Bias Detection Report

The analysis of the dataset 'source_files/COMPAS.csv' focused on detecting any correlation between gender and assessment scores. Here's a detailed summary of the findings:

- 1. Bias Type: Correlation
- 2. Relevant Features: Gender ('Sex_Code_Text') and Assessment Scores ('RawScore')
- 3. Bias Level: Based on the Cohen's d effect size of 0.056, the bias level is categorized as Level 1, indicating no significant bias.

Detailed Explanation:

- **Level 1 (No Bias):**
- The analysis using Cohen's d effect size resulted in a value of 0.056, which is well below the threshold of 0.25 for Level 2 bias. This suggests that there is no significant correlation between gender and assessment scores in this dataset.
- The bar chart visualization of assessment scores across different genders further supports this finding, showing a balanced distribution without any noticeable skew towards a particular gender.

Additional Explanation:

- The Cohen's d effect size is a measure of the strength of the relationship between two variables. In this case, the very low effect size indicates that gender does not have a meaningful impact on assessment scores.

- The bar chart provides a visual confirmation of this lack of bias, as it shows that the distribution of scores is similar across genders.

Conclusion:

Based on the analysis, it appears that the dataset does not exhibit any significant bias concerning the correlation between gender and assessment scores. You can confidently proceed with using this dataset for further analysis or decision-making processes.

