

Common-Factor Communalities

Test: Common-Factor Communalities

Design: Principal-axis variance in each item explained by two common factors.

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

Null hypothesis: An item's communality is zero.

Formula: $h_i^2 = \sum_j \lambda_{ij}^2$; uniqueness = $1 - h_i^2$.

Source rows: 649

Calculated metrics:

mean_communality: 0.566842520071384

minimum_communality: 0.0446441941565061

maximum_communality: 0.965905043470611

factors: 2

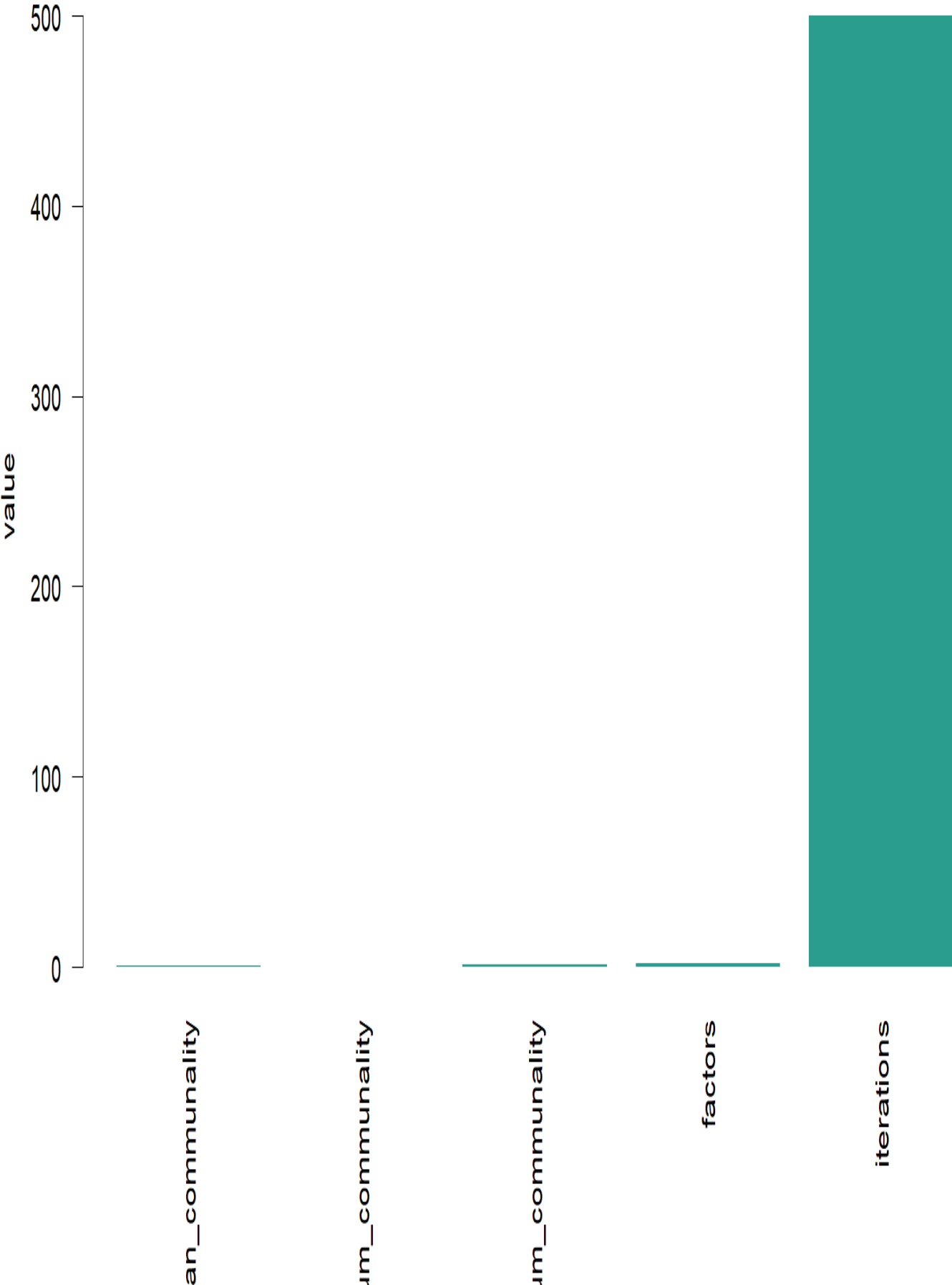
iterations: 500

Interpretation:

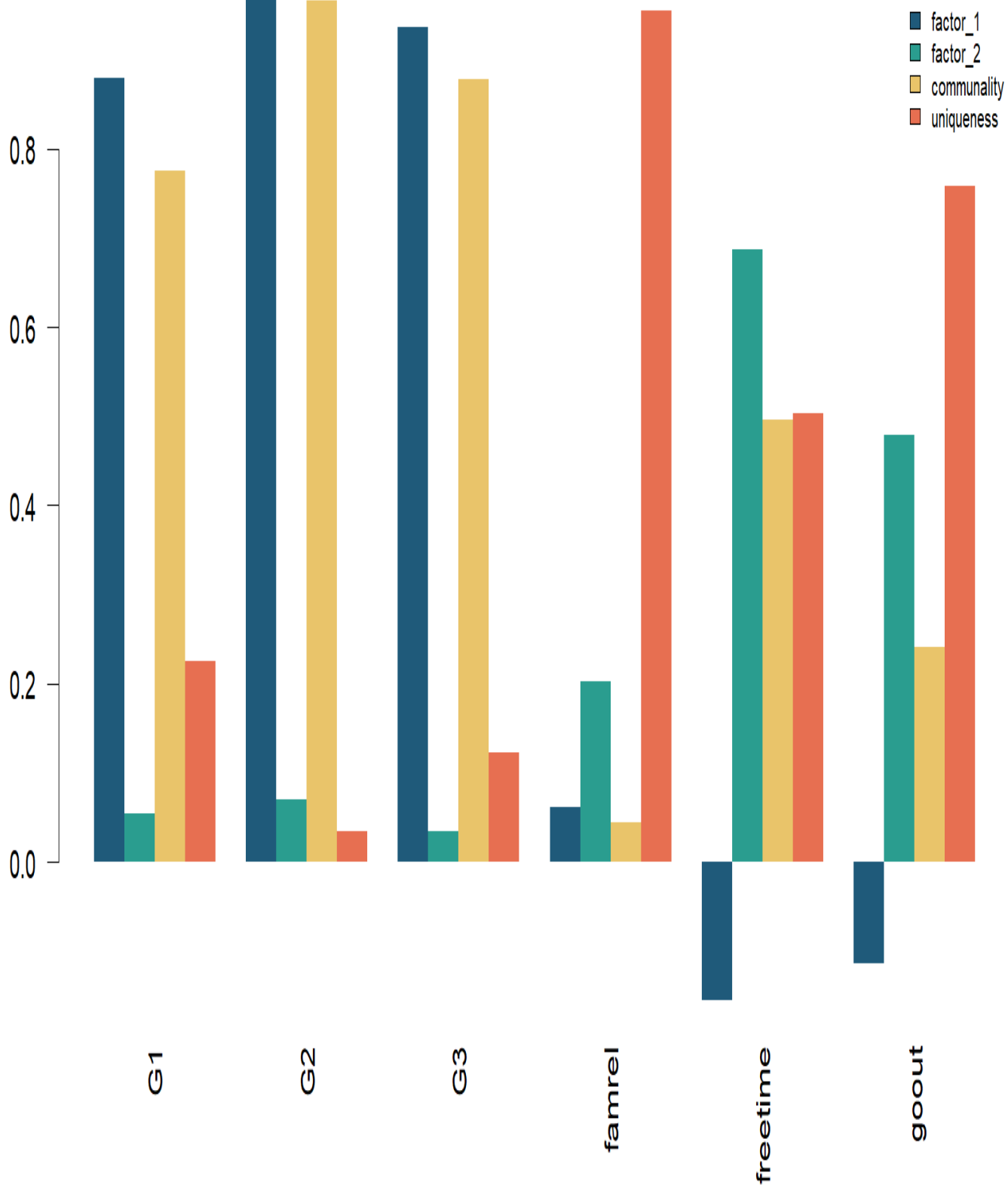
Principal-axis communalities iterate from SMC values.

Mean communality 0.566842520071384

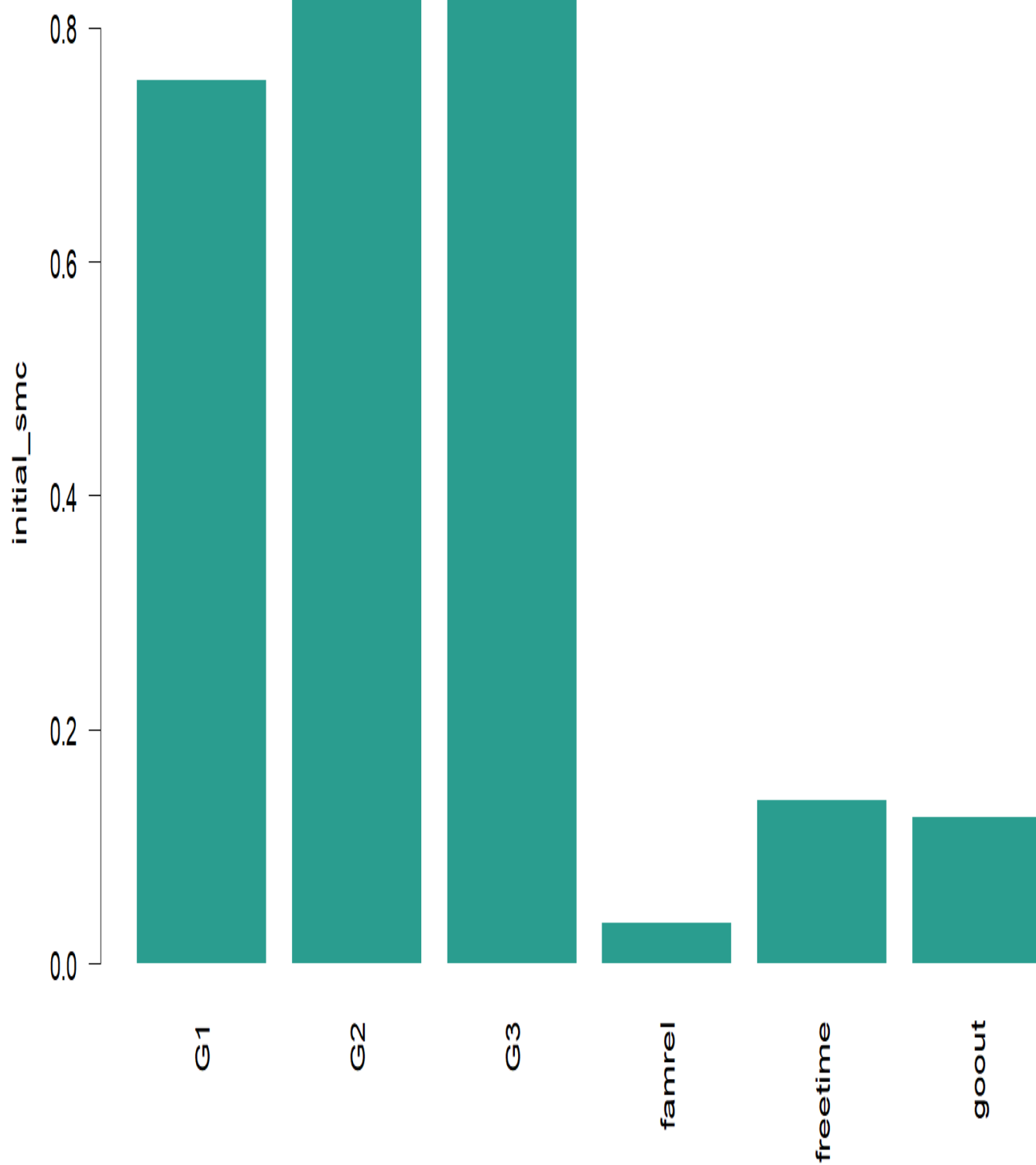
Common-Factor Communalities - primary metrics



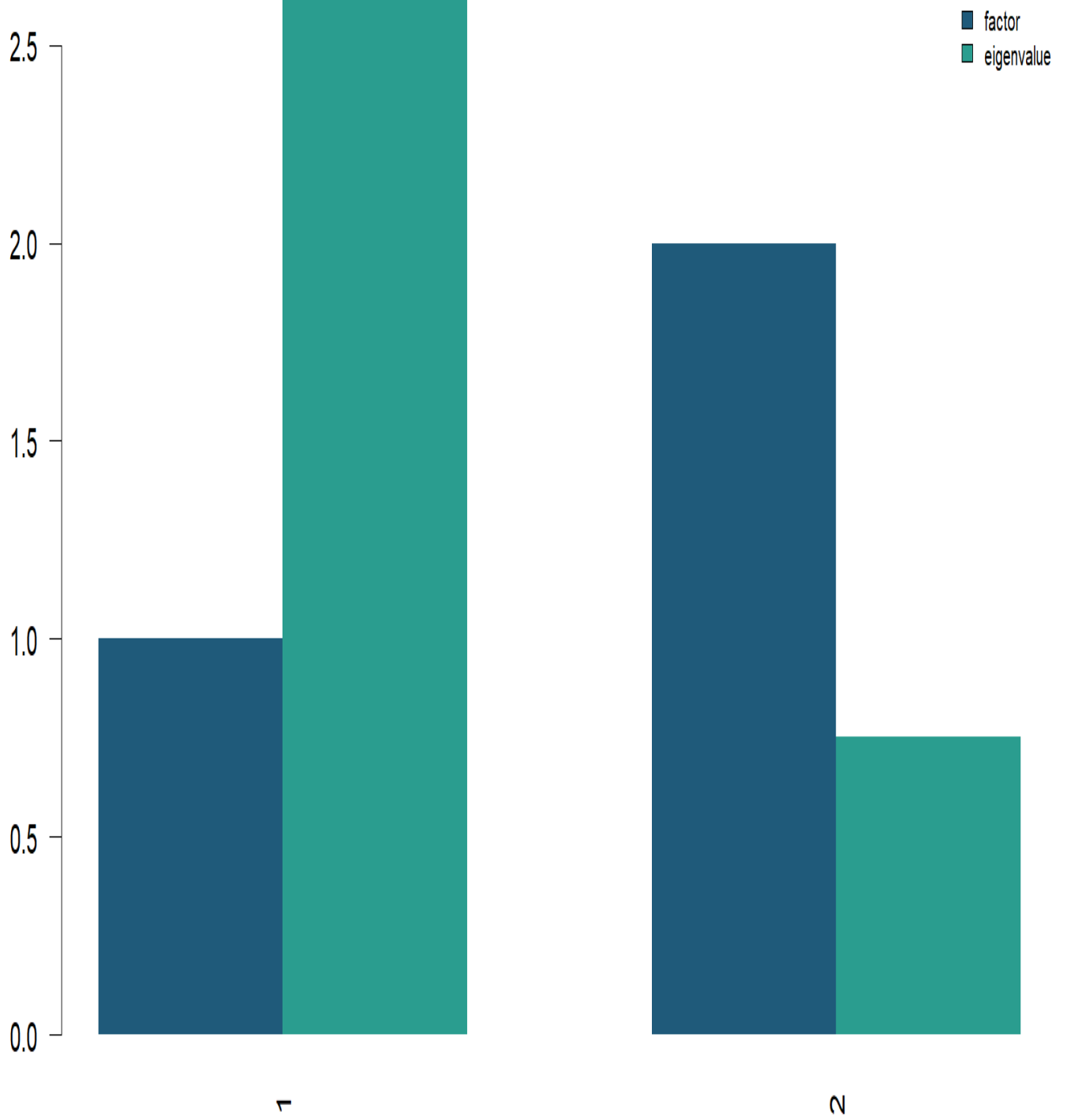
Common-Factor Communalities - iterated communalities



Common-Factor Communalities - initial smc



Common-Factor Communalities - common eigenvalues



Common-Factor Communalities verified results

