Bias Detection Report

Correlation Bias Analysis between Gender and Recommended Supervision Levels

Objective: To explore whether gender influences the recommended supervision levels in the dataset.

Method: Chi-Square Test for independence was used to analyze the correlation between the categorical features 'Sex_Code_Text' (Gender) and 'RecSupervisionLevelText' (Recommended Supervision Level).

Results:

- Chi-Square Statistic: 446.47

- p-value: 1.89e-96

- Degrees of Freedom: 3

The significant p-value suggests a strong association between the features, indicating potential bias.

Bias Type: Correlation

Relevant Features: Gender (Sex_Code_Text) and Recommended Supervision Level

(RecSupervisionLevelText)

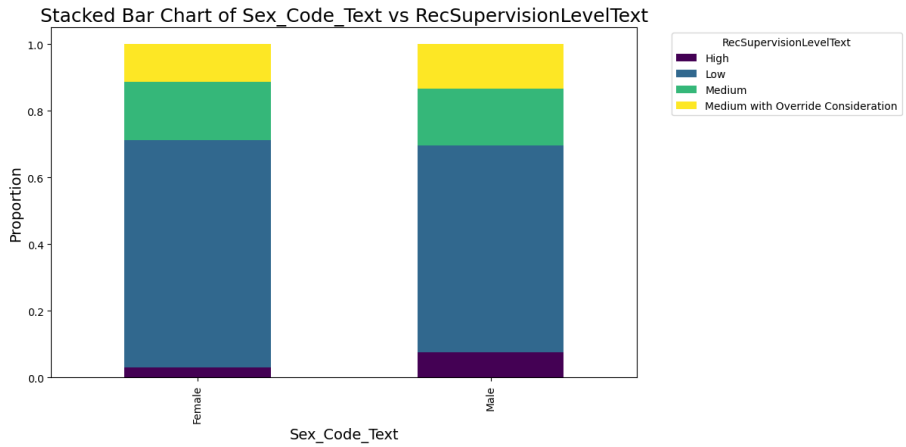
Bias Level: Extreme Bias

Visualization

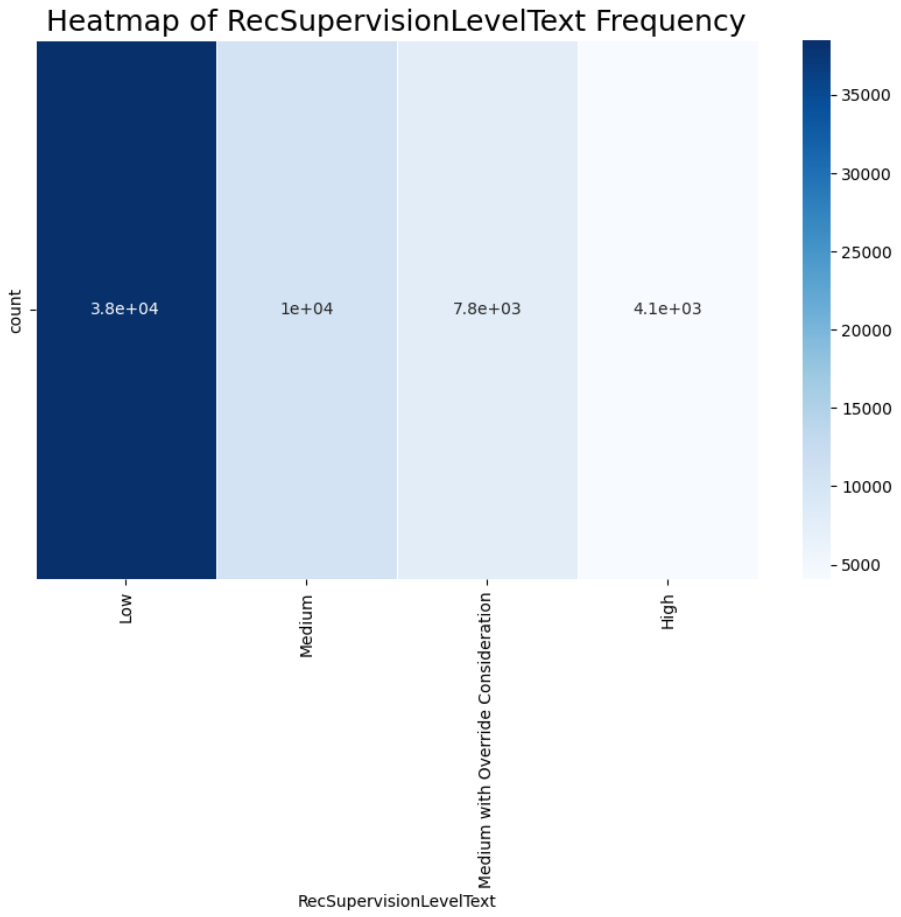
Below are the visual representations of the findings:

- The stacked bar chart illustrates the distribution of supervision levels across genders.

- The heatmap offers a frequency distribution view for better insight.



The stacked bar chart provides a detailed view of the supervision level distribution among male and female subjects.



The heatmap shows the frequency distribution of recommended supervision levels, further supporting the correlation findings from the Chi-Square test.