



Survey Analysis on Sexual Abuse and Harassment: A Comprehensive Study in Understanding Sexual Abuse and the Role of Justice System

Ravleen Bajaj

Department of Statistics, Ramanujan College, University of Delhi, India

*Corresponding e-mail: ravleen.bajaj@gmail.com

Received: 14-July-2024, Manuscript No. ijmrhs-24-141629; **Editor assigned:** 20-July-2024, PreQC No. ijmrhs-24- 141629(PQ); **Reviewed:** 22- July-2024, QC No. ijmrhs-24-141629(Q); **Revised:** 30-July-2024, Manuscript No. ijmrhs- 24-141629(R); **Published:** 10-Aug-2024, **J-invoice:** J-141629

ABSTRACT

In the paper, we have surveyed 500+ with a median age group of 20 years-29 years and about 70.63% identify as female people for sexual abuse and harassment which are further analyzed by Confidence Interval, two-sample t-test and Exploratory Data Analysis (EDA). And the results will be shown in the conclusion. This study is based on a primary survey of 500+ individuals on the common people's general opinion on the reporting and justice system pertaining to their understanding and/or personal experiences with sexual abuse and harassment. The study also focuses on the kind of abuse faced by respondents, the severity of it, and the reporting experience and further expectations. The study begins with Exploratory Data Analysis (EDA) of the data and progresses further into confidence interval and testing to evaluate and understand people's perspective. Throughout history, women have experienced a wide range of life experiences, from the respect and glory they enjoyed in the Vedic period to the struggles for equality and survival in contemporary times. Despite these changes, women have consistently faced a disadvantaged status, including various forms of violence, physical abuse, and denial of basic rights. This includes physical and verbal abuse such as eve-teasing, molestation, sexual abuse, and rape. Many sexual abuse and harassment issues go unreported and unresolved even in our modern society. The study also tries to draw light on the unreported incidents, perhaps understanding the ratio of reported to unreported cases.

Keywords: Sexual abuse, Sexual harassment, Survey analysis, Two sample T-test, Exploratory Data Analysis (EDA)

INTRODUCTION

Sexual abuse and harassment depict sly issues of our society and require immediate attention and action. Such condemnable actions can occur in multiple scenarios from workplaces to homes, and manifest in various forms, including unwanted advances, coercion, assault, and manipulation. Such actions create a feeling of fear, silence and shame that harm the emotional well-being of the victims [1]. Sexual abuse essentially involves the violation of an individual's bodily autonomy and consent, leading to considerable and long-term physical and psychological consequences [2]. Survivors have to deal with a range of emotions, including shame, guilt, and anxiety, which may hinder their ability to disclose the abuse or seek support. The power dynamics inherent in many situations further exacerbate the problem, because perpetrators might sometimes exploit their positions, making it challenging for victims to come forward without fear of retaliation [3]. Previous studies reveal that allegations of child sexual abuse were perceived as more credible than those of rape or sexual harassment. Women tended to believe all allegations more than men did. Men were more likely to believe allegations of child sexual abuse than those of rape or sexual harassment, while women were more likely to believe allegations of sexual harassment [4]. The aim of the study is to provide a simple platform for the victims of such heinous acts to at least freely voice their opinions on the matter whilst enabling the study of this prevailing issue to understand it on a deeper level. Harassment encompasses a spectrum of unwelcome behaviors that create hostile environments creating a medium for sexual abuse or making victims more prone to it. From lewd comments and gestures to

persistent advances, harassment undermines a person's sense of safety and autonomy. An act of harassment thrives in environments where a culture of indifference prevails, perpetuating cycles of abuse.

Forms of Sexual Abuse and Harassment

Rape: Rape may be defined as a severe form of sexual abuse where consent isn't given, and often involves physical force or coercion. It may also occur if the victim's ability to provide informed consent has been impaired. Experiencing such an event can have effects, on survivors impacting them physically emotionally, and psychologically. To address and prevent rape effectively a holistic approach is necessary involving changes, educational initiatives, and support systems for those who have been affected [5].

Molestation: Inappropriate touching or fondling without consent is known as molestation. This type of abuse violates boundaries and can occur in various settings like homes, schools, or public places. Victims of molestation often carry scars for a time. Creating environments for community education efforts. Promoting a culture that values consent and respect are essential in combating this issue [6].

Groping: Groping traditionally refers to contact with another person's body in a sexual manner without their permission. This behavior commonly happens in places or social gatherings. Contributes to feelings of discomfort and violation. Addressing groping involves challenging attitudes that downplay actions running awareness campaigns in public spaces and encouraging bystander intervention to establish environments free from harassment [7].

Verbal Abuse: Verbal abuse also sometimes associated with but not limited to eve-teasing within the realm of harassment encompasses remarks, advances or explicit language that creates an intimidating or hostile atmosphere. This form of abuse can have lasting psychological impacts, on victims [8]. To address mistreatment, it's essential to promote a climate of respect establish rules, against harassment and encourage people to stand up against unacceptable conduct. Teaching about the significance of consent and the effects of abuse before the adolescent age of a young individual is vital, for shifting perspectives [9].

Flashing: The term flashing usually involves inappropriately exposing one's own private parts to make the victim uncomfortable or disturbed. This is usually done in public targeting a specific person or group. This act of abuse could be extremely dangerous to not just the victim but others around especially minors who could see a particular visual and not fully comprehend it. Such an act usually causes psychological impact depending on the intensity of the situation of abuse. Proper education on prevention of such acts is a need for the masses to make society safer and sound [10]. In recent times, cyber-flashing is one of the more common formats of this abuse where a victim might get traumatized by the unwanted display of sexual imagery and the mere shock of it [11].

The study prioritizes on developing an insight on the trust of people on the justice system based on their own personal experiences as victims or as witnesses. The questionnaire developed is detailed, anonymous, polite, and focused and contains questions with multiple choices and/or select as many as you can to address the respondent's interaction with a form of abuse and also to carefully aid in the analysis and monitoring of data. The survey contains trigger warnings keeping in mind the psychological impact of abusive incidents and their recollection. The survey was conducted on 500+ respondents and questions about safety in the workplace/institution or domestic environment helped in understanding the overall reassurance in the safety scenario in these places for the respondents.

Addressing sexual abuse and harassment necessitates a multifaceted and holistic approach. Education and awareness campaigns play a vital role in dispelling myths, challenging harmful norms, and fostering empathy. Creating safe spaces for survivors to share their experiences without judgment is crucial, as is establishing robust reporting mechanisms that protect whistleblowers [12]. Legal reforms are imperative to ensure that abusers and harassers are held accountable for their actions and that survivors have access to justice. Organizations and communities must prioritize prevention by implementing comprehensive training programs that promote consent, respect, and equality [13]. Dismantling toxic power structures and fostering a culture of transparency and accountability are vital in creating environments where sexual abuse and harassment have no place.

The study also emphasizes on the role of the justice system in handling matters of abuse and harassment and people's overall trust in the system. The study aims at alarming society significantly to draw attention to this topic and urges each individual to voice their abuse and seek help. The study also draws attention to the shortcomings in our society at present and provides suggestive directives to improve [14]. Simultaneously, our aim is to benefit society from our study. We have accumulated resources for victims to seek assistance and also improve their emotional well-being.

The analysis conducted works to understand the demographics of respondents and further understand experiences across genders, ages and even public or household environments. As a part of our analysis, we evaluate the confidence intervals for a few specific questions and the analysis also includes testing samples for the respondent's trust in the justice system as a biased factor of their gender using two-sample t-test and concludes that all genders feel likely about the justice system.

These statistical insights further support our objective of spreading awareness about incidents of abuse, victim's fear to be honest, shining light on unreported events and cases and their dependency on the law. Our aim is to only impact society in a positive light

and create awareness to reduce such volatile and traumatizing events aiding in creating a kinder world for all.

Sexual Abuse and Harassment cases can be reduced significantly by not just reforming the justice system with stricter and more informed laws and amendments in the constitution of a country but also by spreading awareness through campaigns, drives and discussion seminars where these topics are talked about freely and not as a taboo. Misuse or misguiding could be a bane of these awareness strategies but this can be improved by channeling the audiences into age groups to ensure the rightful impact on minds, especially adolescent minds. The end goal remains to reduce any and every form of sexual abuse to make our society a kinder and safer place to live in for us and for generations to come.

METHODOLOGY AND ANALYSIS

The study is based on a primary survey that allows people to anonymously but realistically share their experience with a form of sexual abuse or harassment as a victim or as a witness. The study evaluates the opinions of the respondents through rating-based and multiple-choice questions to understand their points of view in greater depth and detail.

Data Cleaning Post completion of the data collection for the study, the data was cleaned for inconsistencies or duplicate entries. This step ensured the authenticity of the responses utilized for analysis to derive precise results.

Exploratory Data Analysis (EDA) essentially helped in understanding the overall trajectory of the data before implementing statistical tests and drawing inferences. This step also enabled us to navigate through the demographics of respondents. **Median Age Group:** 20 years-29 years, the study constituted of a majority of female participants (70.63%).

Two-Sample T-Test This test is used to compare means from two independent samples. It is a statistical method used to estimate the difference between two population means based on sample data. It calculates a confidence interval for the difference in means using the t-distribution [15].

$$z = \frac{(\bar{x}_1 - \bar{x}_2)}{(s_p \left(\sqrt{\frac{1}{n_1} + \frac{1}{n_2}} \right))}$$

Where,

$$s_p = \frac{\sqrt{s_1^2(n_1 - 1) + s_2^2(n_2 - 1)}}{\sqrt{(n_1 + n_2 - 2)}}$$

as we test under the hypothesis: H0: Both means do not differ significantly v/s H1: Both means differ significantly.

In this study, we test for:

H0: Both women and men have a likely rating of their faith in the justice system.

H1: Both women and men do not have a likely rating of their faith in the justice system.

Confidence Interval: A confidence interval, in statistics, refers to the probability that a population parameter will fall between a set of values for a certain proportion of times.

Calculation of the CI of a sample statistic takes the general form:

CI = Point estimate \pm Margin of error [16].

Thus, if a point estimate is generated from a statistical model of 10.00 with a 95% confidence interval of (a, b), it means we are 95% confident that the true value falls within that range.

$$C.I. = \bar{x} + z \frac{S_p}{\sqrt{n}}$$

A crosstab is a table showing the relationship between two or more variables. Where the table only shows the relationship between two categorical variables, a crosstab is also known as a contingency table [17]. We also obtain cross tab or contingency table for the gender and age group of our respondents as a part of our EDA. This helps in better understanding of our sample and make relevant assumptions for our testing. During exploratory data analysis, the study also assessed the crosstab between age and gender to categorize the respondents into different classes. This helps in further understanding the respondent's demographics.

RESULTS

A case of sexual abuse and/or harassment can have a massive impact on the physical and emotional well-being of an individual depending on the type and intensity of abuse. Cases of sexual abuse have been prominent in children and underage teens. This has

led to lifetime impact especially when such heinous incidents take place in a child’s home or educational institution [18]. Post-Traumatic Stress Disorder (PTSD) symptoms have been duly visible for years in victims in the forms of nightmares, limiting experiences, and lifestyle [19].

Our society needs to be reformed not just through legal and medical aid but also at domestic and household levels when we must discuss these issues outside the taboo with young individuals and enable them to understand these forms of abuse whilst also educating them about being model citizens. It should be an individual duty to understand the severity of these acts and be a good influence on their peer group. Reporting of such incidents must be strict and legal action must be stricter to ensure that such acts are reduced to null in the future (Figure 1-4 and Table 1) [20].

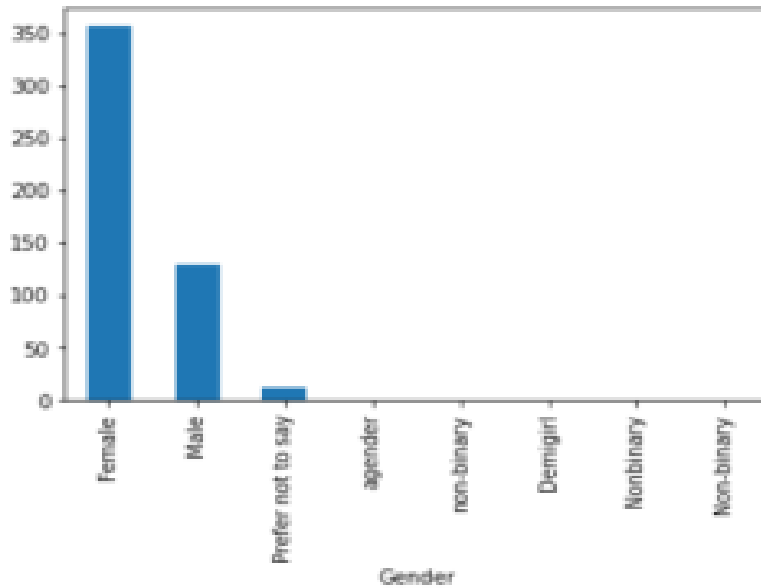


Figure 1 Gender

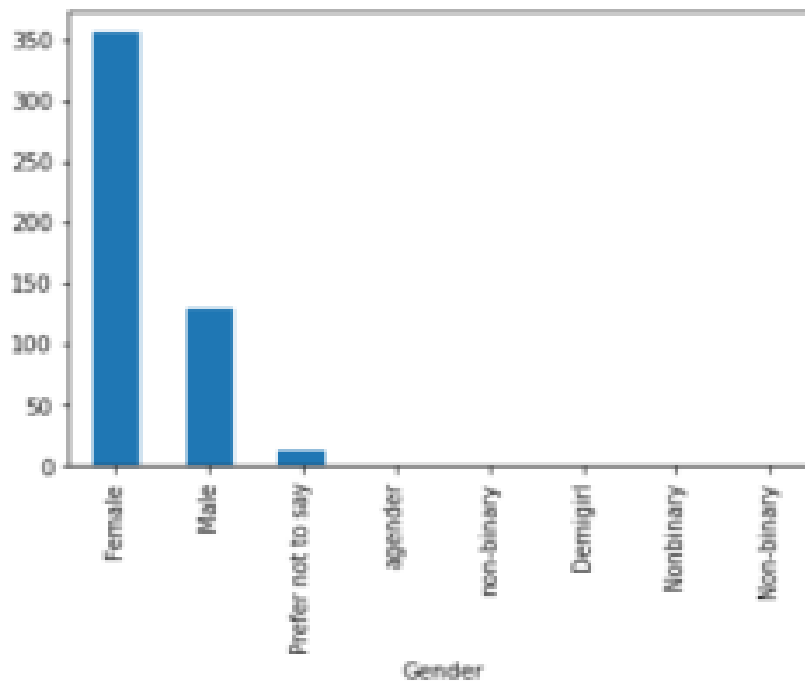


Figure 2 Age

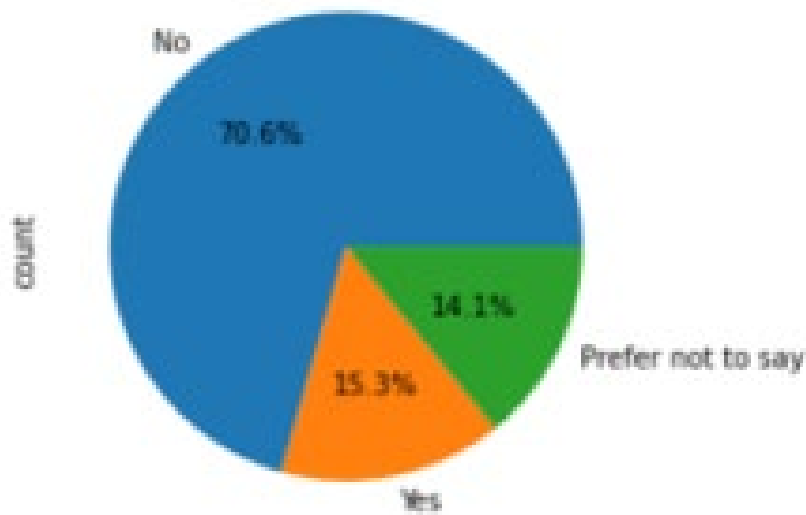


Figure 3 Did you formally report?

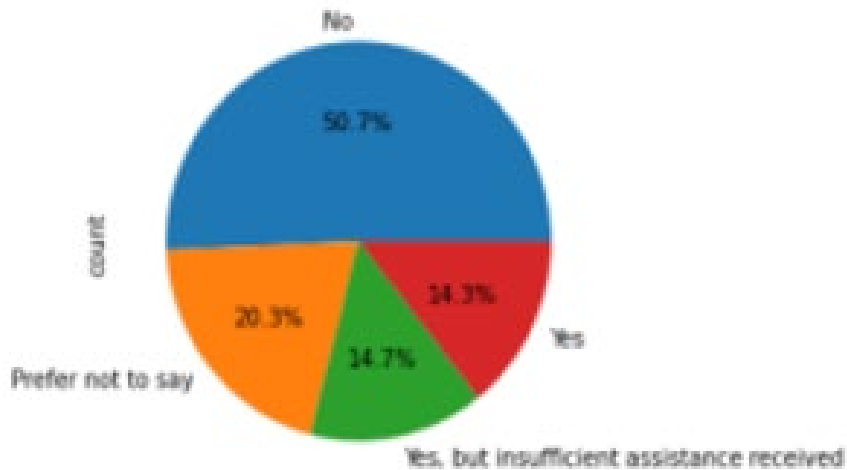


Figure 4 Did you seek formal assistance?

Table 1 Crosstab age and gender

Gender Age	Demi girl	Female	Male	Non-Binary	Non-Binary	Prefer not to Say	A Gender	Non-Binary
13 Years-19 Years	1	110	24	0	1	4	0	0
20 Years-29 Years	0	211	77	1	0	6	1	1
30 Years-39 Years	0	25	18	0	0	0	0	0
40 Years-49 Years	0	9	4	0	0	0	0	0
50 Years-59 Years	0	1	5	0	0	0	0	0
60+ Years	0	0	0	0	0	2	0	0
Below 13 Years	0	0	2	0	0	0	0	0

The study focuses on inferential statistics for the data and the confidence intervals for the following questions from the questionnaire are evaluated. Next, these are used for conducting the 2 sample tests to test our hypothesis and we conclude that both males and females are equally likely to rate the justice system between the interval (6.265442059045618, 6.6649754359842035) which suggests that respondents have moderate dependency and faith on the justice system and hints towards the urgency of reform

and the need for quicker resolution facilities and laws.

DISCUSSION

This study gives us several points to ponder upon. By asking over 500 people, mostly young adults and women, about their experiences, we get a clearer picture of what's really going on. A major challenge and eye opener was how many people don't report these incidents or ask for help. It makes one wonder about the number of cases we never hear about. The graphs realistically depict this scenario.

Men and women seem to have similar levels of trust in the justice system for these issues. It's not super high, which suggests there's room for improvement in how we handle these cases. The study also includes resources for victims and the need for more education for one and all to better enable individuals to prevent such circumstances. We definitely need to approach this problem from different angles - better laws, more support, and changing how people think about these issues.

The idea of talking about sexual abuse more openly, especially with young people, makes a lot of sense. If we can make it less taboo, maybe more people will speak up when something happens which will not reduce incident count but will also promote in strengthening people's faith in the justice system on these matters.

CONCLUSION

The study suggests stricter reporting and legal action, which sounds good in theory, but might be tricky to put into practice. There's always a balance between taking accusations seriously and making sure the process is fair. The study draws light on the fact and reminds us that sexual abuse and harassment are big problems affecting many people, but together and gradually we can impact that significantly. It's not an easy topic, but the goal is to help raise awareness and push for change. The study aims to play a small part towards reform and making society safer, whether it's supporting victims, calling out bad behavior, or pushing for better policies.

REFERENCES

- [1] Madhu Balaaji S and S. Malaimagal. "A study on sexual harassment on women in India". *International Journal of Current Advanced Research*. Vol. 7, No. 2, 2018, pp. 9980-85.
- [2] Davis, Rachel, et al. "Sexual violence and the spectrum of prevention: Towards a community solution". *National Sexual Violence Resource Center*. 2006.
- [3] Sobsey, Dick, and Tanis Doe. "Patterns of sexual abuse and assault." *Sexuality and Disability*. Vol. 9, 1991, pp. 243-59.
- [4] O'donohue, William, and Elizabeth O' Hare. "The credibility of sexual abuse allegations: Child sexual abuse, adult rape, and sexual harassment." *Journal of Psychopathology and Behavioral Assessment*. Vol. 19, 1997, pp. 273-79.
- [5] Bachman, Ronet, and Raymond Paternoster. "A contemporary look at the effects of rape law reform: How far have we really come?." *The American Court System*. Routledge, 2020, pp. 68-8.
- [6] Woodling, Bruce A., and Peter D. Kossoris. "Sexual misuse: Rape, molestation, and incest." *Pediatric Clinics of North America*. Vol. 28, No. 2, 1981, pp. 481-99.
- [7] Adie, W. J., and Macdonald Critchley. "Forced grasping and groping." *Brain: A Journal of Neurology*. 1927.
- [8] Pandey, Ashutosh, and Anil Kumar. "Understanding Eve Teasing: An Insight into Sexual Harassment of Women in Public Places". *International Journal of Research and Analytical Reviews*. 2023.
- [9] Russell, Douglas, et al. "Preventing child sexual abuse: A systematic review of interventions and their efficacy in developing countries". *Child Abuse & Neglect*. Vol. 102, 2020, p. 104395.
- [10] Teranishi Martinez, Christy, et al. "Sexual Harassment and Assault across Trail and Ultrarunning Communities: A Mixed-Method Study Exploring Gender Differences." *Social Sciences*. Vol. 12, No. 6, 2023, p. 359.
- [11] Freeman, Valerie. "Cyber flashing: unwanted and non-consensual lewd photographs as technology-enhanced sexual harassment." 2020.
- [12] Johnson, P. A., S. E. Widnall, and F. F. Benya. "Sexual Harassment of Women: Climate." *Culture, and Consequences in Academic Sciences, Engineering, and Medicine*. 2020.
- [13] Carrington, Kerry, and Moira Carmody. "Preventing sexual violence?," 2000.
- [14] Spohn, Cassia. "Sexual assault case processing: The more things change, the more they stay the same." *International Journal for Crime, Justice and Social Democracy*. Vol. 9, No. 1, 2020, pp. 86-4.
- [15] Cressie, N. A. C., and H. J. Whitford. "How to use the two-sample t-test." *Biometrical Journal*. Vol. 28, No. 2, 1986, pp. 131-48.

- [16] Hazra, Avijit. "Using the confidence interval confidently." *Journal of Thoracic Disease*. Vol. 9, No. 10, 2017, p. 4125.
- [17] Momeni, Amir, et al. "Cross tabulation and categorical data analysis." *Introduction to Statistical Methods in Pathology*. 2018, pp. 93-120.
- [18] Naugle, Amy E. "Cumulative Trauma: The Impact of Child Sexual Abuse, Adult Sexual Assault, and Spouse Abuse". Vol. 1, No. 1, 1996.
- [19] Rowan, Anderson B., and David W. Foy. "Post-traumatic stress disorder in child sexual abuse survivors: A literature review." *Journal of Traumatic Stress*. Vol. 6, 1993, pp. 3-20.
- [20] Mathews, Ben. "Optimising implementation of reforms to better prevent and respond to child sexual abuse in institutions: Insights from public health, regulatory theory, and Australia's Royal Commission." *Child Abuse & Neglect*. Vol. 74, 2017, pp. 86-88.