

e-ISSN: 2320-9801 | p-ISSN: 2320-9798



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

Volume 9, Issue 5, May 2021



Impact Factor: 7.488

9940 572 462

S 6381 907 438

🖂 ijircce@gmail.com

n 🛛 🩋 www.ijircce.com

e-ISSN: 2320-9801, p-ISSN: 2320-9798 www.jjircce.com | Impact Factor: 7.488 |



|| Volume 9, Issue 5, May 2021 ||

| DOI: 10.15680/IJIRCCE.2021.0905054 |

Statistical Analysis of Crimes against Women in India

Rishita Tanwani¹, Siddarth Nanda²

U.G Student, School of Engineering, Ajeenkya DY Patil University, Pune, Maharashtra, India¹

Faculty, School of Engineering, Ajeenkya DY Patil University, Pune, Maharashtra, India²

ABSTRACT: This research survey delivers the information where the centuries have come, and hundreds of years have gone, however the situation of women isn't probably going to change. Time has weakly watched women enduring as segregation, persecution, abuse, debasement, animosity, embarrassment. Indian women through the nations stayed enslaved and mistreated in light of the fact that society had confidence in sticking on to conventional convictions for the brunt of brutality—homegrown just as open, Physical, enthusiastic and mental.

Wrong doings against women are a social threat, and an expensive general medical issue. It can appear as dangers, boisterous attack, battering, assault, and murder. It is a heightening example of coercive conduct that incorporates physical, sexual, and mental attacks. It can detonate anyplace, whenever, and inside any monetary class. Viciousness against women is essentially not a woman's' privileges issue but rather a basic freedoms issue.

KEYWORDS: Survey, Analysis, Statistical Analysis, Crime.

I. INTRODUCTION

In the ancient Indian times women held a high place of respect in the society as mentioned in Rigveda and other scriptures. Volumes can be written about the status of our women and their heroic deeds from the Vedicperiod to the modern times. But later on, because of social, political and economic changes, women lost their status and were relegated to the background. Many evil customs and traditions stepped in which enslaved the women and tied them to the boundaries of the house Physical, sexual and psychological violence strikes women in epidemic proportions worldwide.

It crosses every social and economic class, every religion, race and ethnicity. From domestic abuse to rape as a weapon of war, violence against women is a gross violation of their human rights. Not only does it threaten women's health and their social and economic well-being, violence also thwarts global efforts to reduce poverty. The official statistics showed a declining sex-ratio, health status, literacy rate, work participation rate and political participation among women. While on the other hand the spread of social evils like dowry deaths, child marriage, domestic violence, rape, sexual harassment, exploitation of women workers is rampant in different parts of India.

II. LITERATURE SURVEY

[1] International Journal of Criminology and Sociological Theory, Vol. 2, No. 2, December 2009, 292-302 292 Crime Against Women in India: A Statistical Review

Humiliation, harassment, torture and exploitation of women is as old as is the history of family life. In India, women are way ahead of women elsewhere in the matter of social legislation but the implementation of laws granting rights to women has been so slow, lopsided and haphazard that socially, economically and politically women lag far behind men.

[2] Violence Against Women in India: A Case for Research in Tackling the Menace.



| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | |Impact Factor: 7.488 |

|| Volume 9, Issue 5, May 2021 ||

| DOI: 10.15680/IJIRCCE.2021.0905054 |

Instances of violence need to be thoroughly investigated, and ways and means devised to reduce their incidence. There is need for quick and severe punishment for the accused, which would act as a deterrent too. Any society, in which half the population is not assured of safety, needs to reconsider its claim to being civilised.

[3] Socio-Demographic Characteristics of Alleged Sexual Assault (Rape) Cases in Dhaka City

The study was conducted on 230 female sexually assaulted victims who reported Dhaka Medical College (DMC) for medical examination during the period between January 2006 and December 2006. Details pertaining to age, sex, religion, literacy, socioeconomic status, site of incidence, time interval between incidence and medical examination, number of assailants, relationship with assailants, findings of physical or genital examination and results of evidence collected during examination were noted.

[4] Violence Against Women in India: A Case for Research in Tackling the Menace

Molestation is the act of subjecting someone to unwanted or improper sexual advances or activity. This could be done with gestures, words or actions. Women from childhood onwards have learned to recognise these signals, which men may not comprehend at all. There are many studies on the effect of molestation on the psychology, behaviour, sexual orientation of victims, but hardly any on the effect of habitual molestation on the perpetrator himself.

[5] Crimes against Women in India: Analysis of Official Statistics Chandan Mukherjee, Preet Rustagi and N. Krishnaji.

The Economic and Political Weekly, published from Mumbai, is an Indian institution which enjoys a global reputation for excellence in independent scholarship and critical inquiry. First published in 1949 as the Economic Weekly and since 1966 as the Economic and Political Weekly, EPW, as the journal is popularly known, occupies a special place in the intellectual history of independent India. For more than five decades EPW has remained a unique forum that week after week has brought together academics, researchers, policy makers, independent thinkers, members of non-governmental organisations and political activists for debates straddling economics, politics, sociology, culture, the environment and numerous other disciplines.

[6] Tackling Violence Against Women: A Study of State Intervention Measures. (A comparative study of impact of new laws, crime rate and reporting rate, Change in awareness level)

The study was conducted in four states Maharashtra, Kerala, Uttar Pradesh and Delhi from each of the states two districts has been chosen based on prevalence of violence against women. These two districts from each state include one highest prevalence district and one lowest prevalence district in concern with violence against women.

[7] Violence Against Indian Women, Final Revised Report Author(s): Pamela Jumper Thurman Ph.D.; Roe Bubar J.D.; Barbara Plested; Ruth Edwards; Pamela LeMaster; Erica Bystrom; Marisa Hardy; DeWayne Tahe; Martha Burnside; E. R. Oetting.

This project was initiated in order to explore the patterns of violence against women in Native communities and to examine the readiness of the communities to address violence prevention in a meaningful way. Readiness is a key issue when one is planning prevention strategies. Both reservation and urban Native communities were included in the project sothat differences between the two could be examined to determine the appropriateness of specific interventions and to ascertain any differences in readiness.

[8] Analysis Of Crimes Against Women In India Using Regression R. Devakunchari, Bhowmick S, Bhutada S P, Shishodia Y.

The visualization of the acquired data was done using Tableau software for table and graph modulations. The csv files were input into the software and then parameters required were input into the software. The software then converted the said csv dataset into a graph of aforementioned parameters

[9] Determinants of Women Empowerment Responsible for Reducing Crime Against Women in India.

The study aims to analyse state wise crime against women, extent of women empowerment, and impact of women empowerment in reducing crime against women. The study uses data collected from various reliable secondary sources.



| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | |Impact Factor: 7.488 |

|| Volume 9, Issue 5, May 2021 ||

| DOI: 10.15680/IJIRCCE.2021.0905054 |

Multiple regression modelling analysis has been used for data analysis to get determinants of women empowerment helpful in reducing crime against them.

[10]Exploring the Trend of Violence against Women in India. Arvind Verma, Hanif Qureshi, Jee Yearn Kim The paper critically examines the efforts of the police and others, particularly non-governmental groups to combat such crimes. A number of policy recommendations are made for prevention including comparative efforts in Korea where crimes against women are similarly serious.

III. PROPOSED ANALYSIS APPROACH

Estimating Population Parameter

In Statistics, we use sample statistics to estimate population parameters. The sample mean will be used to estimate the population parameter. We calculate the mean of the strata and then the sample mean.

$$\overline{\mathbf{x}} = \frac{\sum_{i=1}^{n} x_i}{n}$$

 $\bar{x} = 2843.537$

Estimating population variance

Sample variance is used to estimate population variance.

$$S^{2} = \frac{\sum_{i=1}^{n} [[(x]]_{i} - \bar{x})]}{n - 1}$$

 $S^2 = 14948518$

Sample variance is 14948518

Calculating Standard Deviation

Standard Deviation(SD) =
$$\sqrt{Variance}(S^2)$$

SD = 3866.331

Therefore, the standard deviation is 3866.331

Computing Standard Error

Standard error represents the variation in the sample means of a sampling distribution.

$$SE = \frac{SD}{\sqrt{n}}$$

SE = 316.7422

Confidence Level

Confidence interval is the percentage of all possible samples expected to include the true population parameter. A confidence level of 95% means the confidence interval would include the true population parameter, which is what we have assumed.

IJIRCCE©2021

| e-ISSN: 2320-9801, p-ISSN: 2320-9798| <u>www.ijircce.com</u> | |Impact Factor: 7.488 |

|| Volume 9, Issue 5, May 2021 ||

| DOI: 10.15680/IJIRCCE.2021.0905054 |

Finding the Critical Value

The critical value is a factor used to compute the margin of error.

$$\alpha = 1 - \left(\text{confidence} \frac{\text{level}}{100}\right)$$
$$\alpha = 1 - \left(\frac{95}{100}\right)$$
$$\alpha = 0.05$$

Critical Probability(p*)

$$p *= 1 - \alpha/2$$

 $p *= 1 - 0.05/2$
 $p *= 0.975$

Here we use Z-test for our sample size is large. For small samples, t-test is used.

Critical value = 1.96

Margin of Error

The margin of error gives the amount of random sampling error in the result.

ME = *Critical Value* × *Standard Error*

 $ME = 1.96 \times 316.7422$

$$ME = 620.815$$

The margin of error of our sample is 620.815

Confidence Interval

The lower limit of the Confidence interval

$$Cl_{min} = \bar{\mathbf{x}} - ME$$

$$Cl_{min} = 2843.537 - 620.815$$

$$Cl_{min} = 2222.722$$

Upper Limit of the Confidence interval

$$Cl_{max} = \bar{\mathbf{x}} + ME$$

 $Cl_{max} = 2843.537 + 620.815$

$$Cl_{max} = 3464.352$$

IJIRCCE©2021



| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | |Impact Factor: 7.488 |

|| Volume 9, Issue 5, May 2021 ||

| DOI: 10.15680/IJIRCCE.2021.0905054 |

Confidence interval: 2222.722 – 3464.352

IV. FUTURE SCOPE

Measurable procedures other than straightforward expressive measurements are needed to uncover examples of wrongdoings against ladies by and large, and settlement passing's specifically, and to adjust how much this is an issue of scourge extents. Spatiotemporal illness planning models are incredible and valuable strategies to reveal insight into this issue, to restrict problem areas and to assist with finding the hidden danger factors. In this work, we fit spatiotemporal models with various spatial CAR priors to survey their impacts on the last danger gauges. Vehicle priors have been and still are generally used to manage spatial heterogeneity. Here we think about the LCAR, DCAR and BYM2 priors. These priors are broader than the ICAR earlier as they can adapt to both spatially organized and unstructured inconstancy, so they would be liked all in all.

V. CONCLUSION

Crimes against women in India have been constantly expanding recently as detailed by the National Crime Records Bureau. Gender-based brutality has become a major issue so much that it has been classified as a high effect medical condition by the World Health Organization. In any case, there is an absence of spatiotemporal examinations to uncover a total image of the topographical and fleeting examples of violations against women. We center around dissecting how the geological example of 'endowment passing's' progressions after some time in the areas of Uttar Pradesh during the time frame 2001–2014. The investigation of the geological appropriation of endowment passing occurrence and its development after some time means to distinguish explicit districts that display high dangers and to estimate on potential danger factors. We additionally investigate distinctive spatial priors and their consequences for conclusive danger gauges. Different priors for the hyperparameters are additionally checked on. The danger gauges appear to be powerful as far as the spatial earlier and hyperprior decisions and end-product feature a few regions with outrageous dangers of share demise frequency. Genuinely huge affiliations are additionally found between share passing's, sex proportion and a few types of generally crime.

REFERENCES

[1] Ahlawat S. Bijendar and Kumar Parmood. 2012, "Crime against women in Haryana: An empirical study" Global Advanced Research Journal of Peace, Gender and Development Studies. Vol. 2(1) pp.014-020.

[2] Anil B. Deolalikar, Rana Hasan, and Rohini Somanathan (July 2009), "Public Goods Access and Juvenile Sex Ratios in Rural India: Evidence from the 1991 and 2001 Village Census Data", ADB Economics Working Paper Series No. 167, Asian Development Bank, p.1.

[3] World Development Report 2012: "Gender Equality and Development"

[4] Chowdhary, Prem (1994). "The Veiled Women: Shifting Gender Equations in Rural Haryana (1980-1990)". New Delhi: Oxford University Press.

[5] Chowdhary, P. 2007. Contentious Marriages, Eloping Couples: Gender, Caste and Patriarchy in Northern India. New Delhi: Oxford University Press.

[6] Census of India 2001, 2011

[7] Department of Social Welfare, Government of India, 1974 Towards Equality by the Committee on the Status of Women in India

[8] National Crime Records Bureau Data from 2008, 2009, 2010, 2011 [9] Kaur, Ravinder, 2004. "Across-Region Marriages: Poverty, Female Migration and the Sex Ratio" Economic and Political Weekly, vol. 39, no. 25, June 19, pp. 2595-2603.

[10] Kaur, Ravinder, 2013. Mapping the Adverse Consequences of Sex Selection and Gender Imbalance in India and China. Economic and Political Weekly, vol. 48 (35), August 31.





Impact Factor: 7.488





INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

🔲 9940 572 462 🔟 6381 907 438 🖾 ijircce@gmail.com



www.ijircce.com