

# Bias Detection Report

## Bias Detection Report

1. Bias Type: Correlation
2. Relevant Features: Family Size (famsize) and Student Performance (G3)
3. Detailed Bias Levels:
  - HSIC Value:  $3.65 \times 10^{-7}$  (Level 1 - No Bias)
  - Max Absolute N Value: 0.128 (Level 2 - Minimal Bias)
  - Cohen's d Effect Size: 0.184 (Level 2 - Minimal Bias)

The analysis indicates that there is a minimal correlation bias between family size and student performance. While the HSIC suggests no significant correlation, both Max Absolute N Value and Cohen's d point to a minimal level of bias.

Conclusion: The dataset shows minimal bias, which should be considered in specific scenarios but does not significantly affect the overall dataset's reliability.