Bias Detection Report

Bias Type: Correlation

Relevant Features: Gender (Sex_Code_Text) and Assessment Scores (RawScore)

Analysis Findings:

- T-test and Cohen's d:

  - The T-test showed a statistically significant difference in assessment scores between genders, with a very low p-value of 1.45e-08.

  - However, Cohen's d indicated a small effect size of 0.056, suggesting minimal practical difference in scores between genders.

- Standardized Difference:

  - The Standardized Difference values for both male (0.012) and female (-0.043) groups are close to zero, indicating minimal bias.

Bias Level: Level 2 (Minimal Bias)

Additional Explanation: The analysis suggests that while there is a statistical difference in assessment scores between genders, the effect size and standardized difference both indicate that the bias is minimal. This means the dataset is fairly balanced with respect to gender and assessment scores.

Image not found: generated_files/box_plot_gender_scores.png