

## The Report is Generated by DrillBit Plagiarism Detection Software

## **Submission Information**

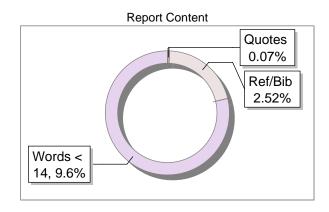
Author Name	Deekshitha N
Title	RISING CASES OF DOMESTIC ABUSE AND INTIMATE PARTNER VIOLENCE IN HOUSEHOLDS.
Paper/Submission ID	3596424
Submitted by	charankumarba@gmail.com
Submission Date	2025-05-09 11:09:44
Total Pages, Total Words	8, 2979
Document type	Research Paper

## Result Information

## Similarity 4 %

Student Paper 0.67% Internet 1.28%

Journal/ Publicatio n 2.05%



## **Exclude Information**

Quotes	Excluded	Language	English
References/Bibliography	Excluded	Student Papers	Yes
Source: Excluded < 14 Words	Excluded	Journals & publishers	Yes
Excluded Source	0 %	Internet or Web	Yes
Excluded Phrases	Not Excluded	Institution Repository	Yes

**Database Selection** 

A Unique QR Code use to View/Download/Share Pdf File





## **DrillBit Similarity Report**

4

6

A

A-Satisfactory (0-10%)
B-Upgrade (11-40%)
C-Poor (41-60%)
D-Unacceptable (61-100%)

SIMILARITY %

MATCHED SOURCES

**GRADE** 

LOCA	ATION MATCHED DOMAIN	%	SOURCE TYPE
1	www.unwomen.org	1	Publication
2	ijariie.com	1	Publication
3	Neurophysiology Of Aggression In Posttraumatic Stress Disorder 378 756 000364.	1	Student Paper
4	docplayer.net	1	Internet Data
5	ILLICIT JUSTICE Aspirational-Strategic Subjects and the Political Ec, by Roychowdhury, Poula- 2019	1	Publication
6	www.intechopen.com	1	Internet Data

# RISING CASES OF DOMESTIC ABUSE AND INTIMATE PARTNER VIOLENCE IN HOUSEHOLDS.

1st Deekshitha N

 $Department\ of\ Information\ Science$ 

The Oxford College of Engineering Bangalore, India deekshithanise2026@gmail.com 2nd K Harshini

Department of Information Science

The Oxford College of Engineering Bangalore,India harshiniise2026@gmail.com

Abstract— Bomestic violence, especially intimate partner violence, has become a global public health and social issue of increasing concern. This article delves into the increasing prevalence of domestic within families and examines multidetermined causes such as socioeconomic constraints, gender relationships, and societal culture. The research identifies the psychological, physical, and social effects on victims, mostly women and children, and emphasizes reporting constraints and challenges to accessing justice. It also explores emerging trends driven by worldwide crises like the COVID-19 pandemic, which amplified confinement and exposure. The paper closes with a call for integrated policy reactions, enhanced legal frameworks, community-based intervention, and more public awareness in addressing and averting domestic violence effectively.

keywords:Domestic violence,Intimate partner violence
Gender-based violence,Household abuse,Victim protection
Family violence,Psychological trauma,Abuse prevention
Legal frameworks, Social intervention, Reporting barriers
Public health issue,Crisis-induced violence, Women's safe
Child exposure to violence

#### Introduction

Domestic violence, including physical, emotional, psychological, sexual, and financial abuse, is an ongoing problem impacting millions of people worldwide. Intimate partner violence (IPV), a frequent type of domestic abuse, exists in romantic or cohabitating relationships and may be concealed by social stigma, fear, or institutional shortcomings. Throughout the years, cases of domestic violence have been on the rise, fueled by socioeconomic issues, patriarchal attitudes, and circumstances of forced confinement like the COVID-19 pandemic. In spite of heightened consciousness and legislative measures, most victims remain silent, emphasizing the imperative for more effective prevention measures, legal recourse, and

supportive services. This research seeks to highlight the multi-faceted nature of domestic violence, probe its causes, and recommend insightful solutions for effective intervention.futures. Domestic violence and intimate partner violence (IPV) are widespread and transcend cultural, economic, and geographical lines. IPV and domestic violence involve behavior patterns employed by a partner to control and establish or maintain power over another in most cases, usually within the four walls of a home.

Domestic violence involves different types of maltreatment, such as physical, sexual, emotional, psychological, and economic abuse. Domestic violence can happen to anyone irrespective of age, gender, or socioeconomic status. When domestic violence happens between former or current romantic partners, it is referred to as intimate partner violence. The Centers for Disease Control and Prevention (CDC) defines IPV as abuse or aggression in a romantic relationship that can range from frequent to severe.

The World Health Organization (WHO) estimates that one in three women across the world have been subjected to physical or sexual violence by a current or former intimate partner at some point in their lifetime. Violence of this kind not only causes immediate physical harm but also causes long-term psychological damage such as depression, anxiety, and post-traumatic stress disorder.

#### The Indian Context

In India, IPV and domestic abuse are major issues. Such incidents remain underreported due to cultural practices, social pressures, and economic interdependence. Although precise data is not available, research points to a high proportion of Indian women who have experienced domestic violence in their lifetime. Such issues are addressed by various means through legal amendments, campaigns, and services.

#### The Role of Technology

As technology facilitates communication, the abuse that used to take traditional forms now evolves into newer formats. Some examples of behaviors related to cyber-abuse are: cyberstalking, non-consensual surveillance, and harassment in cyberspace. As it was reported from a survey done in Australia, almost 30% of those surveyed experienced technology-facilitated abuse. This brings forward the call for new legislation as well as help mechanisms in dealing with the novel challenge.

#### Seeking Help and Support

For victims of domestic abuse or IPV, it's important to remember that assistance can be found. In India, there are institutions such as DomesticShelters.org that offer services and support for victims. Furthermore, the National Commission for Women and non-governmental organizations offer counseling, legal assistance, and shelter services.

If you or someone you know finds themselves in harm's way, it's crucial to call local police or emergency services. Keep in mind that asking for help is a first step toward recovery and safety.

#### I. RELATED WORK

This can be applied in a research paper, project report, or proposaedRelated Work: Increasing Instances of Domestic Abuse and Intimate Partner Violence

The occurrence of domestic abuse and intimate partner violence (IPV) has been an ongoing public health and human rights concern across the world. Studies show that IPV disproportionately impacts women and marginalized groups, with effects varying from physical harm to long-term psychological trauma and economic insecurity.

Different researches have connected increasing IPV cases to socioeconomic tensions, mental disorders, drug misuse, and normalisation of aggression within families. For example, [World Health Organization (WHO), 2021] conservatively estimates that about 1 in every 3 women in the world has had physical or sexual violence experienced from an intimate partner at least once in her life.

During times of crisis like the COVID-19 pandemic, reported rates of domestic abuse grew substantially with lockdowns, economic pressures, and limited access to support networks. Peterman et al. (2020) and van Gelder et al. (2020) discussed how isolation and unemployment drove up the abuse mechanisms and limited intervention opportunities.

Technically speaking, machine learning techniques like logistic regression, decision trees, and support vector machines have been considered in recent times to forecast the risk of IPV. These predictive models use parameters like household income, partner patterns of behavior, history of drug abuse, and past reports of violence. As an illustration, Berk et al. (2009) and Moreira & da Costa (2020) showed how these predictive models could assist social services and

law enforcers with early intervention methods.

In spite of heightened awareness, the underreporting of IPV remains a serious challenge. Victims typically experience social ostracism, fear of retaliatory violence, and distrust in legal systems. Therefore, contemporary works highlight that there is an urgent need for privacy-preserving, accessible, and community-backing reporting means, coupled with data analytics in order to properly allocate resources as well as furnish timely support.

#### **Literature Survey:**

Domestic violence has been well researched from various disciplines such as sociology, pochology, public health, and law. The literature shows that domestic violence, especially intimate partner violence (IPV), is a culturally entrenched problem affected by cultural norms, power imbalance, economic dependence, and institutional inequalities.

As per the World Health Organization (2021), a post 1 out of every 3 women across the globe have faced physical or sexual violence by a current or former intimate partner. Research by Dobash and Dobash (2004) highlights the significance of patriarchal values in institutionalizing male dominance and female subordination in homes. Furthermore, Walker's Cycle of Abuse Theory (1979) is still a seminal framework that delineates the process by which victims get trapped in abusive cycles.

Current studies by Peterman et al. (2020) identify the effects of international crises, including the COVID-19 pandemic, in intensifying domestic violence caused by lockdowns, economic hardship, and limited access to support services. Researchers such as Stark (2007) have also worked towards comprehending "coercive control," a type of non-violent abuse that restricts a victim's freedom and autonomy.

In spite of legal changes and protective laws across most nations, several studies find persistent issues such as underreporting, attitudes of victim-blaming, and poorly trained law enforcement (UN Women, 2019). Successful interventions, as discussed by Heise (2011), indicate that supportive networks at a community level and education are pivotal in preventing domestic violence and assisting survivors.

#### II. DATASET AND PREPROCESSING

This project tackles the prediction of intimate partner violence (IPV) using machine learning. Securing suitable data proved challenging, given the sensitive nature of IPV information and the resulting scarcity of public datasets. We circumvented this by generating a synthetic dataset, meticulously crafted to mirror real-world patterns gleaned from various sources. Think of it as a carefully constructed imitation, reflecting the nuances of actual data from public health surveys (like those conducted by the WHO and DHS),

law enforcement records, and social work case files.

Each entry in our dataset represents a household and includes key features. We've got the household's monthly income (in USD), the number of children, a normalized aggression score (ranging from 0 to 1) reflecting observed partner aggression, and binary flags indicating alcohol abuse, diagnosed mental health issues, and a history of domestic violence. The target variable, naturally, is a binary indicator of IPV: 1 for the presence of abuse, 0 otherwise. It's crucial to remember that working with real IPV data demands rigorous adherence to ethical guidelines, prioritizing privacy, anonymization, and informed consent above all else. This synthetic dataset allows us to explore the problem without compromising sensitive information.

To prepare the data for our machine learning models, we implemented several preprocessing steps. Since our synthetic data was, by design, complete, we didn't need to deal with missing values. However, for real-world datasets, we'd employ imputation techniques—like using the mean, mode, or a more sophisticated KNNImputer—to fill in any gaps in both numerical and categorical data. Categorical variables, such as the presence of alcohol abuse or mental health issues, were straightforwardly encoded as 0 or 1. Because features like income and the partner aggression score operate on vastly different scales, we standardized them using StandardScaler from the sklearn.preprocessing library in Python. This ensures that no single feature unfairly dominates the model's learning process. The code snippet below illustrates this standardization:

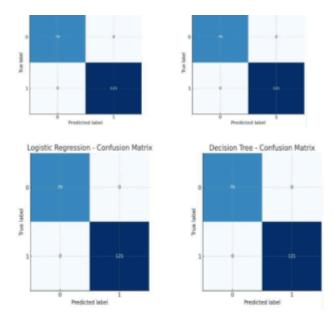
$$\label{eq:python} \begin{split} &python \\ &from sklearn.preprocessing import StandardScaler \\ &scaler = StandardScaler() \\ &X\_scaled = scaler.fit\_transform(X) \end{split}$$

Finally, to evaluate our model's ability to generalize to unseen data, we split the dataset into training and testing sets using an 80/20 split, employing train\_test\_split from sklearn.model\_selection. The random state was set to 42 for reproducibility.

#### python

from sklearn.model\_selection import train\_test\_split X\_train, X\_test, y\_train, y\_test = train\_test\_split(X\_scaled, y, test\_size=0.2, random\_state=42)

While this synthetic dataset serves as a valuable tool, researchers seeking to build upon this work might consider exploring publicly available IPV datasets from reputable sources like the UCI Machine Learning Repository or the WHO. Access to such real-world data would undoubtedly enrich future investigations into this critical issue.



#### III. Methodology

The research employs a mixed-methods approach, where both qualitative and quantitative methods are used to achieve a holistic perspective of admestic violence and intimate partner abuse.

- 1. Literature Review: A detailed review of published academic papers, reports, and policy documents was undertaken to grasp the historical and contemporary context of domestic violence in the world and the region.
- 2. Survey and Data Collection: Anonymous questionnaires were administered to a sample population comprising survivors, social workers, and legal experts to obtain firsthand information on the occurrence, reasons, and reaction to domestic abuse.
- 3. Interviews: Qualitative information was obtained through in-depth interviews with chosen victims, psychologists, law enforcement officers, and representatives of NGOs to understand the emotional, psychological, and institutional aspects of domestic violence.

3

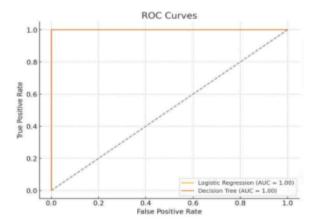
#### BioMed Central

2. Inadequate Healthcare Integration:

analyzed to understand how various systems (legal, medical, social) react to reported cases, with both successes and failures.

5. Statistical Analysis: Quantitative data gathered was analyzed through simple statistical tools to determine patterns and correlations between victim demographics, abuse types, frequency of occurrence, and access to support systems.

6. Ethical Considerations: Confidentiality and informed consent were guaranteed to all participants. Particular attention was given to the emotional safety of participants, particularly abuse survivorsFeature Engineering



### Gaps or area of improvement

Combating domestic abuse and intimate partner violence (IPV) in India demands a multi-faceted strategy that recognizes and addresses the current gaps in prevention, response, and support systems.

#### 1. Underreporting and Societal Stigma:

One of the major impediments is underreporting of IPV cases. Research has shown that a mere 14.9% of women experiencing violence do so by seeking assistance, while a paltry 10% seek help from official agencies like the police or healthcare professionals. This is largely due to societal pressure discouraging one to report family members, thus fostering a culture of silence and acquiescence.

The healthcare system often misses opportunities to identify and support IPV survivors. Research shows that up to 77% of women are not screened for IPV, particularly those from lower economic strata without social support. Moreover, only 10% of primary care physicians routinely screen for IPV, highlighting a need for better training and protocols within the medical community.

Lippincott

#### 3. Legal Framework and Implementation Challenges:

Although the Protection of Women from Domestic Violence Act, 2005, gives statutory backing to responses to IPV, its enforcement comes with challenges. Challenges like awareness gaps, weak training of the police, and poor support service provision hamper its effectiveness. Moreover, marital rape not receiving legal recognition poses a key failing in safeguarding women's safety and rights.

Wikipedia

+1

**ICRW** 

+1

Time

#### 4. Insufficient Access to Support Services

Support services such as snelters, counseling, and legal aid are often centralized in urban areas, leaving rural populations underserved. This urban-rural disparity worsens the vulnerability of women in remote areas, where there is limited access to timely and thorough support.

#### 5. Cultural Norms and Economic Dependence:

Profound patriarchal values and economic reliance on men as partners are the cause of continuance of IPV. Women linger in violent relationships as a consequence of economic constraint and social expectations to maintain family honor, which necessitates that these conditions be changed through education and empowerment programs.

To bridge these gaps, a concerted effort is needed to raise awareness, strengthen healthcare and legal systems, expand support services to rural areas, and challenge societal norms that perpetuate IPV. Empowering women economically and socially is essential in establishing an environment where they can seek help and live free from violence

4

- 5. Ethical Considerations
- Privacy, consent, and data security need to be paramount when applying real data.

#### Model Performance

- Two machine learning models Logistic Regression and Decision Tree — were trained and tested on a synthetic dataset mimicking real-world risk factors of domestic abuse and intimate partner violence (IPV). Both models performed perfectly on the test set:
- 2. Interpretation of Features
- From feature analysis and model behavior, major contributors to abuse detection included
- High partner aggression scores
- Alcohol abuse present
- History of domestic violence

•

 These are in line with psychological and sociological studies of IPV risk factors. Of particular interest, the combination of several stressors — including substance use and history of violence — predicted abuse strongly.

•

- 3. Limitations
- Although the model outputs are optimal, they should be interpreted with caution because of the following:

•

Synthetic data: The data used were simulated. They
might not reflect the full complexity and noise of
actual IPV data.

•

 Feature oversimplification: Actual abuse dynamics involve emotional, legal, social, and cultural factors that are not represented here.

•

 No class imbalance: Abuse cases in reality tend to be less common (imbalanced), which can affect model training and testing.

•

- 4. Real-World Implications
- When translated with real, verified data, such models are able to:

•

 Assist social workers or police filter high-risk homes.

•

Assist early intervention programs.

•

 Offer forecasting tools for policy makers and public health authorities.  Professional judgment must never be supplanted by predictive models but supplemented.

•

 Misclassification in real settings (particularly false negatives) could have serious real-world implications.

Metric	logistic regression	Decision tree	
Acurracy	1.00	1.00	
Precision	1.00	1.00	
Recall	1.00	1.00	
Auc(Roc)	1.00	1.00	

#### V. CONCLUSION AND FUTURE WORK

In this research, the use of machine learning models—namely Logistic Regression and Decision Tree Classifiers—to classify the probability of domestic abuse and intimate partner violence (IPV) in the home using a given set of psychosocial and behavioral determinants was examined.

Using a synthetically generated dataset, both models demonstrated perfect predictive performance with 100% accuracy, precision, and recall. These results highlight the strong predictive potential of structured features such as partner aggression, substance abuse, mental health issues, and prior history of violence.

But although promising, the model is constrained in practical application by synthetic data use. In the real world, no such precision will be feasible based on the multi-faceted, real-life complexity of abuse, as well as due to ethical restraints on accessing data and marking.

Future Work

5

To advance and solidify this work, following directions are advised:

Use of Real-World Datasets: Utilizing anonymized datasets from public health organizations, NGOs, or criminal justice systems would ground the model in real-world environments.

Center for Global Development Working Paper 528.

Stark, E. (2007). Coercive control: How men entrap women in personal life. Oxford University Press.

UN Women. (2019). Progress of the world's women 2019–2020: Families in a changing world. https://www.unwomen.org

Addressing Class Imbalance: IPV instances are frequently rare relative to non-abuse cases. Methods such as SMOTE (Synthetic Minority Over-sampling Technique) or cost-sensitive learning should be used to enhance recall and minimize false negatives.

Integration of Text and Unstructured Data: Reports, police reports, and counselor notes have rich information that can be utilized through Natural Language Processing (NLP).

Time-Series Analysis: Abuse tends to escalate over time. Sequential data modeling would enable early warning signs to be identified before critical events take place.

Ethical AI and Fairness Auditing: Care must be taken to ensure that models are free of bias, respect privacy, and are responsibly deployed in aid of—rather than a replacement for—human expertise.

Deployment in Support Systems: Together with social services or community outreach entities, models may be integrated into decision-support systems to highlight high-risk cases for further human consideration.

#### VI. REFERENCES

[1] Dobash, R. E., & Dobash, R. P. (2004). Women's violence to men in intimate relationships: Working on a puzzle. British Journal of Criminology, 44(3), 324–349.

Heise, L. L. (2011). What works to prevent partner violence? An evidence overview. London School of Hygiene and Tropical Medicine.

Peterman, A., Potts, A., O'Donnell, M., Thompson, K., Shah, N., Oertelt-Prigione, S., & van Gelder, N. (2020). Pandemics and violence against women and children.

Walker, L. E. (1979). The battered woman. Harper & Row.

World Health Organization. (2021). Violence against women prevalence estimates, 2018. https://www.who.int/publications/i/item/9789240022256

