

Discriminant Validity

Test: Discriminant Validity

Design: HTMT and latent–correlation separation for academic versus social constructs.

Variables: G1, G2, G3, famrel, freetime, goout

Null hypothesis: The two constructs are not empirically distinguishable.

Formula: $HTMT = \frac{\text{mean}|r_{\text{heterotrait}}|}{\sqrt{(\text{mean}|r_{\text{monotrait},A}| \text{mean}|r_{\text{monotrait},S}|)}}$.

Source rows: 649

Calculated metrics:

htmt: 0.21043104090296

factor_correlation: -0.144694034519499

sqrt_ave_academic: 0.934069706344357

sqrt_ave_social: 0.517784326476187

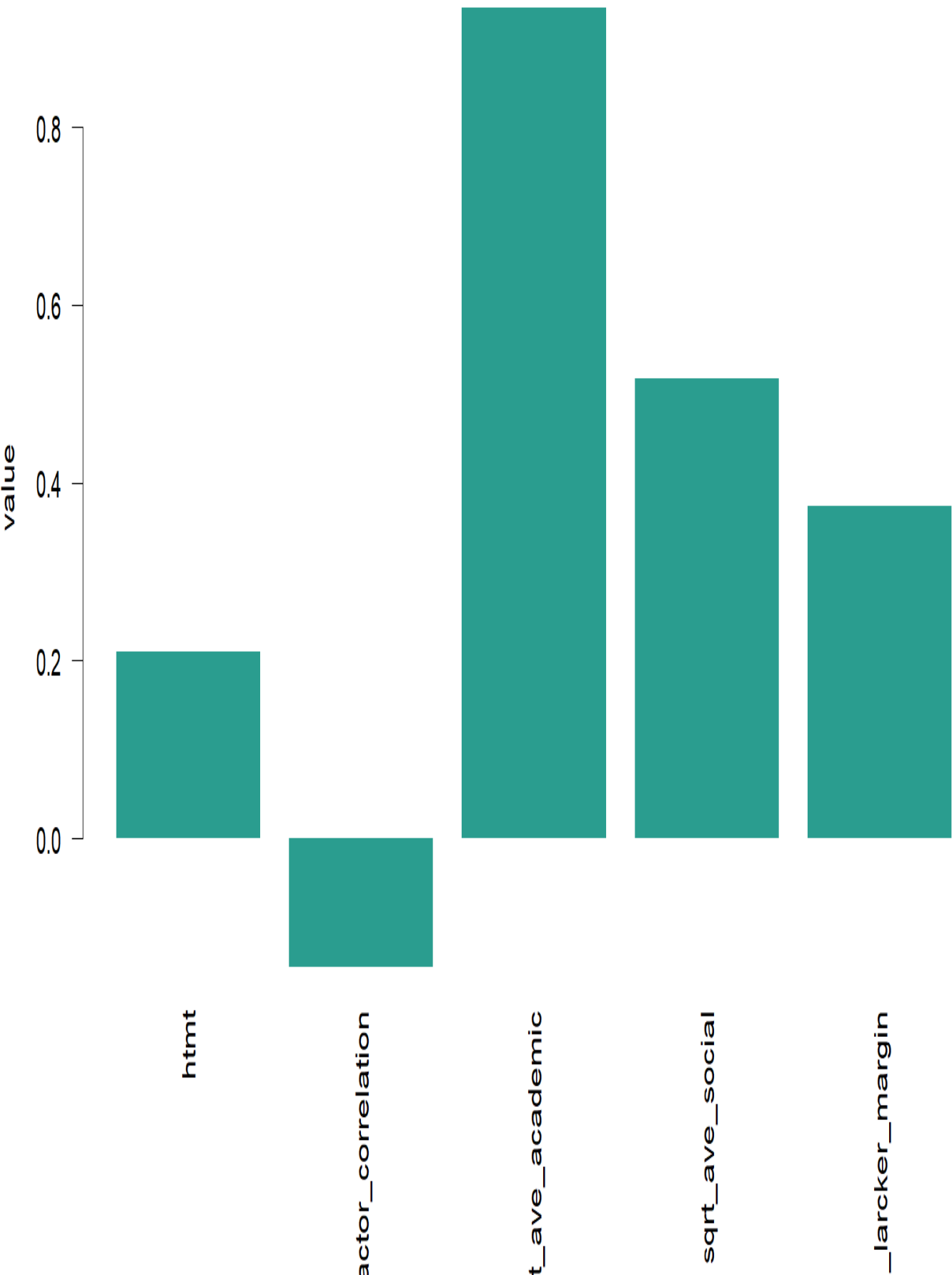
fornell_larcker_margin: 0.373090291956688

Interpretation:

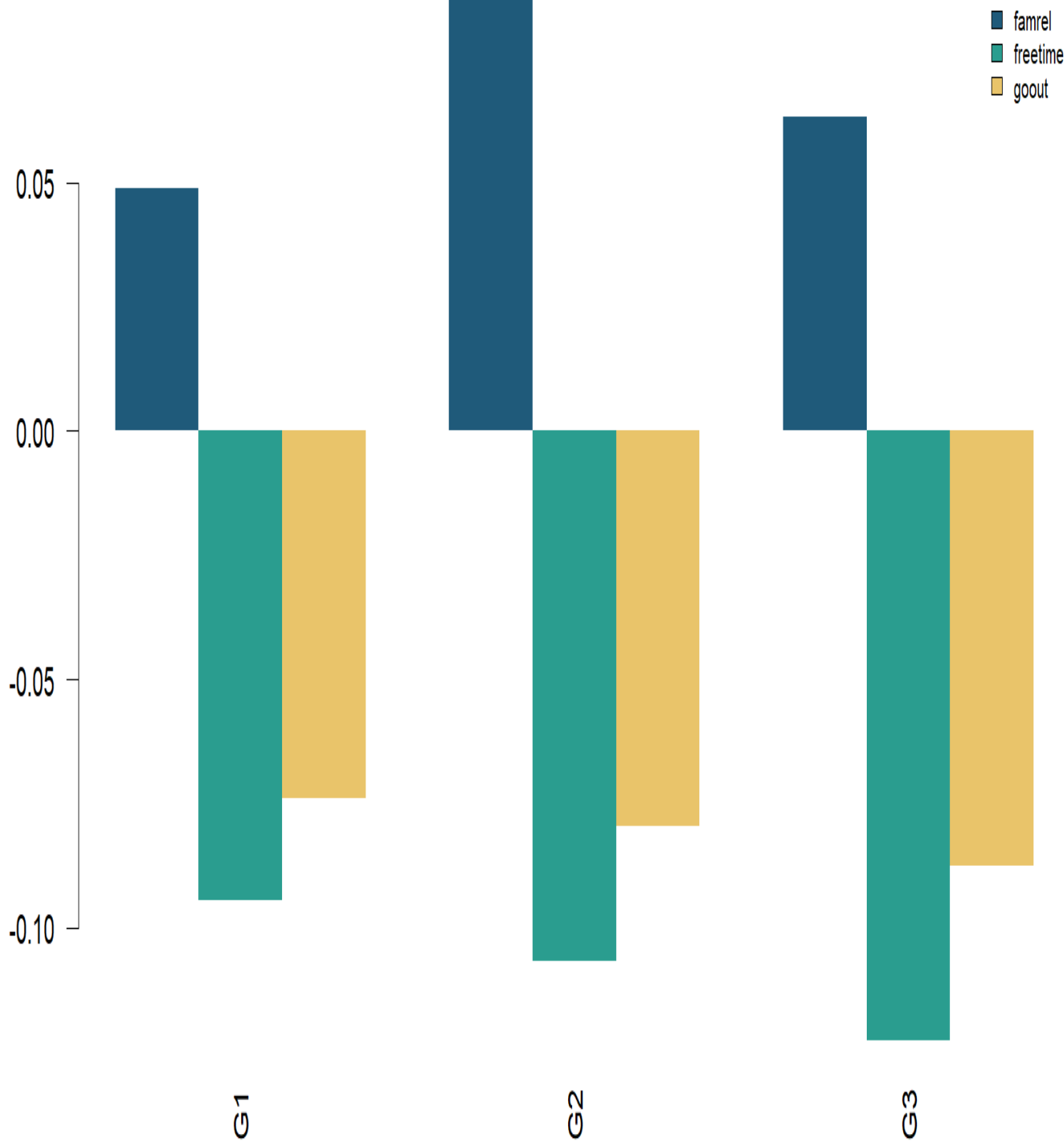
HTMT and Fornell–Larcker are separate checks.

HTMT 0.21043104090296

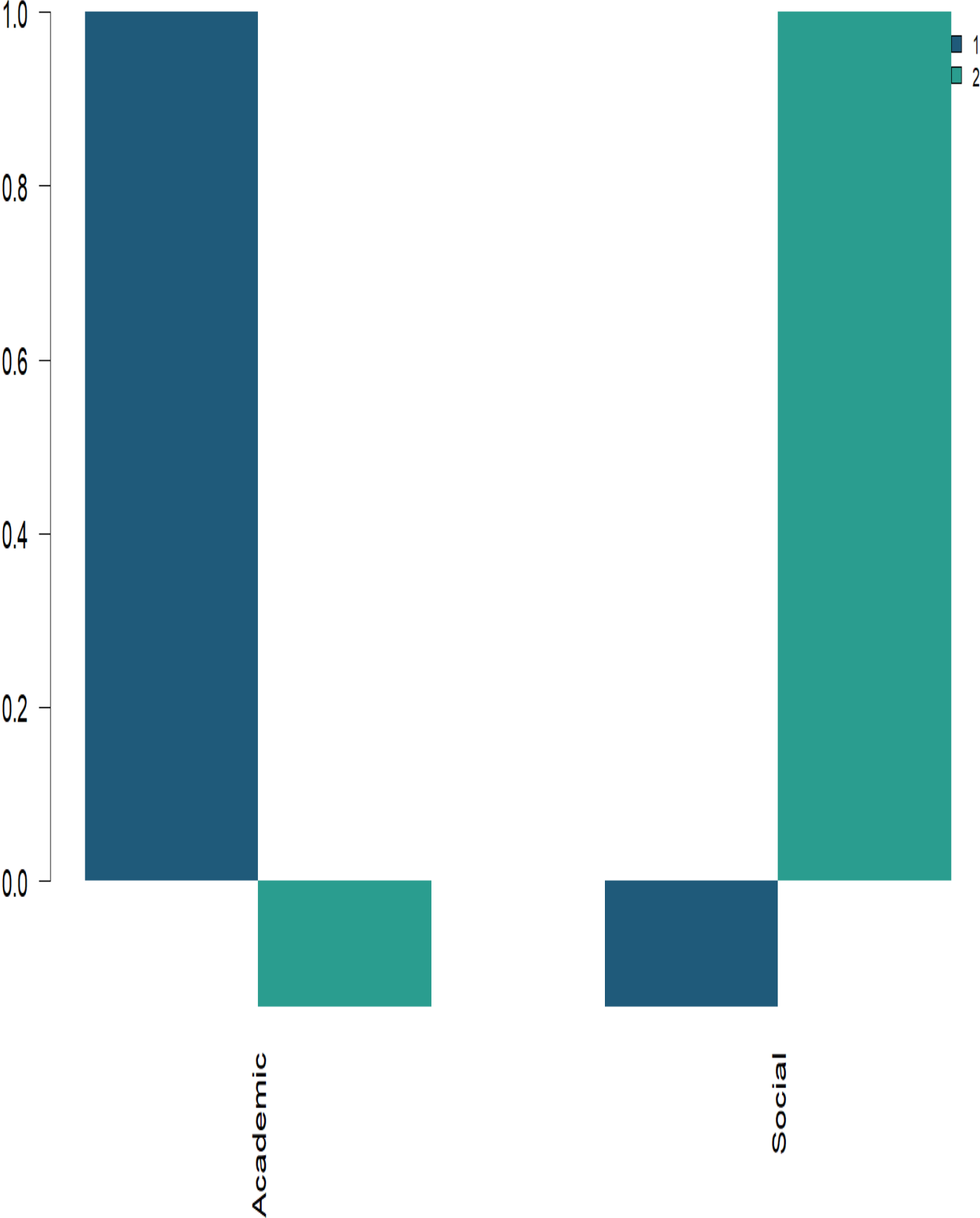
Discriminant Validity - primary metrics



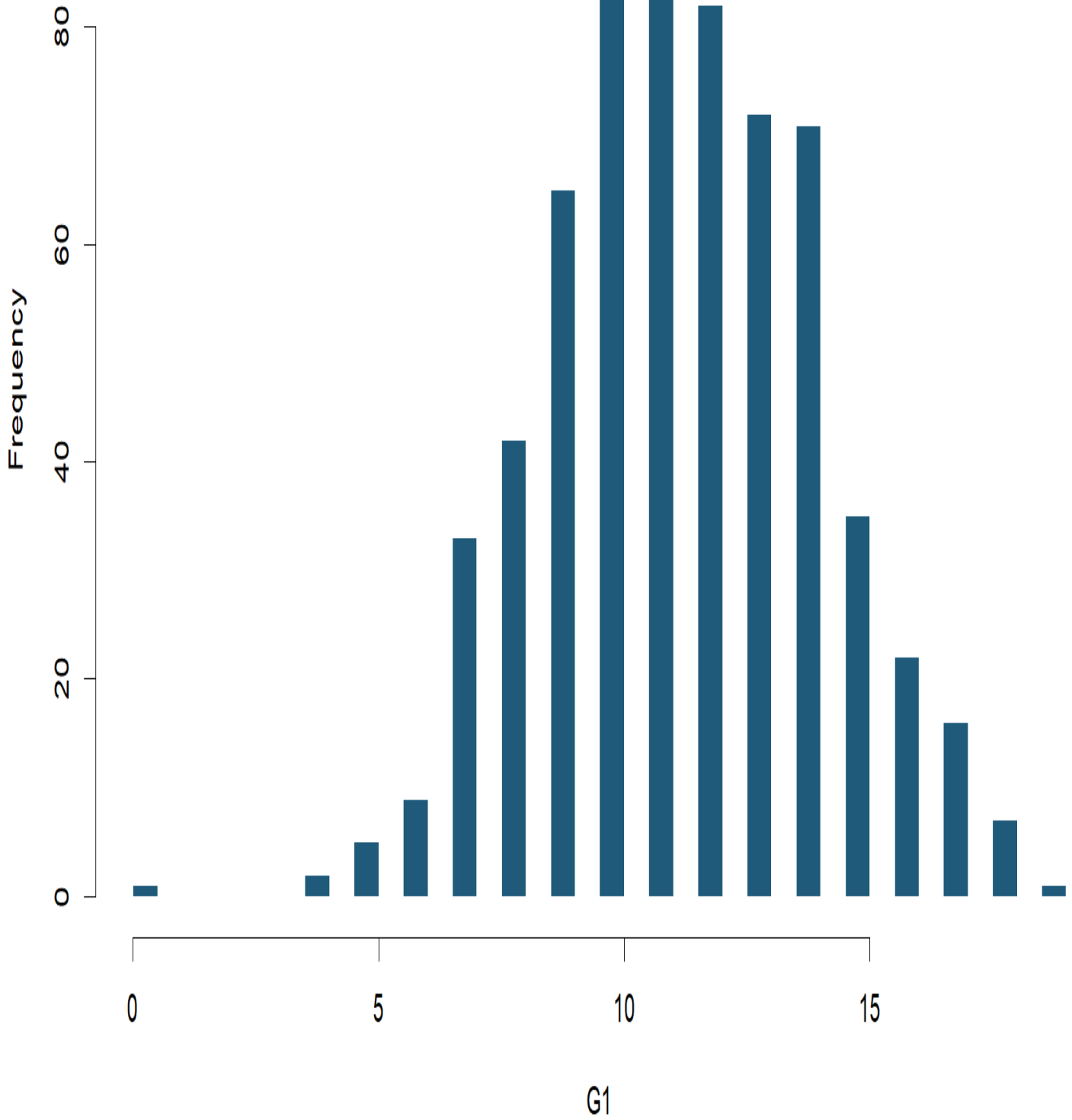
Discriminant Validity - heterotrait correlations



Discriminant Validity - factor correlation matrix



Discriminant Validity source G1



Discriminant Validity verified results

