

# Bias Detection Report

Bias Detection Report: Analysis of Internet Access and Final Grades

Bias Type: Correlation

Relevant Features: Internet Access (categorical), Final Grades (numerical)

T-Test and Cohen's d Analysis:

- Mean Final Grade with Internet Access: 10.62
- Standard Deviation with Internet Access: 4.57
- Mean Final Grade without Internet Access: 9.41
- Standard Deviation without Internet Access: 4.45
- T-statistic: 1.96
- P-value: 0.050
- Cohen's d: 0.268
- Conclusion: Minimal to Moderate Bias

Standardized Difference (SD) Analysis:

- SD for 'No Internet': -0.220
- SD for 'Yes Internet': 0.044
- Conclusion: Minimal Bias

Hilbert-Schmidt Independence Criterion (HSIC) Analysis:

- HSIC Value: 3.62e-07

- Conclusion: No Bias

Overall Conclusion:

- The analysis suggests a small to negligible effect of internet access on final grades. While the t-test indicates a borderline significant difference, the effect size is small. The SD and HSIC analyses support the conclusion of minimal bias.