

# Replication Exercise: Does Victim Gender Matter for Justice Delivery? Police and Judicial Responses to Women's Cases in India

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## Introduction

This report will detail our efforts to replicate specific code and outcomes Nirvikar Jassa's 2023 study, *"Does Victim Gender Matter for Justice Delivery? Police and Judicial Responses to Women's Cases in India."*

This paper investigates whether women face disadvantages in accessing justice in India compared to men, focusing on the entire trajectory of cases from police registration to judicial verdicts. The study identifies a pattern of "multi-stage" discrimination against women within the justice system, including delays, reduced chances of cases reaching court, and lower conviction rates for crimes reported by women. By examining these disparities, the study seeks to shed light on how gender influences the outcomes of legal proceedings.

The research leverages a dataset of approximately 418,190 police reports from Haryana (2015–2018), merged with 251,804 judicial records. The methodology incorporates descriptive statistics to quantify gender-based disparities at various stages of the justice process, OLS regression analysis to examine the relationship between complainant gender and justice outcomes, and Structural Topic Modeling (STM) to analyze first-person testimonies in police reports. This approach helps identify the themes and severity of cases, particularly those involving violence against women. Additionally, Topical Inverse Regression Matching (TIRM) is employed to adjust for confounding factors by matching complaints based on text similarity, allowing the study to infer the causal impact of gender on case outcomes.

Our project aims to replicate the Topic Modeling portion of this study, focusing specifically on the Structural Topic Modeling (STM) models, both with and without the inclusion of FREX measures.

## Extension

In our extensions, we analyzed the words used by men and women when filing a crime report to the police, examining whether these words differ, how frequently they are used, and in what context. The goal of this analysis is to identify gender-based differences in language within specific topics of police reports. For example, within reports related to alcohol, we found that men are more likely to use the word *accident*, while women more commonly use the word *abuse*. This is a particularly interesting finding because it highlights the existence of gender-based differences in how crimes are reported and how they may impact differently in women and men, which definitely has important policy implications. We also found cases where the words used within a topic do not vary significantly between genders or provide particularly insightful distinctions.

## Autopsy

### Replication Challenges

The code lacked sufficient comments and annotations, making it somewhat difficult to follow and replicate. However, all the code was functioning correctly.

Additionally, the corpus is in Hindi, and the translation to English occurs at some point, but it is not entirely clear where or how this process takes place.

### Replication Successes

The code ran smoothly, allowing us to replicate the STM models and figures successfully, ultimately arriving at the same results.

The extensions were not difficult to implement, and we obtained interesting results that can easily be expanded to other topics. We only produced extensions for a few selected topics, as running them for the entire dataset is very computationally expensive and takes a lot of time to get results.

## References

Jassal N. Does Victim Gender Matter for Justice Delivery? Police and Judicial Responses to Women's Cases in India. *American Political Science Review*. 2024;118(3):1278-1304. doi:10.1017/S0003055423000916

Jassal, Nirvikar, 2023, "Replication Data for: Does Victim Gender Matter for Justice Delivery? Police and Judicial Responses to Women's Cases in India", <https://doi.org/10.7910/DVN/F6UCQT>, Harvard Dataverse, V1