Bias Detection Report

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Dataset Analyzed

- **Path:** source_files/COMPAS.csv

Features Examined

- **Gender (Sex_Code_Text)**

- **Recommended Supervision Level (RecSupervisionLevelText)**

Type of Bias Detected
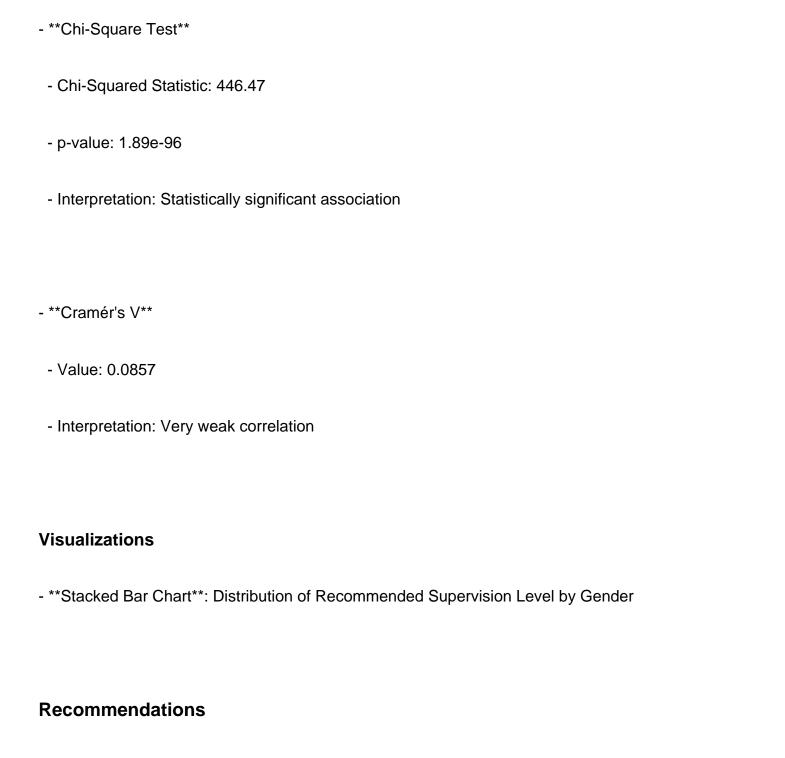
- **Correlation Bias**

Tools Used

- **Chi-Square Test**

- **Cramér's V Calculation**

Values Obtained and Bias Extent

- **Chi-Square Test**

  - Chi-Squared Statistic: 446.47

  - p-value: 1.89e-96

  - Interpretation: Statistically significant association

- **Cramér's V**

  - Value: 0.0857

  - Interpretation: Very weak correlation

Visualizations

- **Stacked Bar Chart**: Distribution of Recommended Supervision Level by Gender

Recommendations

Based on the analysis, the correlation between gender and the recommended supervision level is statistically significant, but the strength of the association is very weak. Therefore, it is suggested to proceed with using the dataset, as the bias level is minimal.

Stacked Bar Chart of Sex_Code_Text vs RecSupervisionLevelText