

# How does The impact of Socio-economic status impact on Domestic Violence against Women? Evidence from in Eastern India

## Abstract

Background: In the era of women's empowerment, domestic violence against women really becomes an issue having significant impacts on the well-being of Indian communities. ~~The linkage between domestic violence and income of the family has an important significance in family planning.~~ The present study investigated the relationship between the socio-economic status of the family and domestic violence in West Bengal, India.

Methods: ~~The study also finds the pattern of domestic violence change during the period of 2005-06 to 2020-21.~~ Quantitative research was used to collect data through quantitative survey/s with 160 women in (where) ~~A cross-sectional survey consisted of 160 women from both rural and urban area based on a~~ Non-probability purposive sampling was used to collect data from (How many respondents) and (how many) completed the survey instrument. Data were analysed for the survey using and for the qualitative interviews using... For reliability and validity...

Results: Results of the logit model show a statistically significant negative association between the family's income and both domestic physical and psychological violence experienced. The intensity of physical domestic violence will increase by 3.028 when the income decreases by one thousand rupees. Similarly, the intensity of psychological violence increases by 1.386 when the income decreases by one thousand rupees. Results also indicated that the pattern of domestic violence change during the period of 2005-06 to 2020-21.

Conclusion: These findings bear important implications for how to reduce the violence against women through promoting income-generating activities and socio-economic status in the study area. Policies that enhance family income and reduce income inequality would help in reducing the intensity of violence against women.

**Keywords:** domestic violence, income inequality, psychological violence, physical violence

## 1. Introduction

The safety and well-being of women across the country are adversely affected by their experience ~~singby of physical violence as well as~~ emotional and economic violence. It is important to be conscious of the fact that all women are vulnerable to ~~some~~ acts of violence.

**Comment [R1]:** Indicate something about the physical and psychological violence here, which is a great concern as family planning does not appear in your findings, rather domestic violence consisting of physical and psychological violence

**Comment [R2]:** What kind of study? Mixed methods consisting of quantitative survey/s or/or Qualitative interviews See suggestions in text. Provide in brief also how data were collected, analysed and trustworthiness of data ensured

**Comment [R3]:** You mention later that you used a mixed methods study but you only reported quantitative results - therefore you have to indicate that you used a quantitative study (I did not see any interviews?) and not a mixed methods study if you only report your quantitative results

**Comment [R4]:** If a quantitative study and you only used the surveys please indicate it here and in the research design section...

**Comment [R5]:** If a mixed methods study was used you could frame it as follows: Mixed methods research was used to collect data through quantitative survey/s with 160w women in (where) and (how many) qualitative interviews. Non-probability purposive sampling. was used to collect data from (How many respondents) and (how many) completed the survey instrument. Data were analysed for the survey using and for the qualitative interviews using... For reliability and validity

**Formatted:** Font: (Default) Times New Roman, Bold

**Formatted:** Font: (Default) Times New Roman

**Formatted:** List Paragraph, Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 0.25" + Indent at: 0.5"

**Comment [R6]:** Which country? India?

**Comment [R7]:** I indicated how you should frame it in abstract if you only report on the surveys in this study - then it is only a quantitative study - please also correct in research design and methods section according to which methodology you used

**Comment [R8]:** Use consistent terms - instead of 'emotional' use, 'psychological' consistently

Violence against women is not always visible because ~~the~~ economic and psychological violence are often not even perceived as violence. One of the most common forms of violence against women is violence perpetrated by a husband or other male partner, which is often referred to as domestic violence or Intimate partner violence (IPV).

**Comment [R9]:** Text reference to support this claim?

One domain of domestic violence is economic violence which is often considered within the scope of psychological violence. Domestic violence caused ~~dsfrom-by~~ economic factors involves controlling a woman's ability through-to use and sustain economic resources to gain, thereby threatening her potential ~~of-for~~ self-sufficiency. In contrast to these many studies recently ~~states to~~ defined economic violence as a unique form of violence. Since economic violence is an important aspect of IPV, studies that ignore economic violence miss an important factor ~~which~~ caused ~~from-by~~ unemployment and lack of economic independence, which is significantly associated with forms of economic abuse. The issue of dowry harassment has received attention as a significant contributing cause to domestic violence. ~~The A survey (author, year) shows-revealed that~~ confrontations often revolve around different parts of gender roles and expectations. This is particularly evident in the severity and constancy of violence against pregnant women and forced sex across strata (author, year).

**Comment [R10]:** Text reference?

**Comment [R11]:** Provide in brackets text references to the authors and years of the 'many studies' (Author/s, year; Authors, year)

**Comment [R12]:** Do not provide the results of your own study here because it must be reported in the results section - provide a text reference to the survey of another author here

**Comment [R13]:** Text ref?

### 1.1 Marital violence and economic status of family

**Comment [R14]:** Suggestion: Rather delete this sub-heading- subheadings are only justified if there are two or more sub-headings under a main headings

~~The domestic violence on women is consistently linked with the socioeconomic status of the family but the little attention has been put on the likelihood of domestic violence on women and~~ Furthermore, domestic violence against women is consistently linked with the socioeconomic status of the family (text ref), but little attention has been put on the likelihood of domestic violence against women and the income level of the family. There have been several studies ~~which tried to that~~ correlates the socio-economic status and domestic violence. For example, Whaley and Messner (2002) studied the economic divergence index and violence over women, whereas Sanz-Barbero *et al.*, (2015) found economic disparities increase women's exposure to violence. In addition to income variables for socioeconomic status, the educational difference was also considered to examine ~~a-the~~ likelihood of domestic violence ~~on-against~~ women.

## 2. Problem statement

The reason ~~behind the reasons for~~ domestic violence ~~in terms of including~~ physical ~~as well as mental and psychological violence on women to their wives is~~ indeed multi-layered. Many studies in India (text references to these studies) and elsewhere (text reference/s to

studies elsewhere, however, sought to identify the factors of domestic violence empirically. Debate on the correlation between domestic violence and the economic status of the family became a deeply entrenched problem in exploring the likelihood of domestic violence against married women. It is reasonable to consider the economic condition of the family as a correlate of domestic violence. In consonance with this reasoning, the socio-economic status of the family could be explored in this study for associations with the reporting of violence. Briefly, Economic violence is a field of research that has emerged recently (text reference). Apart from the uncertain impact, there has are also several other factors also which that are directly and indirectly associated with the economic condition of the family. Hence, there are compelling reasons s for the consideration of the study. The study aimed to

Hence, the following research questions and hypotheses guided this study:

Research question: How .....?

Hypothesis 1-Domestic violence (both physical and emotional) is more prevalent among the lower socio-economic classes' families in West Bengal.

Hypothesis 2-Domestic violence against women (both physical and emotional) is more prevalent among families in which the family income is low.

### 3. Review of Literature

An important Previous result research is indicates that violence is significantly increased when there is a gender imbalance in work position (ICRW, 2000). Makino (2019) has shown found that, in situations where women lack inheritance rights, a dowry raises a woman's position within the family. Panda and Agarwal (2005) evaluated the incidence and correlates of both long-term and recent physical and psychological violence and revealed that the probability of spousal violence is found to be much lower for women who possess immovable property compared to those who do not. The latter results see consequences are significant for development policy are significant development. For example. Bonnes (2016) in his study suggested that men in Malawi must also receive education in order to reduce the likelihood of physical and psychological intimate partner abuse among against women. The reason is that because the risk that a woman may experience intimate partner violence from her present husband is significantly influenced by her degree of education, but this effect is dependent on her husband's education. Gahramanovet *al.*, (2021) have revealed that joint

**Comment [R15]:** Include the purpose statement of the study: eg. The study aimed to OR the purpose of the study was....

**Comment [R16]:** Provide an overarching research question that aligns with both hypothesis

**Formatted:** Indent: First line: 0"

property ownership may serve as a form of reward encouraging women to willingly provide greater labour for home production, thereby reducing the likelihood that men will use violence to coerce women to perform such labour. However, Eswaran and Malhotra (2011) have revealed that in India, women who work away from home are more likely to experience domestic violence, which may be related to jealousy and paternity doubt from our ancestors' time. Tauchenet al., (1991) have shown that in high-income families, there was a negative correlation between women's income and domestic abuse when men earned more than women and a positive correlation when males earned less than women. This result was only true for high-income families because of women's unwillingness to provide money to men. In rural Mexico, domestic violence and cash transfers to women were found to correlate negatively when the transfers were modest and positively when the transfers were substantial (Angelucci, 2008). Bloch and Rao (2002) demonstrated a positive association between the likelihood of wife abuse and the wife's family wealth using survey data from rural India. They explained this by the husband's intention to extort money through violence. According to research conducted by Hidrobo, M., and Fernald, L. (2013) in [....], receiving a cash transfer from a spouse dramatically reduces psychological abuse by that partner for women with higher education levels. However, the impact of a monetary transfer on women with only a primary school education or less depends on how much less educated she is than her partner. In particular, the monetary transfer markedly ups-increases emotional aggression in marriages where the woman has an academic level at least as high as her partner. Aizer (2010) found that reduced wage disparity lessens violence against women. According to research by Gahramanovet al., (2020), having sole property ownership isn't always a sign of less domestic abuse being committed against the woman. Married women who own the property with their spouses, however, are less likely to experience domestic abuse from their partners. Thus, it is evident from the reviewed literature that.... [The study's research design and methods will be discussed next.]

#### 4. Research design and Methodology

The study employed a.....research design consisting of .....(indicate number and names of surveys) and when conducted .....Data was collected during the periods (indicate dates of both surveys) Define research design (text ref) Indicate how data was collected and analysed and also how you ensured reliability and validity here

##### 4.1 Study population and Sampling

**Comment [R17]:** Was this study also conducted in India? Please indicate where the study was conducted like you did with previous study...

**Comment [R18]:** Was there an increase in wife abuse when the wife's family wealth decreased or increased? Not clear- reformulated sentence

**Comment [R19]:** Where? Specify country

**Comment [R20]:** What is the overall conclusion on the literature review. Thus, it is evident from the reviewed literature that.....

**Comment [R21]:** Provide bridge sentences between sections like indicated here to guide the reader to the next section

**Comment [R22]:** change the methods section to Research design and methodology and include underneath it subheadings : Study population and sampling, Data collection and instruments, data analysis, reliability and trustworthiness. Ethical considerations before presenting the Results and Discussion Section

**Formatted:** Font: Not Bold

**Formatted:** Font: Not Bold

**Formatted:** Font: Not Bold

**Formatted:** Font: Not Bold

The study population consisted of (how many) women in rural and urban areas in... (where). ..... The required data collected through employed a mixed-methods to investigate the problem of domestic violence and economic status in West Bengal (India). The study primarily based-on-used data compiled from the National Family Health Survey (NFHS, 2021) reports for India, conducted during 2005-06 and 2020-21. In the second phase of this study was based on a household survey undertaken in 2020-21 in the state of West Bengal. The respondents were ever-married women in the age group 15–49. The total sample size consisted of 160 households, including (how many women??) of out of which women of the age group 15-49 included. The qualitative data was collected through the personal interviews of with 80 married women from both urban and rural settings. The study examined three types of domestic abuse- physical, emotional/psychological, and economic (Table 1).

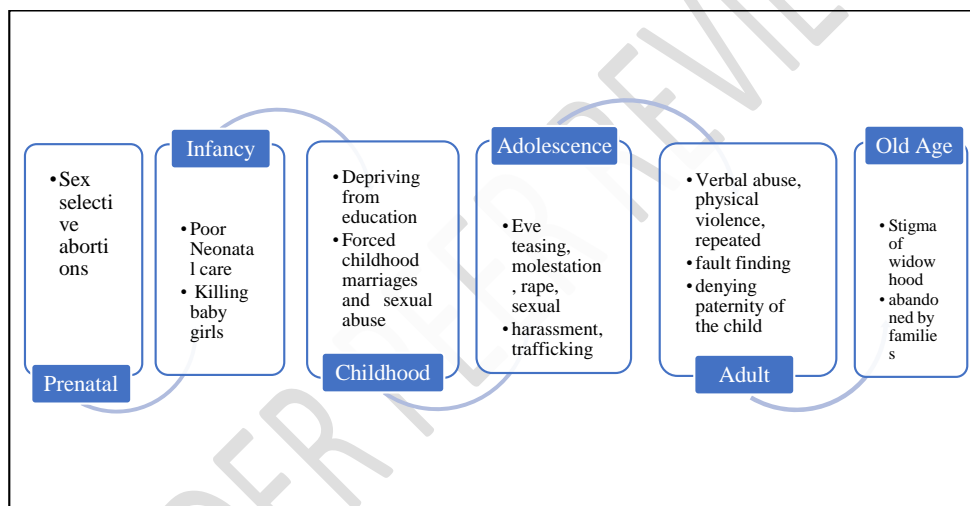


Figure 1. Different forms of violence against women at different stages of lifecycle

The collected information was obtained from ever-married women on violence caused by husbands and by others relatives, and from never-married women on violence by anyone, including boyfriends. Different International research has shown that domestic violence is one of the most common forms of violence experienced by women in both rural and urban areas.

#### 4.2 Measurement of Domestic Violence

Domestic violence on women committed by the husband or boyfriend is usually measured in more detail than violence by other perpetrators including relatives. Explicitly,

**Comment [R23]:** If you used a MIXED METHODS study, you Also have to indicate how you sampled for the quantitative survey/s and for the qualitative interviews. How many respondents completed the surveys (quantitative sample size) and how many participants did you interview? Who were the participants that you interviewed? Women - from where and their sample frame, how many were married, ages etc (biographical profile)

**Comment [R24]:** Ensure that you provide all the above information when describing your samples (quantitative survey/s sample and qualitative interview sample)

**Comment [R25]:** Quantitative ??? If you only report on the two surveys

**Comment [R26]:** Ever is the wrong word here and is not understandable - does it mean they were all married - all married women? Never married women etc?

**Comment [R27]:** Which interview questions did you ask the women - was the interviews individual or focus groups?

**Comment [R28]:** Remove the qualitative data section and interviews if you do not report on this in this study (your results only show the quantitative studies' results)

**Formatted:** Highlight

**Comment [R29]:** Move this sentence to your introduction and provide a text reference

**Comment [R30]:** Indicate here how you collected data and which scales you used. In the methods and results section you only report on how you collected the data, analysed it and ensure trustworthiness and provide detail as indicated in my previous comments

violence by husbands is measured by using a critically through modified Conflict Tactics Scale (CTS) (Strauss, 1990).

Table 1. Different types of domestic abuse

**Comment [R31]:** Did you use these in your survey or household survey - which survey ?

Physical violence	Sexual violence	Emotional violence
Twist your arm or pull your hair	Physically force you to have sexual intercourse	Say or do something to humiliate you in front of others
Push you, shake you, or throw something at you	Force you to perform any sexual acts	Threaten to hurt or harm you or someone close to you
Punch you with his fist or with something that could hurt		Insult you or make you feel bad about yourself
Kick you, drag you or beat you up		Say or do something to humiliate you in front of others
Try to choke you or burn you on purpose		
Threaten or attack you with a knife, gun, or any other weapon		
Twist your arm or pull your hair		

In order to answer the research problem-question stated earlier, the obtained data were put into-analysed through the statistical software like STATA. ~~A~~ Descriptive Statistics were performed to compare the pattern of change the-in violence in the study area. Using logistic regression analysis, correlational analysis was conducted on the data to analyse the impact of economic status on domestic violence problem amongst women. The same methodology was also applied by Schragand Ravi(2020) for assessing mental health in battered women.

**Comment [R32]:** How did you ensure reliability of the quantitative data and of the qualitative interviews? You indicate that you used a mixed methods study - indicate how you 'mixed' or merged the qualitative data and quantitative data.

## 5. Results and Discussion

The results of the study will be presented and discussed in this section.

**Comment [R33]:** Please indicate which results of the study will be presented in this section - the results of which survey/s and where are the interview results? Please be clear - if the interview results are not reported in this study - you must indicate that you will only report on the quantitative results of the two surveys and do not include anything about mixed methods study, or the qualitative interviews - remove then all mention to a mixed method study, interviews and qualitative study.

### 5.1 Socio-Demographic Profile

Women facing domestic violence is not a new concept and from-for long time it is prevailing in society. When they should be safest, within their homes, women are frequently in-at grave risk. Many people experience a regime of terror and violence at home at the hands of someone they should be able to trust (Kapoor, Sushma, 2000). Domestic violence especially on women have-has more consequences on their physical, mental and reproductive health (WHO, 2013). The serious public health issue of intimate partner violence (IPV) against

women, which cuts across socioeconomic and economic lines, is seen as a key roadblock to progress (Alvi, 2009).

Table 2 shows...

**Comment [R34]:** Move this paragraph and intergrate it earlier in your introduction or problem statement as this is part of the problem- the consequences of this violence

**Comment [R35]:** Indicate what table 2 shows for example: Table 2 shows the results pertaining to...from the ... (which?) survey....

**Comment [R36]:** Important note: Please double-check all your results in the tables for accuracy and if they correspond with the results provided in writing

Table 2. Percentage of married women who have been beaten or physically mistreated since age 15

Variables	West Bengal		
	1998-99	2021-22	% Change
<b>Beaten or physically mistreated since age 15</b>			
i. Husband	17.6	23.90	35.80
ii. In-laws	15.7	16.87	7.45
iii. Other persons	1.7	5.04	196.47
<b>Work status of woman</b>			
i. Not working	16.9	11.87	-29.76
ii. Agri. and HH activities	27.9	21.09	-24.41
iii. Non-agri. activities	26.1	22.90	-12.26
<b>Standard of living of HH</b>			
iv. Low	29.1	31.09	6.84
v. Medium	20.1	17.65	-12.19
vi. High	10.1	15.11	49.60

Given the prevalence of domestic violence of women by their intimate partners worldwide, it is necessary to investigate these phenomena in various familial, relational, and cultural situations (Ruffin and Angelina Kathleen, 2021). The results of the survey show that, ~~23 per cent of women reported that they faced physical mistreatment since age 15 by their husbands in 2021 22, while it was less in 1998 99 survey~~ 23 percent of women reported that they faced physical mistreatment since age 15 by their husbands in 2021-22, while it was less in the 1998-99 survey, accounting for 17.60 percent. Most of the females who were prone to physical mistreatment were exposed to domestic violence, their husbands acted as the perpetrators (72.73%). Domestic violence exposes women to a wide range of direct and indirect health problems (Musa, *et al.*, 2019). It is believed that as the country progresses, there will be more woman empowerment and less domestic violence against women, but unfortunately here the figures show that, there is an increase in the violence cases. Most of the domestic violence against women ~~are-is~~ caused by their partners, which is also referred to as Intimate partner violence (IPV). IPV is one of the most prevalent types of violence against women in the world, and it can have significant, long-lasting, and wide-ranging health effects on victims (Coll CVNet *al.*, 2020; Musa *et al.*, 2019; Michele *et al.*,

**Comment [R37]:** Move to introduction or literature review

2014). Many studies ~~(authors, year)~~ also support that women face physical violence more often by their partners especially in developing nations like India. Table 2 also shows that 16.87 % of women reported being exploited to physical mistreatment by the ~~mir~~ in laws in 2021-22. Similarly, 5.04 % of women reported being mistreated physically by other persons.

**Comment [R38]:** Provide text references to the many studies in brackets

In all three cases, the violence rate was ~~more-higher~~ in 2021-22 when compared to 1998-99. Also, the women reported being mistreated majorly by their husbands, which is a major insight of ~~the~~ Table 2. A study by Sarkar M. A. (2010) ~~similarly~~ showed that husbands were the perpetrators in ~~the~~ case of most ~~of the~~ females (72.73%).

~~Another variable which shows -~~The work status of the non-working women in ~~the~~ Table 2 shows that, in total, 11.87 % of women are facing physical mistreatment during 2021-22, whereas, 16.90 % of non-working women ~~have been-were~~ exploited by beatings and physical mistreatment in 1998-99. ~~This change shows that there is positive change in the trend. Thus, Over~~ the two decades, the physical mistreatment of non-working women decreased substantially. The most vulnerable groups of women are those who experience violence and live in impoverished environments (Michele *et al.*, 2014). ~~Furthermore Table 2 shows that ...~~ Another variable of the study women engaged in agriculture and household activities, which indicates that, over the years, the violence against them has been decreased (from 27.90% in 1998-99 to 21.09% in 2021-22). ~~Thus, the results show that o~~ Over the decades, ~~we can see there are less fewer~~ cases of domestic violence against women ~~who are~~ engaged in agriculture and household activities. Similarly, women who are involved in non-agricultural activities, for them the percentage of women ~~who~~ suffered this kind of physical mistreatment was 26.10% in 1998-99 and it was comparatively less in 2021-22.

**Comment [R39]:** This sentence is unclear - reformulate to make clearer. Write in active voice to make clearer

Overall, the data reveals that physical abuse of women is highest among those who work in both agricultural and non-agricultural activities and is least prevalent among those who do not work.

Poor household background is a significant contributor to the abuse or domestic violence of women. It has long been observed that poorer households are more likely to experience this type of domestic abuse. Domestic violence instances and household income have a substantial link. This doesn't mean that those who are extremely wealthy and economically powerful won't experience physical abuse or violence, but the likelihood is much lower.

In both the periods considered above (1998-99 and 2021-22), the households ~~which~~ ~~that~~ have a low standard of living registered higher percentages of physical mistreatment of

married women when compared to those who have a high standard of living. It is evident from the figures that for the high standard of living households, the percentages of domestic violence reported were 10.10% in 1998-99, and it was 15.11% in 2021-22. Surprisingly, over the decades, the violence increased among the high and low standard of living households. Only for those in the middle standard of living category saw the decrease in the occurrence of the domestic violence among married women since age 15.

[Table 3 shows the result of ...](#)

Table 3. Reason of for domestic violence in accordance with specific attitudes (%)

Reason/behaviour	2005-06		2020-21	
	Women	Men	Women	Men
<b>Husband is justified in hitting or beating his wife if :</b>				
She goes out without telling him	18.6	12.8	16.6	16.3
She neglects the house or children	24.8	17.0	25.2	19.3
She argues with him	21.9	17.1	26.6	27.8
She refuses to have sexual intercourse with him	10.9	7.5	13.2	11.8
She doesn't cook properly	13.1	7.2	10.6	7.3
He suspects her of being unfaithful	14.6	13.1	21.4	27.6
She shows disrespect for in-laws	33.6	30.0	28.7	30.9
<b>Wife is justified in refusing to have sex with her husband when she:</b>				
Knows her husband has a sexually transmitted disease	73.1	65.9	75.0	80.2
Knows her husband has sex with other women	68.8	57.1	75.4	71.7
Is tired or not in the mood	73.3	73.2	76.4	69.5
Percentage who agrees with all three reasons	57.7	47.9	64.9	57.6
Percentage who agrees with none of the three reasons	16.6	19.0	15.0	11.0
<b>When a wife refuses to have sex with her husband, he has the right to:</b>				
Get angry and reprimand her	-	15.9	-	24.2
Refuse to give her financial support	-	4.5	-	15.8
Use force to have sex even if she doesn't want to	-	4.2	-	14.9
Have sex with another woman	-	3.8	-	10.6
Percentage who agrees with all four behaviours	-	1.1	-	3.9
Percentage who agrees with none of the four behaviours	-	80.5	-	65.2

According to the World Health Organisation (WHO), 30% of women globally who have been in a relationship say indicated that an intimate partner has physically or sexually abused them. Estimates of the prevalence of violence against women range from 20% to 50% depending on the country (Kapoor, Sushma, 2000). Whenever the topic of domestic violence

comes up for discussion, it's also important to analyse the factors which cause this violence to occur. In table 3, the various reasons for domestic violence were listed along with their percentages of respondents separately for men and women for two different time periods like 2005-06 and 2021-22.

A study by Ibrahim (2010) ~~says that if the~~ indicated that when couples ~~were have longer marriage-married for a longer~~ time (six years or more), ~~then there are more chances the likelihood increases that they will have more chances of for the married~~ women ~~facing to experience~~ domestic violence. ~~There are gender wise attitudes as know and here~~ hence, it's important to mention ~~separately~~ the attitudes of men and women ~~separately~~. When it comes to hitting wives, husbands give many different reasons for the violence for justification's sake. Some of the reasons ~~were~~ mentioned in the table ~~were~~ based on the literature reviews of similar ~~studies~~. ~~The M~~majority of men and women during both periods (2005-06 and 2020-21) responded that ~~the~~ husband is justified in hitting or beating his wife when ~~the~~ wife shows disrespect for in-laws. This shows that the majority of the violence or beating of the wife by the husband occurs whenever ~~the~~ wife fails to show respect to the in-laws.

Comment [R40]: Unclear sentence reformulate

Comment [R41]: Provide text references to these studies in brackets

The second most ~~attitude was that wife neglecting the house or the children~~ common attitude was that the wife neglects the house or the children, which was mentioned by most of the respondents. In ~~the~~ 2005-06 time period, 24.80% of women and 17% of men responded ~~that that the~~ husband is justified in hitting his wife when ~~the~~ wife neglects the house or the children, respectively. During ~~the~~ 2020-21 period, 26.60% of women and 27.80% of men expressed that ~~the~~ husband is justified in hitting his wife when ~~the~~ wife argues with him.

In some cases, it was observed that violence ~~on against~~ women occurs when ~~she they~~ refuses to have sex with ~~her their~~ husbands. In such cases, it is also important to analyse the various reasons for a wife refusing to have sexual intercourse with her husband. Among many reasons, a few notable and important reasons ~~were are~~ mentioned in Table 3. It was evident from the table that ~~a~~ wife is justified in refusing to have sex with her husband when she is tired or not in the mood (73.30% of women, 73.2% of men during 2005-06, and 76.4% of women and 69.50% of men during 2020-21). These figures shows that ~~the~~ main reason for the wife to refuse ~~for~~ sexual intercourse was that she ~~will would~~ be tired or not in the mood to have sex.

~~This~~ study also ~~helps to~~ give some interesting information that ~~the~~ wife refuses to have sex with her husband because she knows that her husband has a sexually transmitted disease, and she feels that its dangerous for her if she agrees ~~for~~ to have sex. Whereas,

16.6 % of women and 19% of men during ~~the~~ 2005-06 period responded that, they do not agree with any of the reasons mentioned in ~~the~~ Table 3.

~~If we look at other side of this issue, taking men's opinion when women refuse to have sex with her husband~~ the other side of this issue, considering men's opinions when women refuse to have sex with their husbands is also important. Men were asked questions to see what they think whenever women say no to sex and how they react to it. It was observed that ~~the,~~ majority of men during both time periods ~~s~~ considered responded that, they agreed ~~with~~ none of the behaviours mentioned in the Table 3. About 15.9% of men during 2005-06 and 24.2% of men during 2020-21 responded that, they have the right to get angry and reprimand their wives when the wives refuse to have sex with them.

### 5.2 Socio-demographic characteristics

In this section the results pertaining to the socio-demographic characteristic obtained from ... (which surveys? Or surveys and interviews???) will be presented in Table 4 and discussed,

Formatted: Font: Not Bold

Formatted: Font: Not Bold

Formatted: Font: Not Bold, Not Italic

The domestic violence of women ~~e~~ especially depends on their socio-economic background. A previous study showed ~~There is a~~ statistically significant correlation between the proportion of women who experience violence and their age, education, and marital status (Sarkar M. A., 2010). ~~We can see from~~ ~~t~~ Table 4 ~~shows~~ that ~~the,~~ majority of the people who agreed that a husband is justified in hitting his wife ~~for~~ at least one specified reason belongs to the age group of 15-19 during 2005-06. This indicates that more young people justify men hitting women. During ~~the~~ 2020-21 period, ~~the~~ majority of ~~the~~ population (51.7% of men and 41% of women) agreed that a husband is justified ~~in~~.... Whereas only 37.9% of women and 34.40% of men belonging to ~~the~~ 40-49 age group justify ~~in~~ hitting ~~his~~ ~~their~~ wife for at least one specified reason. In the study conducted by Sarkar, M. A. (2010) ~~reported that,~~ females between the ages of 30-39 years had the highest prevalence (50%) of domestic violence.

Table 4: Percentage of population agreed that a husband is justified in hitting or beating his wife for at least one specified reason

Socio-economic variables	2005-06		2020-21	
	Women	Men	Women	Men
<b>Age</b>				
15-19	47.7	50.6	40.3	48.0
20-24	42.1	39.9	41.0	51.7
25-29	40.1	40.3	43.3	48.6
30-39	42.7	34.4	41.0	46.7
40-49	37.9	34.4	42.5	46.1

<b>Employment (past 12 months)</b>				
Employed	45.2	39.8	39.8	48.9
Employed, for cash	45.2	38.2	39.3	48.5
Employed, not for cash	44.9	61.6	46.0	67.8
Not employed	40.6	30.3	42.1	40.3
<b>Residence</b>				
Urban	25.0	26.9	29.7	40.1
Rural	49.8	44.9	47.6	<b>51.3</b>
<b>Household structure</b>				
Nuclear	44.7	39.3	41.9	46.0
Non-nuclear	39.1	38.4	41.3	49.5

In various studies (author, year), it was noticed that, if men don't have any employment or proper job, then domestic violence cases happen and increases. That's why Consequently, it is necessary to investigate the employment status of the people who justified beating their wives. ~~If we look at the~~ Table 4 ~~shows, it is observed that~~ that the, majority of women (61.6% of men during the 2005-06 period) were employed but not for cash purposes. Even during 2020-21 the, majority of women (67.8% of men) who responded in favor of justifying the husband hitting wife were employed, but they were not employed for cash. Only 30.3% of men who were not employed agreed that a husband is justified in hitting. There are more chances that, rural women are more prone to ~~the~~ domestic violence and various ~~studies also highlight the fact that,~~ there are more cases in rural when compared to urban places. Here, similarly, men from rural places in the majority (51.3% during 2020-21) agreed that a husband is justified in hitting or beating a wife for at least one specific reason. In both time periods, more rural men and women agreed in justifying this violence than urban men and women.

The majority of domestic violence research ~~focus~~ focuses on the relationship between the attacker and the victim, namely how often ~~the~~ domestic violence occurs in married, living with a partner, and dating couples, but most do not consider how family structure (polygynous marriage, partnerships with children, and presence of extended family members in the home) may affect these experiences (Ruffin and Angelina Kathleen, 2021).

**Comment [R42]:** Provide text references to these various studies in brackets after the word many studies (text references)...

**Comment [R43]:** Provide the text references of these various studies in brackets after the words - various studies (author, year; author, year; author, year) highlight....

**Comment [R44]:** Please indicate before you provide the figure what you will present to the readers in the figure

**Comment [R45]:** Also indicate whether this figure is indicative of your study (surveys) or which study are you referring to here

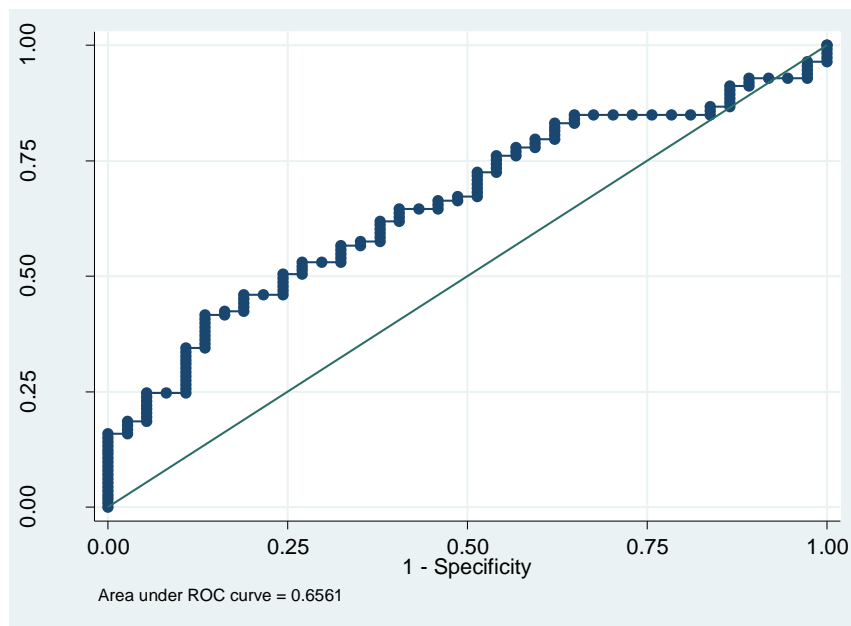


Figure 2. Diagnostic test for logistic regression

The receiver operating characteristic (ROC) curve is used for evaluating the performance of logistic analysis. It provides a graphical representation of a classifier's performance, rather than a single value like most other metrics. ~~Total area under ROC curve (0.65) measured the overall performance of diagnostic~~ The total area under the ROC curve (0.65) measured the overall performance of diagnostic test (Figure 2).

In different societies, there are many types of families, and not everyone can have every type of family. ~~The P~~presence of family members in a home like parents, children and other relatives, most probably change the dynamics of the couples and the household members, so as the structure of the family changes, the risk of being affected by domestic violence also changes. ~~With In~~ this regard, ~~in~~ the last portion of Table 4, ~~we can see~~ shows that there is one more variable called household structure. This household structure is defined in this study as a nuclear family and a non-nuclear family structure. Basically, the nuclear family structure is considered as a family in which a pair of adults and their children live together. A non-nuclear family structure is that one in which more than one generation, like grandparents, parents and their children, live together. In this study, 44.7% of women during the 2005-06 period belonging to nuclear family agreed that the husband is justified in beating his wife. In 2020-21, 49.5% of men from non-nuclear family structures s agreed ~~for to~~ the same. These facts in the above ~~Table~~ 5 do not give any kind of association between any two variables.

Table 5. Factors affecting different forms of domestic violence experienced in West Bengal  
(n= 160)

Variable	Physical violence	Psychological violence
Family income ('000 Rs. / month)	-3.028** (0.829)	-1.386*** (0.211)
Marital duration (Years)	-1.074** (0.145)	0.643 (3.135)
Place of residence (Rural/Urban)	-0.292 (0.175)	4.272** (0.842)
Partner's occupation	-0.139 (0.079)	0.096 (1.819)
Woman currently working(Y/N)	0.063 (0.186)	4.083 (7.141)
Caste or tribe of the household head	-0.008 (0.066)	0.735 (1.710)
Partner's education level (in Years)	0.102 (0.061)	2.902* (0.839)
Age difference (in Years)	-0.742* (0.295)	0.097 (0.054)
Sex of living children (M/F)	1.034* (0.429)	10.128** (4.637)

Note: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Various factors affect the domestic violence that the women face in the society. Power, employment, and degree of education are only a few examples of the many causes of violence. Female illiteracy and domestic violence are related (author, year). The majority of women were unaware of their rights. They frequently view violence as commonplace. Those women who are in economically distressed settings are considered most vulnerable to the domestic violence.

Results of the logit model shows a statistically significant negative association between the family income and both domestic physical and psychological violence experienced. The intensity of physical domestic violence will increase by 3.028 when the income decreases by one thousand rupees. Similarly, the intensity of psychological violence increases by 1.386 when the income decreases by one thousand rupees. Similar results were seen in various studies showing that as wealth or the economic status of the women or the family increases, the violence cases also decrease. For example, a study conducted by Shoukry and Fathy (2016) showed that, women with higher status, as determined by the wealth index, had less intense intimate partner violence than women with lower status.

In addition, Table 5 showed that there was also a significant negative association between marital duration and the physical violence experienced. This indicates that as the relationship gets old matures (the longer the relationship), there will be fewer cases of physical violence. As discussed earlier in the discussion that, the place of residence also affects the

Comment [R46]: Text reference?

Comment [R47]: Or is this your own study and table 5 results that you are referring to? THEN indicate specifically that Table 5 shows....

Comment [R48]: Provide text references to substantiate this claim

Comment [R49]: Where is the Logit model? Figure?

Comment [R50]: Or Table? Be clear to which results you are referring to for example....Table 5 shows that....

Comment [R51]: Provide text references in brackets to these various studies in brackets that you mention here

violence and its ~~intensity~~ intensity: y, here in ~~the~~ Table 5, there is a positive significant association between ~~the~~ psychological violence and the place of residence. Another important factor affecting psychological violence is ~~the~~ partner's education, and the analysis ~~brings out~~ reveals a positive and significant relationship between the two. Surprisingly, ~~the~~ sex of the living children ~~is~~ also one of the major factors which causes the domestic violence. Especially in India, it is a known fact that, many expect a male child to be born in the family and they don't like it when ~~the~~ a female child is born. The study's ~~analysed data~~ analysis showed a significant positive relationship between the sex of a living children and ~~the~~ psychological violence. ~~A large number of literatures~~ Many previous studies (author, year; author, year.....) on domestic violence identified ~~that there is a~~ strong negative association between the low socio-economic status and prevalence of domestic violence against women.

**Comment [R52]:** Rather use the word 'gender' instead of 'sex'

**Comment [R53]:** Gender?

**Comment [R54]:** Provide the authors and years in brackets of the many literature you refer to here

**Comment [R55]:** Include a heading on the limitations of the research and recommendations for future research

**Comment [R56]:** Reiterate your contribution in the conclusion

## 6. Conclusion

~~It is found~~ This study found that ~~the~~ socioeconomic status of the family has negative relationship with their domestic violence against women in the study area. If the causal factors could be meticulously controlled, then ~~different~~ various forms of violence can be prevented from harming women in our society. Therefore, various strategic activities needs to be implemented through authorized agencies and governmental organizations ~~at~~ which ~~are~~ already working at many levels, with multiple layers of target groups both in urban and rural areas.

Keeping in view the findings, it is recommended that the Central or State ~~g~~ Governments should create job opportunities ~~and~~ help the people to raise their socio-economic status, which may have positive impact ~~upon~~ violent behaviour. Male attitudes and society's attitudes need to undergo change. Since prevention of domestic violence requires fundamental changes in attitudes and behaviour, it confronts societal and individual resistance to change. In addition to public education campaigns, legal framework and institutional interventions needs to be restructured to prevent ~~the~~ gender-based domestic violence. ~~This e~~ analysis of this study also ~~shows~~ revealed that there are significant urban-rural differences in the socio-economic status and educational background of the family. Policies that enhance family income and reduce income inequality would help in reducing the intensity of violence against women.

## References

1. Aizer, A. (2010). The gender wage gap and domestic violence. *American Economic Review*, 100(4), 1847-1859.<https://doi.org/10.1257/aer.100.4.1847>
2. Aizer, A. (2011). Poverty, violence, and health the impact of domestic violence during pregnancy on newborn health. *Journal of Human resources*, 46(3), 518-538.<https://doi.org/10.1353%2Fjhr.2011.0024>
3. Angelucci, M. (2008). Love on the rocks: Domestic violence and alcohol abuse in rural Mexico. *The BE Journal of Economic Analysis & Policy*, 8(1).<https://doi.org/10.2202/1935-1682.1766>
4. Bincheng Mao, World economic forum report, November 3, (2022). To tackle violence against women, we need to alleviate poverty. *Gender equality*. <https://www.weforum.org/agenda/2022/11/to-take-violence-against-women-alleviate-poverty>.
5. Bloch, F., & Rao, V. (2002). Terror as a bargaining instrument: A case study of dowry violence in rural India. *American Economic Review*, 92(4), 1029-1043.DOI: 10.1257/00028280260344588.
6. Bonnes, S. (2016). Education and income imbalances among married couples in Malawi as predictors for likelihood of physical and emotional intimate partner violence. *Violence and victims*, 31(1), 51-70.<https://doi.10.1891/0886-6708.VV-D-14-00016>.
7. Dugan, L., Nagin, D. S., and Rosenfeld, R. (1999). Explaining the Decline in Intimate Partner Homicide: The Effects of Changing Domesticity, Women's Status, and Domestic Violence Resources. *Homicide Studies*, Vol.3, No.3, P.187-214. <https://doi.org/10.1177/1088767999003003001>
8. Decker MR., Peitzmeier S., Olumide A., Acharya R., Ojengbede O., Covarrubias L., Gao E., Cheng Y., Delany-Moretwe S., and Brahmabhatt H. (2014). Prevalence and Health Impact of Intimate Partner Violence and Non-partner Sexual Violence Among Female Adolescents Aged 15-19 Years in Vulnerable Urban Environments: A Multi-Country Study. *Journal of Adolescent Health*, Vol.55, No.6, P.S58-S67. <https://doi.org/10.1016/j.jadohealth.2014.08.022>.
9. Eswaran, M., & Malhotra, N. (2011). Domestic violence and women's autonomy in developing countries: theory and evidence. *Canadian Journal of Economics/Revue canadienne d'économique*, 44(4), 1222-1263.<https://doi.org/10.1111/j.1540-5982.2011.01673.x>
10. European Union Agency for fundamental rights, violence against women: an EU-wide survey-Results at a glance, 2014.
11. Gahramanov, E., Gaibulloev, K., and Younas, J. (2021). Women's type of property ownership and domestic violence: a theoretical note. *Review of Economic Household*, 19, 223-232.<https://doi.org/10.1007/s11150-021-09544-z>
12. Gahramanov, E., Gaibulloev, K., & Younas, J. (2020). Does property ownership by women reduce domestic violence? A case of latin America. SBA Working paper. American University of Sharjah. <http://hdl.handle.net/11073/16691>.
13. Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence. World Health Organization, Geneva (2013).

14. Hamza Alvi. (2009). Pakistani women in a changing society Human Rights Commission of Pakistan – 1999, Report. Economic Survey of Pakistan, 10.
15. Hidrobo, M., and Fernald, L. (2013). Cash transfers and domestic violence. *Journal of Health Economics*, Vol.32, No.1, P.304–319.
16. Ibrahim, N. B. (2010, June). Mental Health in battered women in Jordan. *Journal of the Islamic University*, 8(10), 299-329, doi:10.5539/ass.v9n2p257
17. ICRW (International Centre for Research on Women), 2000. Domestic Violence in India: A Summary Report of a Multi-Site Household Survey, funded by USAID/India, Washington, DC, USA ([www.cedpa.org](http://www.cedpa.org)).
18. Kapoor, Sushma. (2000). "Domestic Violence against Women and Girls. Innocenti Digest 6."
19. [https://www.researchgate.net/publication/234621729\\_Domestic\\_Violence\\_against\\_Women\\_and\\_Girls\\_Innocenti\\_Digest\\_6](https://www.researchgate.net/publication/234621729_Domestic_Violence_against_Women_and_Girls_Innocenti_Digest_6).
20. Khan, Z., Cheong, Y. F., Miedema, S., Naved, R. T., & Yount, K. (2020). Women's experiences of economic coercion and depressive symptoms in Matlab, Bangladesh. *SSM Population Health*. <https://doi.org/10.1016%2Fj.ssmph.2020.100641>
21. Makino, M. (2019). Dowry in the absence of the legal protection of women's inheritance rights. *Review of Economics of the Household*, Vol.17, P.287–321.
22. Musa, A., Chojenta, C., Geleto, A., and Loxton, D. (2019). The associations between intimate partner violence and maternal health care service utilization: a systematic review and meta-analysis. *BMC Women's Health*, Vol.19, No.36, P.1-14. <https://doi.org/10.1186/s12905-019-0735-0>.
23. NFHS-V, Report of National Family Health Survey- III, International Institute for Population Sciences, Mumbai, 2019-21.
24. Panda, P., and Agarwal, B. (2005). Marital Violence, Human Development and Women's Status in India. *World Development*, Vol.33, No.5, P.823-850.
25. Postmus, J. L., Hoge, G. L., Breckenridge, J., Sharp-Jeffs, N., and Chung, D. (2020). Economic abuse as an invisible form of domestic violence: A multi-country review. *Trauma, Violence, & Abuse*, Vol.21, No.2, P.261-283.
26. Rashada, Ahmed Shoukry; Sharaf, Mesbah Fathy (2016): Income inequality and intimate partner violence against women: Evidence from India, Frankfurt School-Working Paper Series, No. 222, Frankfurt School of Finance & Management, Frankfurt.
27. Ruffin, Angelina Kathleen, "Family Structure and Women's Experiences of Intimate Partner Violence" (2021). Publicly Accessible Penn Dissertations. 3730. <https://repository.upenn.edu/edissertations/3730>
28. Schrag, R. J. V., & Ravi, K. (2020). Measurement of economic abuse among women not seeking social or support services and dwelling in the community. *Violence and victims*, 35(1), 3-19. <https://doi.org/10.1891/0886-6708.VV-D-18-00154>

29. Sarkar, M. (2010). A study on domestic violence against adult and adolescent females in a rural area of West Bengal. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*, 35(2), 311. <https://doi.org/10.4103%2F0970-0218.66881>.
30. Sanz-Barbero, B., Vives-Cases, C., Otero-García, L., Muntaner, C., and Torrubiano-Domínguez, J. (2015). Intimate partner violence among women in Spain: the impact of regional-level male unemployment and income inequality. *The European Journal of Public Health*, Vol.25, No.6, P.1105-1111. <https://doi.org/10.1093/eurpub/ckv048>.
31. Tauchen, H. V., Witte, A. D., and Long, S. K. (1991). Domestic violence: a non-random affair. *International Economic Review*, 32(2), 491–511. <https://doi.org/10.3386/w1665>
32. Whaley, R. B., & Messner, S. F. (2002). Gender equality and gendered homicides. *Homicide Studies*, 6(3), 188-210. <https://doi.org/10.1177/108876790200600302>
33. Yount, K. M., Krause, K. H., & VanderEnde, K. E. (2016). Economic coercion and partner violence against wives in Vietnam: a unified framework?. *Journal of interpersonal violence*, 31(20), 3307-3331. <https://doi.org/10.1177/0886260515584350>

Appendix 1. Different forms of spousal violence by husband's characteristics and empowerment indicators										
	Emotional violence		Physical violence		Sexual violence		Physical or sexual violence		Emotional, physical, or sexual violence	
	2005-06	2020-21	2005-06	2020-21	2005-06	2020-21	2005-06	2020-21	2005-06	2020-21
<b>Husband's schooling</b>										
No schooling	15.4	22.5	44.0	36.4	26.8	13.9	51.3	39.4	52.6	41.5
<5 years complete	15.2	17.2	42.8	31.8	23.2	10.9	47.3	32.6	48.6	34.3
5-7 years complete	11.3	15.4	34.1	22.0	19.7	10.0	42.7	24.2	44.4	27.0
8-9 years complete	10.9	16.9	23.8	23.0	20.6	9.6	33.9	25.0	36.1	28.1
10-11 years complete	8.5	8.0	19.8	14.9	20.9	3.0	30.2	16.4	31.2	18.0
12 or more years complete	6.2	13.2	10.0	16.5	10.3	3.0	16.9	16.7	18.5	22.5
<b>Husband's alcohol consumption</b>										
Does not drink	8.8	11.8	26.5	19.1	18.0	6.1	34.2	20.8	35.7	23.7
Drinks/never gets drunk	14.4	15.8	37.8	21.8	29.2	8.3	48.8	21.8	51.5	23.9
Gets drunk sometimes	20.3	30.0	49.3	43.6	28.8	17.0	55.3	45.6	56.2	48.5
Gets drunk often	39.2	56.2	74.6	82.2	41.9	37.2	78.6	83.7	79.8	85.0
<b>Spousal age difference</b>										
Wife same age	15.5	10.6	20.4	22.6	24.0	5.5	32.6	23.0	36.5	23.6
Wife 1-4 years younger	8.4	15.7	19.5	24.1	10.2	11.2	23.8	26.3	26.4	28.4
Wife 5-9 years younger	9.8	16.0	32.5	24.0	21.9	8.3	40.8	25.3	41.9	28.3
Wife 10 or more years younger	10.7	14.3	32.8	24.1	22.7	6.8	40.9	26.5	42.1	29.9
<b>Spousal schooling difference</b>										
Husband has more schooling	11.7	15.5	28.8	24.0	18.4	7.9	36.3	25.5	38.2	28.1
Wife has more schooling	13.5	16.3	35.0	24.7	27.7	9.5	44.5	27.2	45.7	29.9
Both have equal schooling	5.7	12.0	14.5	17.6	13.6	6.5	21.8	18.3	22.8	23.1
Neither attended school	14.7	23.5	44.6	37.8	25.2	13.3	51.0	39.2	52.4	41.4

Note: Husband refers to the current husband for currently married women and the most recent husband for widowed, divorced, separated women

UNDER PEER REVIEW