporting having no say at all were assigned a score of 0. The scores obtained for the three decision-making variables were summed (scale ranged from 0 to 6). A dichotomous variable (low/high) was then created with those having a score of 0-2 being defined as having limited household decision-making autonomy while the rest (score of 3 or above) as having high autonomy. For the household decision-making index the Cronbach alpha was 0.72 for baseline and 0.77 for follow-up.

In recognition of the fact that women's autonomy is a dynamic rather than a static construct, we further refined our indicators of autonomy to account for changes in women's autonomy that occurred during the inter-survey period. We created a four-category variable for each of the three dimensions of women's autonomy. For example, in the case of women's financial autonomy, the indicator variables were (a) woman had no financial autonomy at baseline and at follow-up (b) woman had financial autonomy at both baseline and follow-up (c) woman had no financial

autonomy at baseline but gained financial autonomy by the time of the follow-up survey and (d) woman had financial autonomy at baseline but lost it by the time of the follow-up survey. Equivalent variables were created for freedom of movement and household decision-making autonomy.

Our violence exposure variable was taken from the follow-up survey, and assessed whether the respondent had experienced physical violence perpetrated by her husband in the twelve months prior to the interview. Questions pertaining to physical violence assessed whether the respondent's husband had pushed, pulled or held her down, hit with fist, kicked or dragged her, strangled or burned her or attacked with knife or gun.

We controlled for a number of background variables. These included respondent's current age, educational level (defined as a categorical variable with three categories, namely, illiterate, some primary or middle school education, middle school complete or higher), wealth status at baseline (defined by using the standard of living index—low, medium or high), change in wealth status from baseline to follow-up (categorical variable with three categories: better, worse or remained the same), caste (categorical variable with four categories: scheduled caste, scheduled tribe, other backward caste and general caste) and religion (categorical variable with three categories: Hindu, Muslim or other religions). We also controlled for husband's characteristics and behaviours that are found to be correlated with women's risk of experiencing violence,<sup>2-3,30-33</sup> including educational level (defined as a categorical variable with three categories: illiterate, less than middle school, middle school complete or higher), alcohol use (whether or not the husband ever consumed alcohol), reaction to the dowry brought by the wife (categorical variable with three categories: dissatisfied, satisfied or did not care, wife did not bring anything). Also controlled was the presence of children assessed as woman having at least one living child before the start of the year preceding the follow-up survey. Finally, to account for socio-economic and cultural differences among study states, a variable indicating the state of residence was also included.

### **Analysis**

Multivariable logistic regression analyses were conducted in STATA to accommodate the complex design of the baseline and follow-up surveys including the potential non-independence of responses within PSUs. All analyses were weighted for non-response. Adjusted models were fitted for physical MV with separate models for each of the three dimensions of autonomy—financial autonomy (Model A), freedom of movement (Model B) and household decision-making autonomy (Model C). We also fitted a pooled model that included all three dimensions of women's autonomy along with other covariates (Model D).

### **RESULTS**

Table 1 presents a socio-demographic profile of married women aged 19-43 years. Of note, women were, typically, 31 years of age, poorly educated (67% women reported having no education) and from economically disadvantaged families (53% having a low standard of living index). The majority of the women interviewed reported having at least one child one year prior to the follow-up (95%).

#### **Experience of physical violence within marriage**

Almost one-fourth of the women in the follow-up survey reported experiencing physical violence from their husband in the twelve months preceding the interview, ranging from 2% in Jharkhand

to 9% in Bihar. Of all forms of physical violence, hitting with a fist was most commonly reported; of those reporting experience of violence, 70% reported that their husband had hit them with a fist.

### **Women's autonomy**

Figure 1 summarizes the distribution of the three key dimensions of women's autonomy - access to financial resources, freedom of movement and household decision-making - at both baseline and follow-up. One-third (35%) of women reported not having financial autonomy at the time of the baseline while the remaining 65% reported financial autonomy. During the inter-survey period, while 22% of women reported gaining financial autonomy, a substantial minority of women (16%) reported losing it. In the case of freedom of movement, we find that as many as 62% of women did not have freedom of movement at the time of the baseline, while the remaining reported having it; 38% of women reported gaining freedom of movement over time and only 6% reported losing this freedom during the inter-survey period. Finally, we find that as many as 55% of women had low household decision-making autonomy and the rest of the women had high autonomy at the baseline. While 26% of women reported improvements, 18% of women reported losing this autonomy during the inter-survey period.

### **Relationship between women's autonomy and physical violence within marriage**

Table 2 shows the results of the multivariable analyses. With respect to financial autonomy, we found a strong relationship between financial autonomy and the risk of experiencing violence even after controlling for the effects of important socio-demographic correlates of violence. Results indicated that women having financial autonomy at both baseline and follow-up were less likely to report experiencing violence as compared to women not having financial autonomy at both time points (OR: 0.61; 95% CI: 0.48-0.77). We also found that women who did not have financial autonomy at baseline but gained this autonomy during the inter-survey period had a reduced risk of experiencing MV as compared to women having no financial autonomy at both time points (OR: 0.67; 95% CI: 0.52-0.86). Also, women who had financial autonomy at baseline but lost this autonomy during the inter-survey period continued to be at a lowered risk of experiencing violence when compared to women who did not have financial autonomy at both time points (OR: 0.72; 95% CI: 0.55-0.93). For freedom of movement, we found that women reporting mobility at both time points (OR: 0.73; 95% CI: 0.58-0.93) or those who gained mobility during the inter-survey period (OR: 0.75; 95% CI: 0.62-0.92), were less likely to report physical MV when compared to women not having mobility at either time point. For household decision-making, women reporting high autonomy at both time points (OR: 0.81; 95% CI: 0.66-0.99) were at a decreased risk of experiencing violence when compared to women having low autonomy at both time points. However, the risk of experiencing MV was no different among those who gained or lost decision-making autonomy over time when compared to those who had low decision-making autonomy at both times.

We also found a number of notable results in the pooled model. First, financial autonomy continued to remain strongly associated with risk of MV, while the association between other dimensions of autonomy and risk of MV attenuated considerably. Second, we found that even in the pooled model, not only was having consistently high financial autonomy negatively associated with risk of MV, but losing or gaining such autonomy over time continued to exert a powerful influence on the risk of MV.

## DISCUSSION

This prospective study provides clear evidence that, in settings characterized by low levels of autonomy among women and high levels of MV, women's autonomy, particularly financial autonomy and freedom of movement substantially reduces their risk of experiencing physical violence within marriage. Further these protective effects were evident not only among women displaying consistent high autonomy but were also present for those who gained it during the inter-survey period. Additionally, having financial autonomy earlier in life continues to be protective, that is women who had financial autonomy at baseline continued to report decreased risk of violence despite losing it over time when compared with women lacking financial autonomy at baseline and follow-up. Further, results from the pooled model show that among the three dimensions of autonomy, financial autonomy exerts the strongest independent influence in reducing the risk of MV. While studies in the past have documented negative associations between autonomy and risk of MV<sup>3,22</sup> using cross-sectional data, ours is the first to show these links using prospective data. As demonstrated by a cluster-randomized trial in South Africa, increased economic well-being among women can potentially lead to decreases in partner violence through the following mechanisms- increased capacity to challenge the acceptability of partner violence, increased expectation of receiving better treatment from partners and increased social support through mobilization of new and existing community groups.<sup>34</sup>

Past research demonstrate that in South Asia, improvements in women's autonomy are influenced by age, birth of sons, shifts in role from mother to mother-in-law and changes in household structure (extended to nuclear).<sup>9,25</sup> Results of our study indicate that while a substantial proportion of women experienced an improvement in their autonomy status over time, a considerable number also reported a decline in their autonomy particularly financial and household decision-making autonomy. A recent study from India corroborates these findings; this study found that financial discretion had declined for almost 50% of the study participants.<sup>9</sup> Further research is needed to explore the determinants of observed changes, both improvements and deterioration, in women's autonomy found in our study.

Findings of this study need to be interpreted in light of certain limitations. First, we acknowledge that although we made considerable efforts to ensure the inclusion of a range of socio-demographic factors as well as changes in these factors over time, it is possible that we failed to account for some important variables that might affect the risk of MV. For example, change in family structure (joint family vs. nuclear family) is an important variable that can potentially influence both the risk of MV as well the level of autonomy enjoyed by women within the household.<sup>8-9</sup> Second, only the youngest woman within a household with multiple eligible respondents was selected for interview in the follow-up sample, which makes the sample biased towards the younger age group.

Despite these limitations, findings on the protective effects of women's financial autonomy and freedom of movement on the risk of experiencing MV underscore the value of examining the influence of a range of status variables on MV, moving beyond the focus on women's education and employment that has dominated the literature to date.

## Conclusion and Implications

Our findings highlight yet another imperative for improving women's autonomy, namely, its protective effect on MV. Of particular note are the protective effects of increased financial

autonomy in relation to MV found in our study. Findings highlight the need for strategies, programmes and policies that aim to improve women's access to and notably their control over financial resources, including, for example, the provision of livelihood skill-building opportunities, opportunities for savings and access to varied savings products and asset building options. More focused efforts are needed to enhance married women's agency, mitigate their social disadvantage, and encourage savings among women. Equally important are efforts to raise awareness among women about their rights and enhance their ability to challenge existing gender norms.



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## Tables and Figures

**Table 1: Socio-demographic characteristics of women**

<b>Variable</b>	<b>N = 4,904</b>
Age at follow-up (Mean)	31
<b>Educational level at baseline (%)</b>	
No education	67.5
Less than middle school	16.3
Middle school complete or higher	16.1
<b>Husband's education level at baseline (%)</b>	
No education	38.2
Less than middle school	24.7
Middle school complete or higher	37.1
<b>Economic activity status at baseline (%)</b>	
Working	41.1
<b>Religion (%)</b>	
Hindu	88.3
Muslim	8.7
Other	3.0
<b>Caste (%)</b>	
Scheduled castes	21.1
Scheduled tribes	7.7
Other backward castes	52.4
General castes	18.7
<b>Household standard of living index at baseline (%)</b>	
Low	53.4
Medium	38.3
High	8.3

<b>State of residence (%)</b>	
Bihar	40.7
Jharkhand	13.7
Maharashtra	17.8
Tamil Naidu	27.7
<b>Change in household economic condition since baseline (%)</b>	
Better	26.9
Worse	26.4
Same	46.7
<b>Has at least one child one year prior to the follow-up (%)</b>	
Yes	95.1
<b>Husband's reaction to dowry brought by the woman (%)</b>	
Dissatisfied	4.0
Satisfied/did not care	88.8
Did not bring anything	7.2
<b>Husband consumes alcohol (%)</b>	
Yes	41.9
<b>Physical violence in the 12 months preceding the follow-up (%)</b>	
Yes	24.0

**Table 2: The association between the experience of physical violence within marriage and women's autonomy <sup>§</sup>**

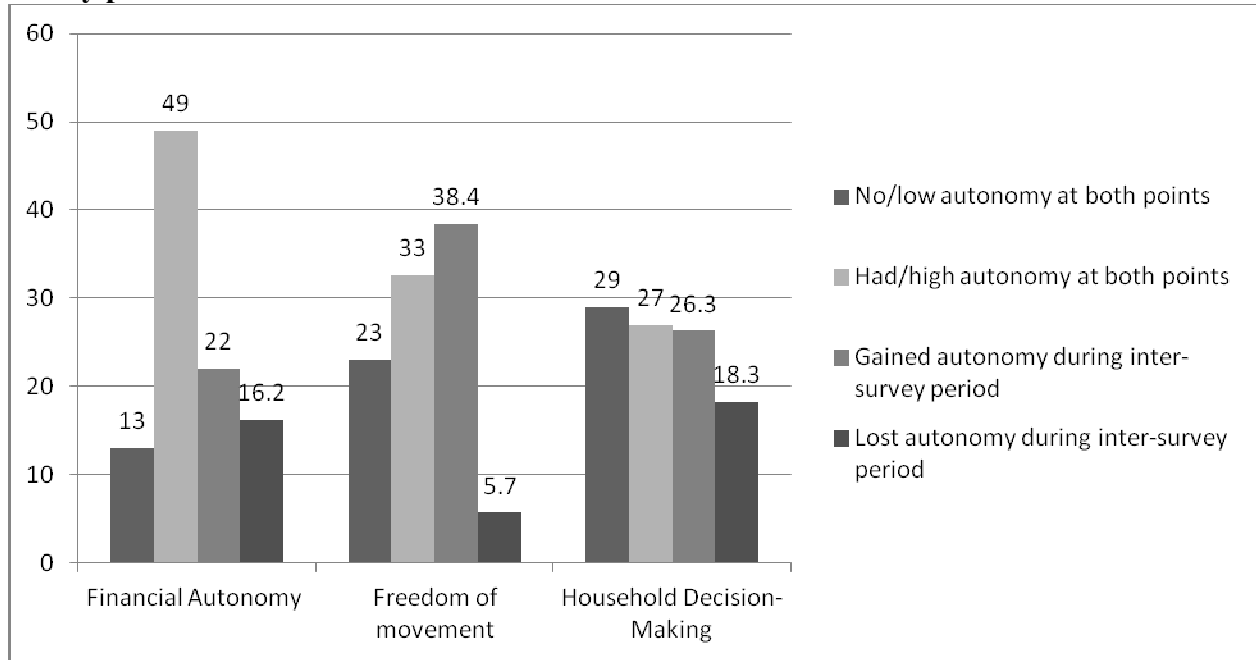
Variable	Model A	Model B	Model C	Model D
<b>Financial Autonomy</b>				
No financial autonomy at both points (Reference)	1.00			1.00
High financial autonomy at both points	0.61 <sup>***</sup> (0.48-0.78)			0.64 <sup>***</sup> (0.50-0.89)
Gained financial autonomy during the inter-survey period	0.67 <sup>**</sup> (0.52-0.86)			0.69 <sup>**</sup> (0.53-0.89)
Lost financial autonomy during the inter-survey period	0.72 <sup>*</sup> (0.55-0.93)			0.72 <sup>*</sup> (0.56-0.94)
<b>Freedom of Movement</b>				
No freedom of movement at both points (Reference)		1.00		1.00
High freedom of movement at both points		0.72 <sup>**</sup> (0.57-0.92)		0.80 (0.62-1.02)
Gained freedom of movement during the inter-survey period		0.75 <sup>**</sup> (0.61-0.91)		0.78 <sup>*</sup> (0.64-0.95)
Lost freedom of movement during the inter-survey period		0.86 (0.61-1.22)		0.92 (0.64-1.30)
<b>Household Decision-Making Autonomy</b>				
Low decision-making autonomy at both points (Reference)			1.00	1.00
High decision-making autonomy at both points			0.81 <sup>*</sup> (0.66-0.99)	0.87 (0.71-1.06)

Gained decision-making autonomy during the inter-survey period			0.94 (0.78-1.14)	1.01 (0.83-1.23)
Lost decision-making autonomy during the inter-survey period			0.81 (0.65-1.01)	0.81 (0.65-1.01)

<sup>§</sup> Adjusted for woman's current age, educational level, employment status, religion, caste, standard of living at baseline, change in wealth status from baseline, presence of child/children one year prior to the follow-up, husband's educational level, husband's alcohol use, husband's reaction to dowry given at marriage and state of residence

\*  $P < 0.05$  \*\*  $P < 0.01$  \*\*\*  $P < 0.001$

**Figure 1: Distribution of three dimensions of autonomy at baseline, follow-up and inter-survey period**





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