Bias Detection Report

Bias Detection Report: Language Influence on Assessment Scores

This report analyzes the potential bias in assessment scores based on the language spoken by defendants. The dataset used for this analysis was sourced from COMPAS.csv.

1. Bias Type: Correlation

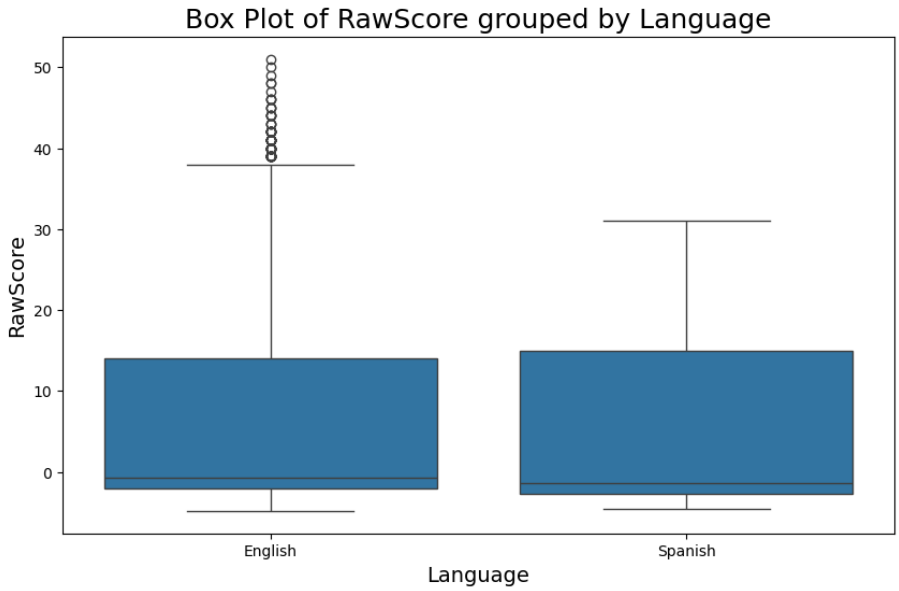
2. Relevant Features: Language, RawScore

Detection and Analysis Methods:

- Cohen's d Effect Size: 0.0638

- Hilbert-Schmidt Independence Criterion (HSIC) Value: 3.71 x 10^-15

Both methods indicate a minimal correlation bias, categorized as Level 1 (No Bias).



Explanation:

- The Cohen's d effect size is well below any significant threshold, indicating that the language spoken by defendants does not exert a meaningful influence on their assessment scores.

- The HSIC value suggests almost no correlation bias between the language and scores.

- The box plot visualization supports these findings, showing consistent score distributions across different language groups.

Conclusion: The analysis reveals no significant bias based on language, allowing confidence in the assessment scores' fairness across different language groups.