

Conover–Iman Post–Hoc Test

Test: Conover–Iman Post–Hoc Test

Design: Pairwise rank comparisons of final grade across four study–time groups after Kruskal–Wallis.

Variables: G3, studytime

Null hypothesis: Every pair of study–time groups has the same distributional location.

Formula: $t_{ij} = (R_{bar_i} - R_{bar_j}) / \sqrt{s^2 (N-1-H^*) / (N-k) (1/n_i + 1/n_j)}$

Source rows: 649

Calculated metrics:

kruskal_wallis_h: 50.3162081794567

omnibus_p_value: 6.84157052891836e–11

rank_variance_s2: 34704.8634259259

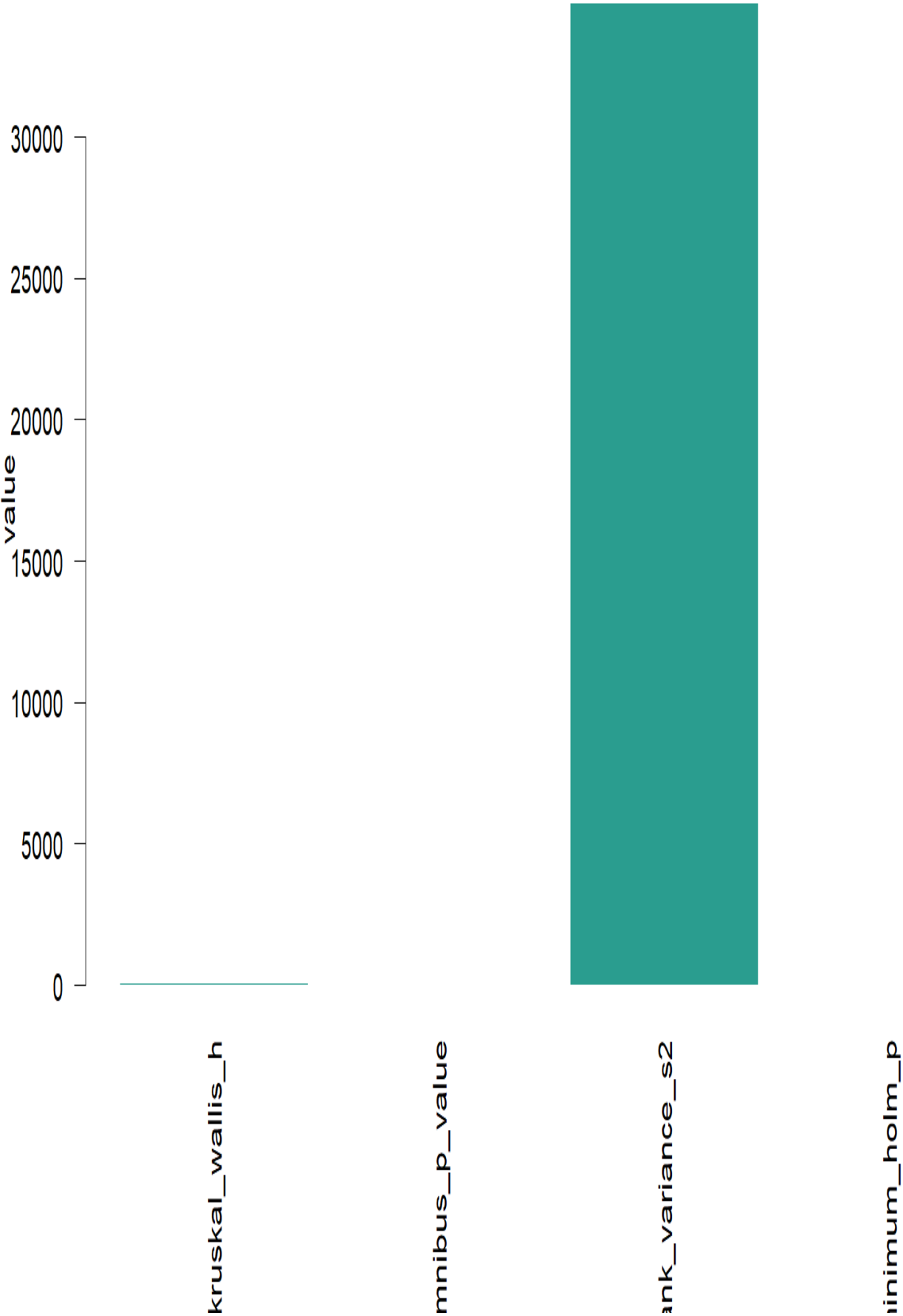
minimum_holm_p: 2.31526687824227e–10

Interpretation:

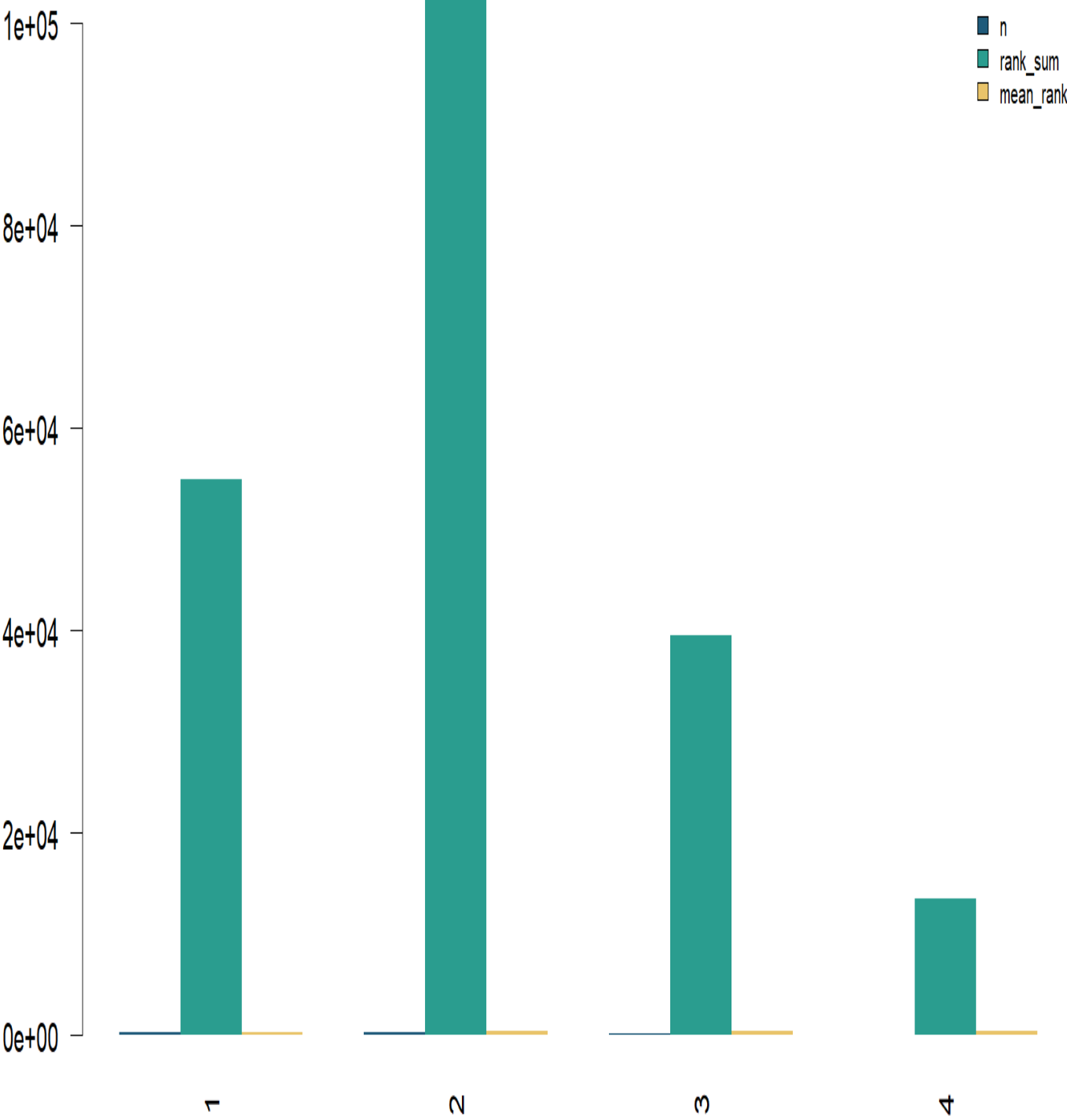
Conover–Iman uses the pooled rank variance and a t reference with N–k degrees of freedom.

Minimum Holm p = 2.31526687824227e–10

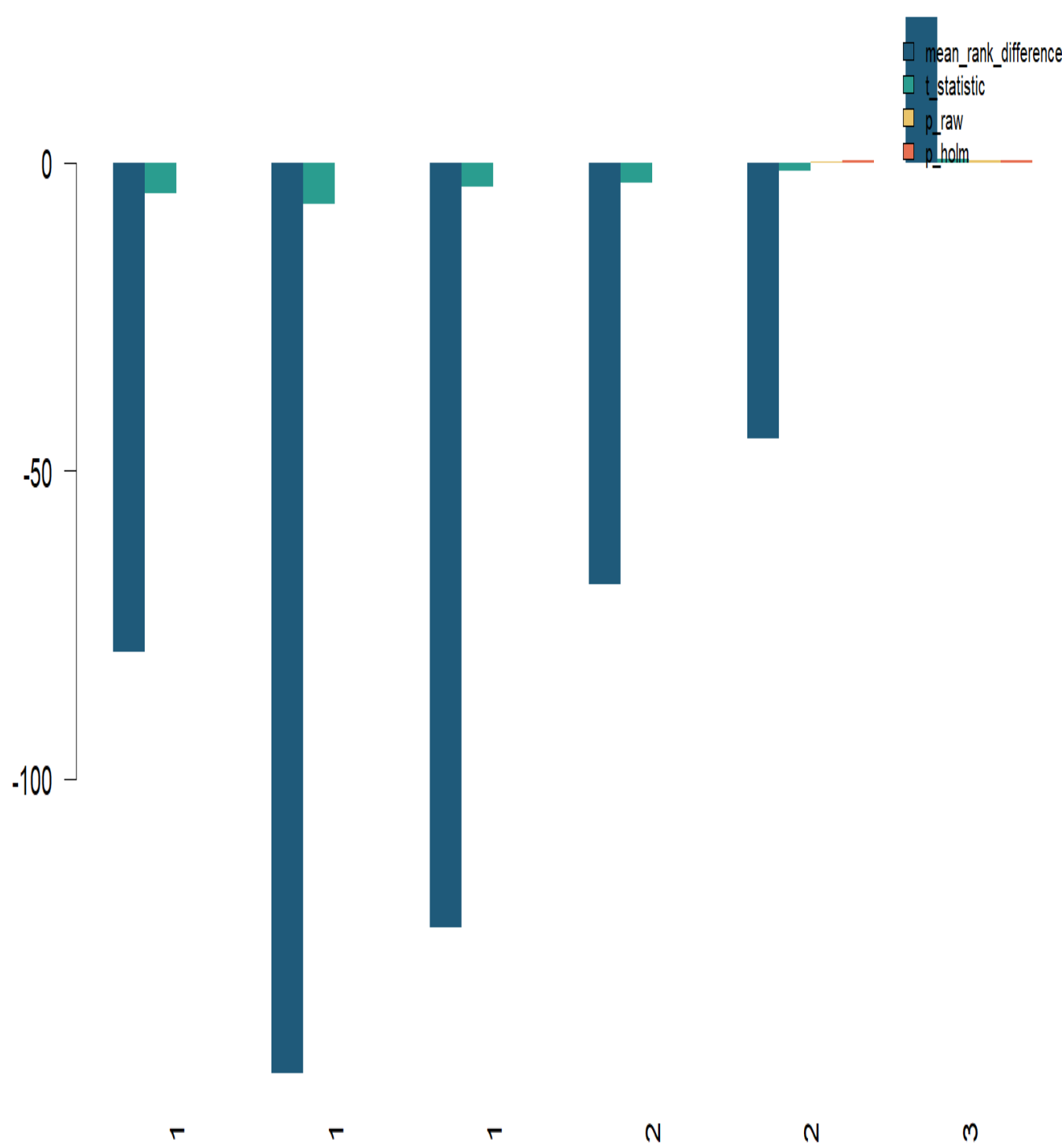
Conover-Iman Post-Hoc Test - primary metrics



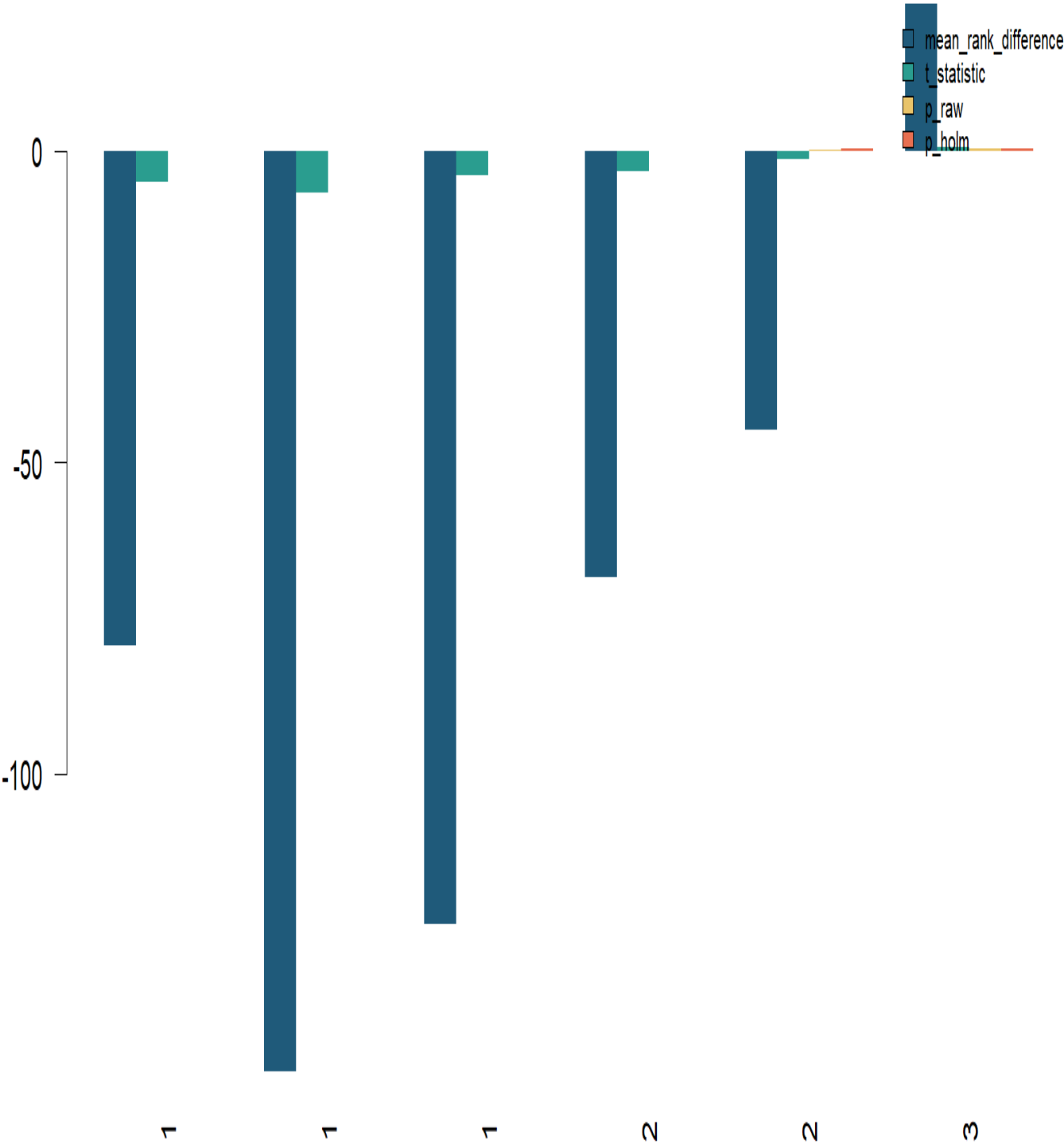
Conover-Iman Post-Hoc Test - group rank summary



Conover-Iman Post-Hoc Test - conover pairwise



Conover-Iman Post-Hoc Test - holm decisions



Conover-Iman Post-Hoc Test verified results

minimum_holm_p

rank_variance_s2

omnibus_p_value

kruskal_wallis_h

