Bias Detection Report

Bias Detection Report for the 'paid' Feature in Student Performance Dataset

1. Bias Type: Distribution

2. Relevant Feature: paid

3. Bias Detection Results:

- Shannon Entropy & Balance: No Bias (Level 1)

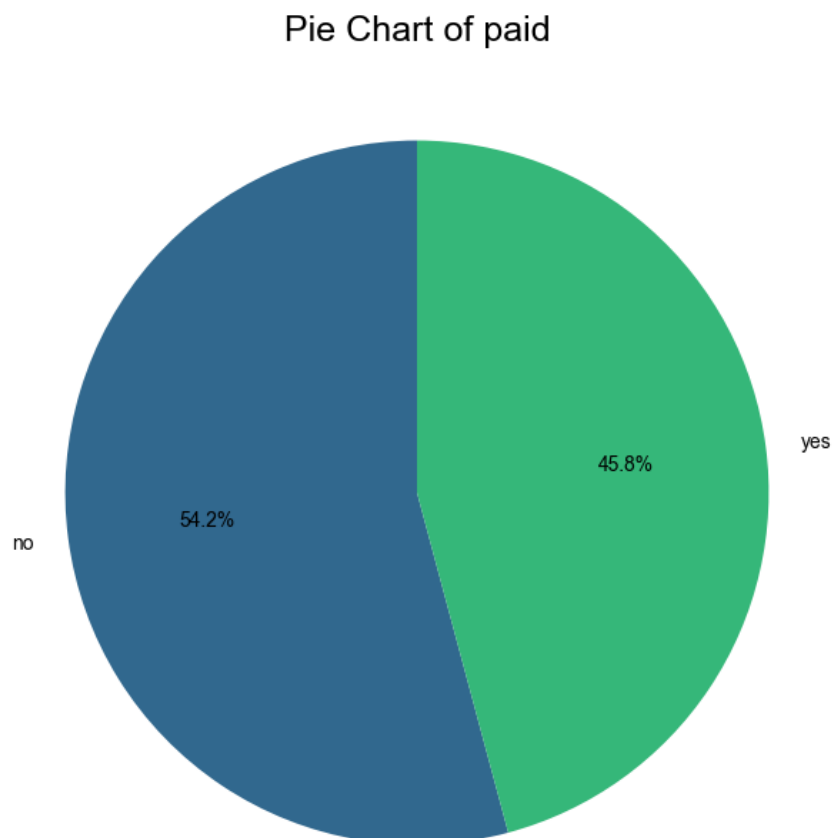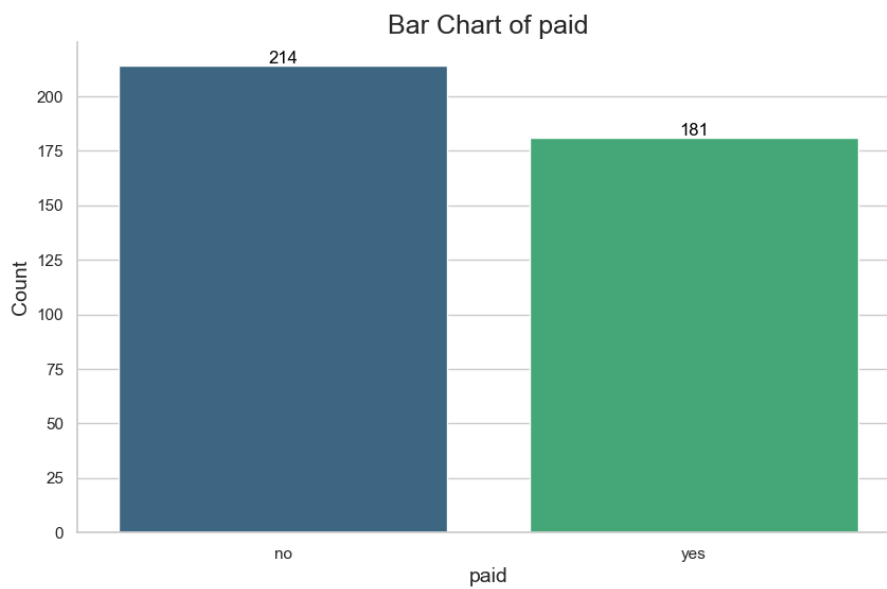- Max/Min Ratio: No Bias (Level 1)

- Gini Index: No Bias (Level 1)

- Chi-Square Test: No significant deviation (p-value: 0.0968)

- Kolmogorov-Smirnov Test: High K-S Statistic (0.9949) but contextually consistent with other findings

4. Visualizations:

- Detailed bar and pie charts illustrate the distribution of the 'paid' feature.

Bar Chart of paid

Pie Chart of paid

5. Conclusion: The 'paid' feature shows no significant bias in its distribution, indicating a balanced representation of students attending extra paid classes. The dataset is suitable for further analysis

without concerns about distribution bias.