

# Bias Detection Report

This report analyzes the correlation bias between ethnicity and decile scores in the COMPAS dataset.

Bias Type: Correlation

Relevant Features: Ethnic\_Code\_Text, DecileScore

The standardized difference for the first category was approximately 1.30, indicating a significant difference in decile scores across different ethnic groups.

The HSIC value was  $3.824256359700253e-11$ , which is below the threshold for significant bias, indicating no strong correlation bias.

Considering the results from both the standardized difference and HSIC analyses, the overall bias level can be categorized as Moderate Bias.

Based on my analysis, the dataset shows a moderate level of bias concerning the correlation between ethnicity and decile scores. The standardized difference suggests some bias, but the HSIC analysis indicates that the correlation is not strong. You may need to consider this bias in certain applications, and I recommend giving these results additional thought before proceeding.