

Mann–Whitney U Test

Test: Mann–Whitney U Test

Design: Two independent final–grade samples defined by internet access.

Variables: G3, internet

Null hypothesis: The probability that an observation from one group exceeds the other equals 0.5.

Formula: $U_1 = R_1 - n_1(n_1+1)/2$

Source rows: 649

Calculated metrics:

u_statistic: 29581.5

p_value: 6.38970234902372e-05

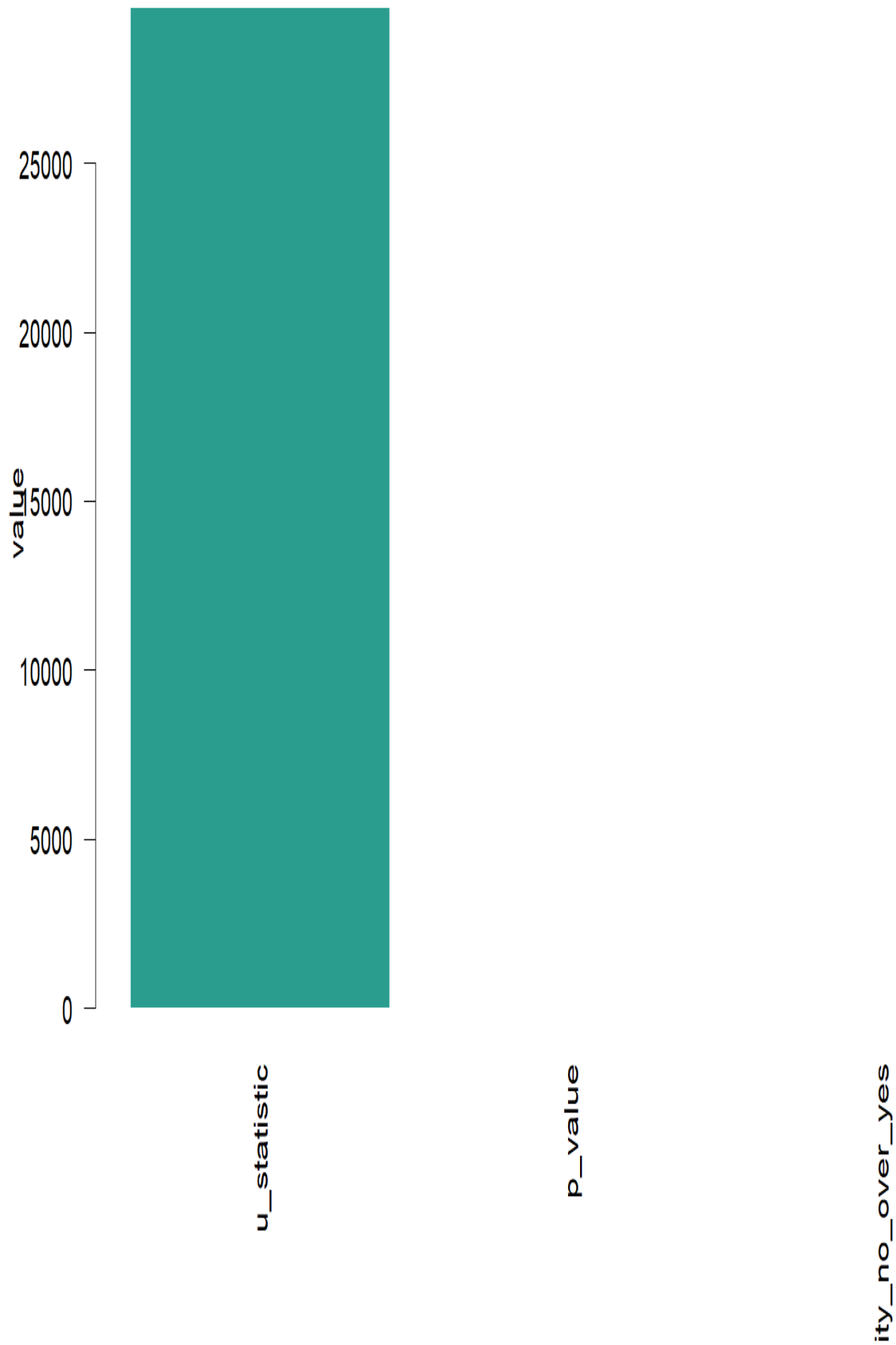
probability_superiority_no_over_yes: 0.393381472911514

Interpretation:

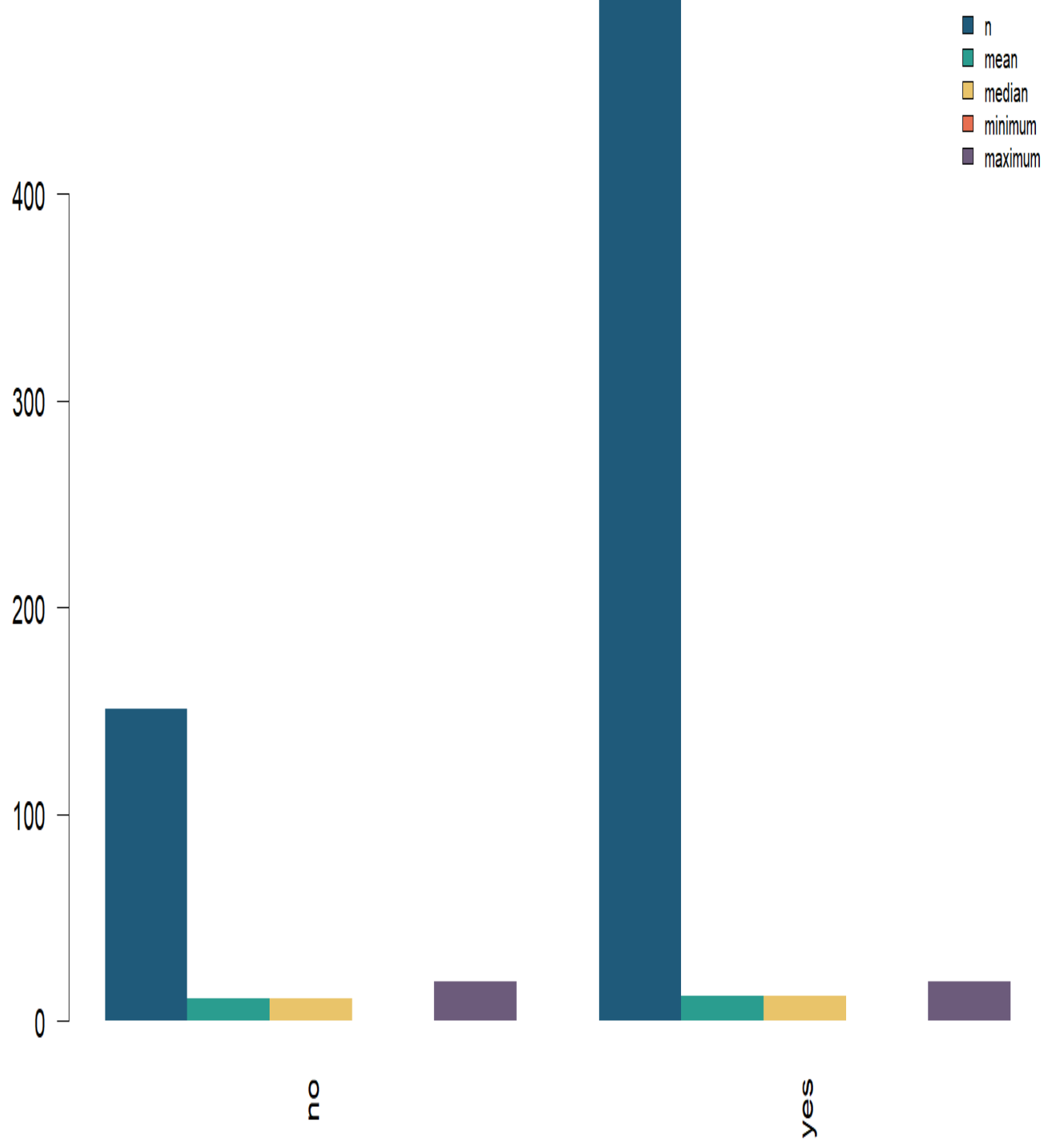
Probability superiority = 0.393381472911514

Ties contribute one half.

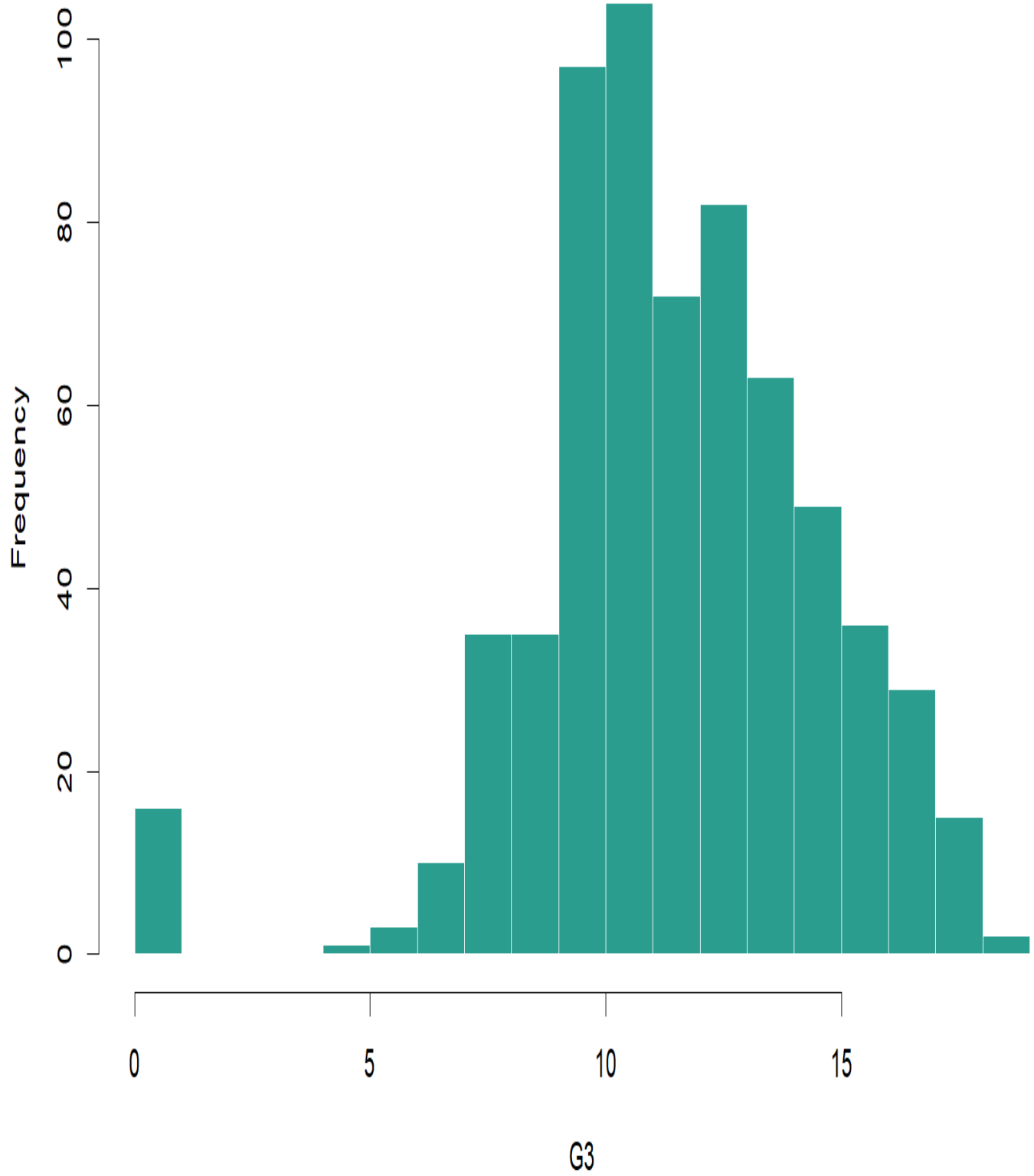
Mann-Whitney U Test - primary metrics



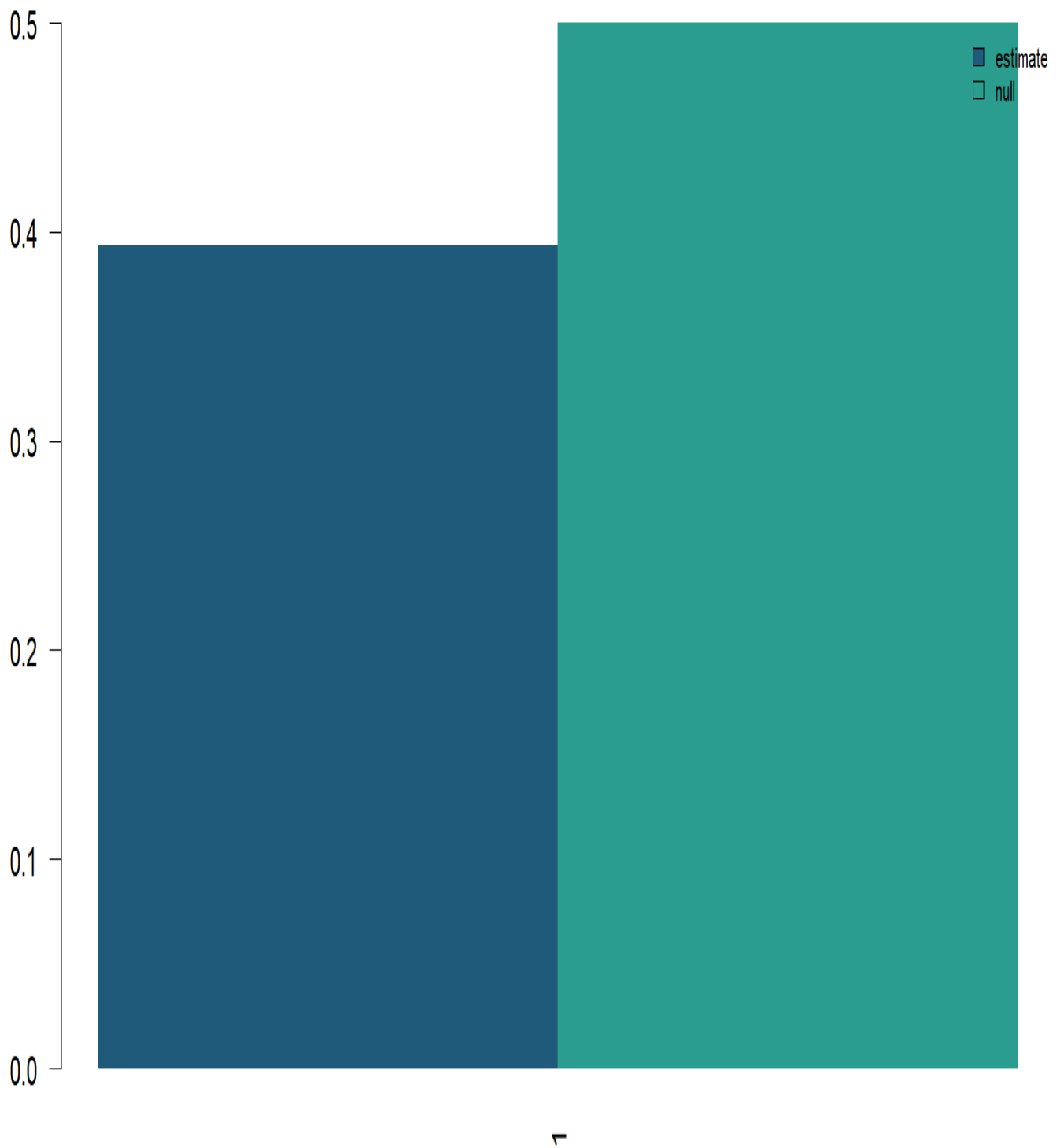
Mann-Whitney U Test - internet grade summary



Mann-Whitney U Test - ranked observations



Mann-Whitney U Test - probability interpretation



Mann-Whitney U Test verified results

bility_superiority_no_over_yes

p_value

u_statistic

