

Goodness-of-Fit Index

Test: Goodness-of-Fit Index

Design: Absolute covariance reproduction fit for the two-factor CFA.

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

Null hypothesis: The fitted model does not improve the weighted residual trace over the saturated reference.

Formula: $GFI = 1 - \frac{\text{tr}[(S^{-1} - (S - \Sigma))(S^{-1} - (S - \Sigma))]}{\text{tr}[(S^{-1} - S)(S^{-1} - S)]}$.

Source rows: 649

Calculated metrics:

gfi: 0.99263494417734

residual_trace: 0.0441903349359596

p_variables: 6

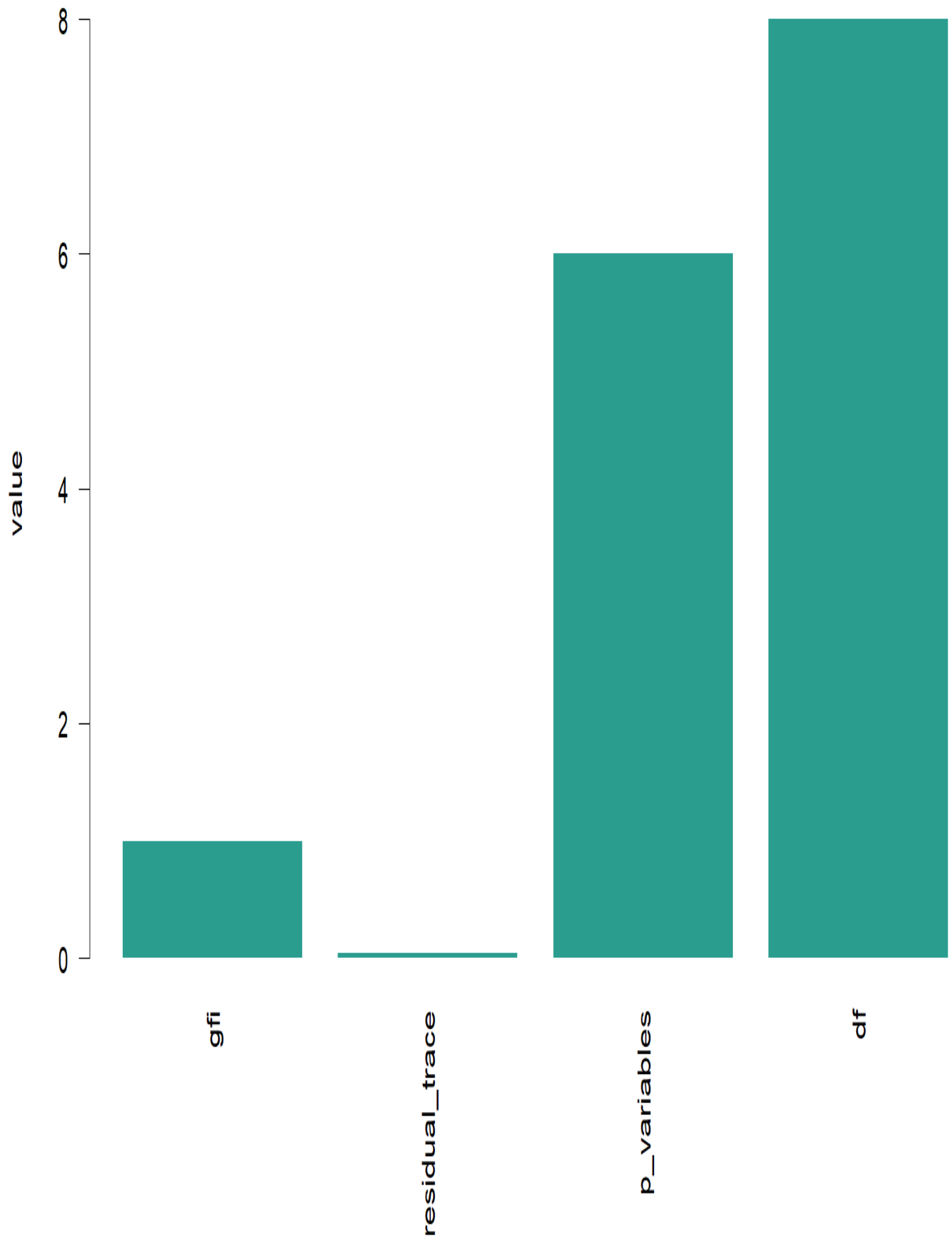
df: 8

Interpretation:

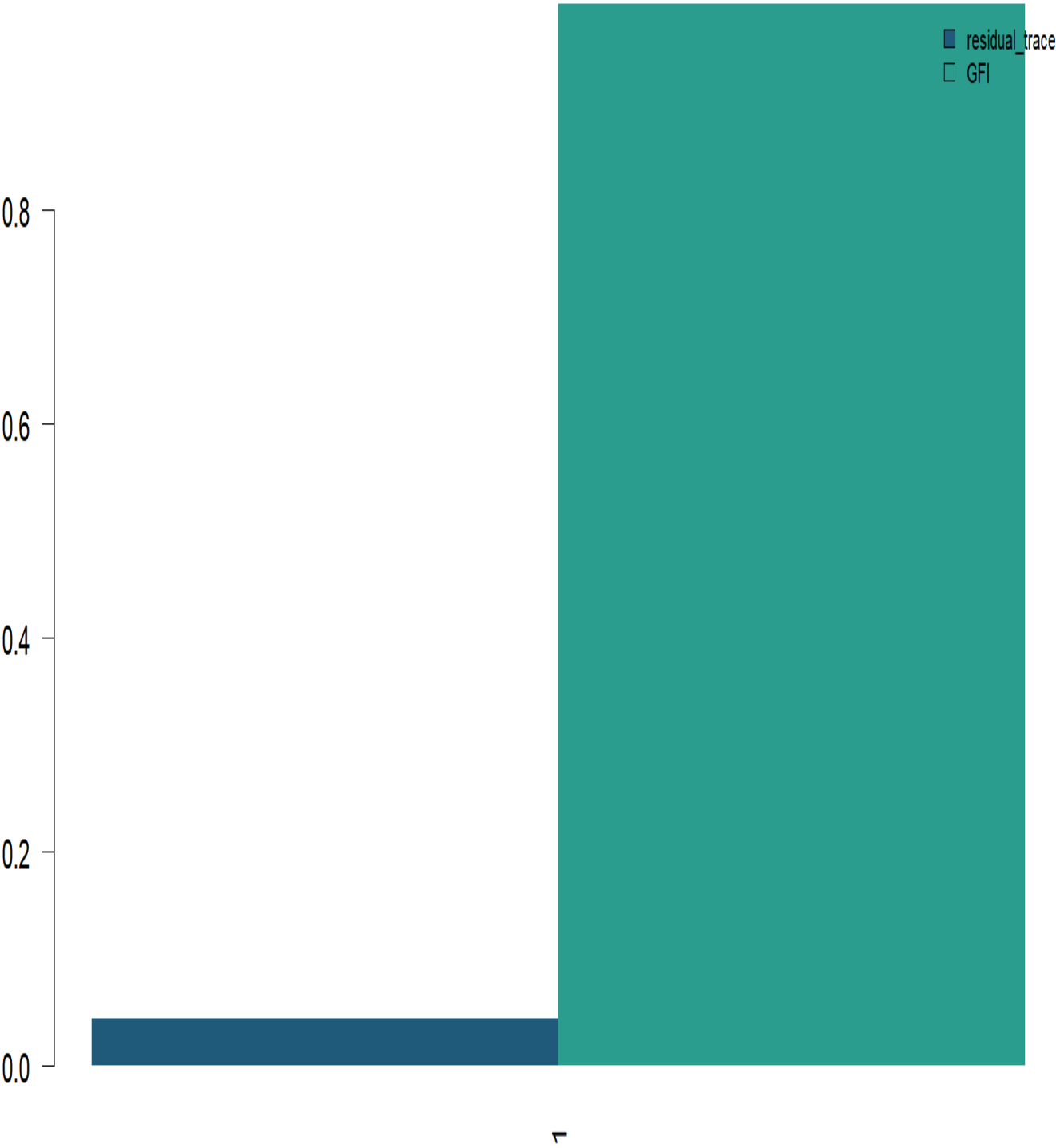
GFI uses a weighted covariance-residual trace ratio.

GFI 0.99263494417734

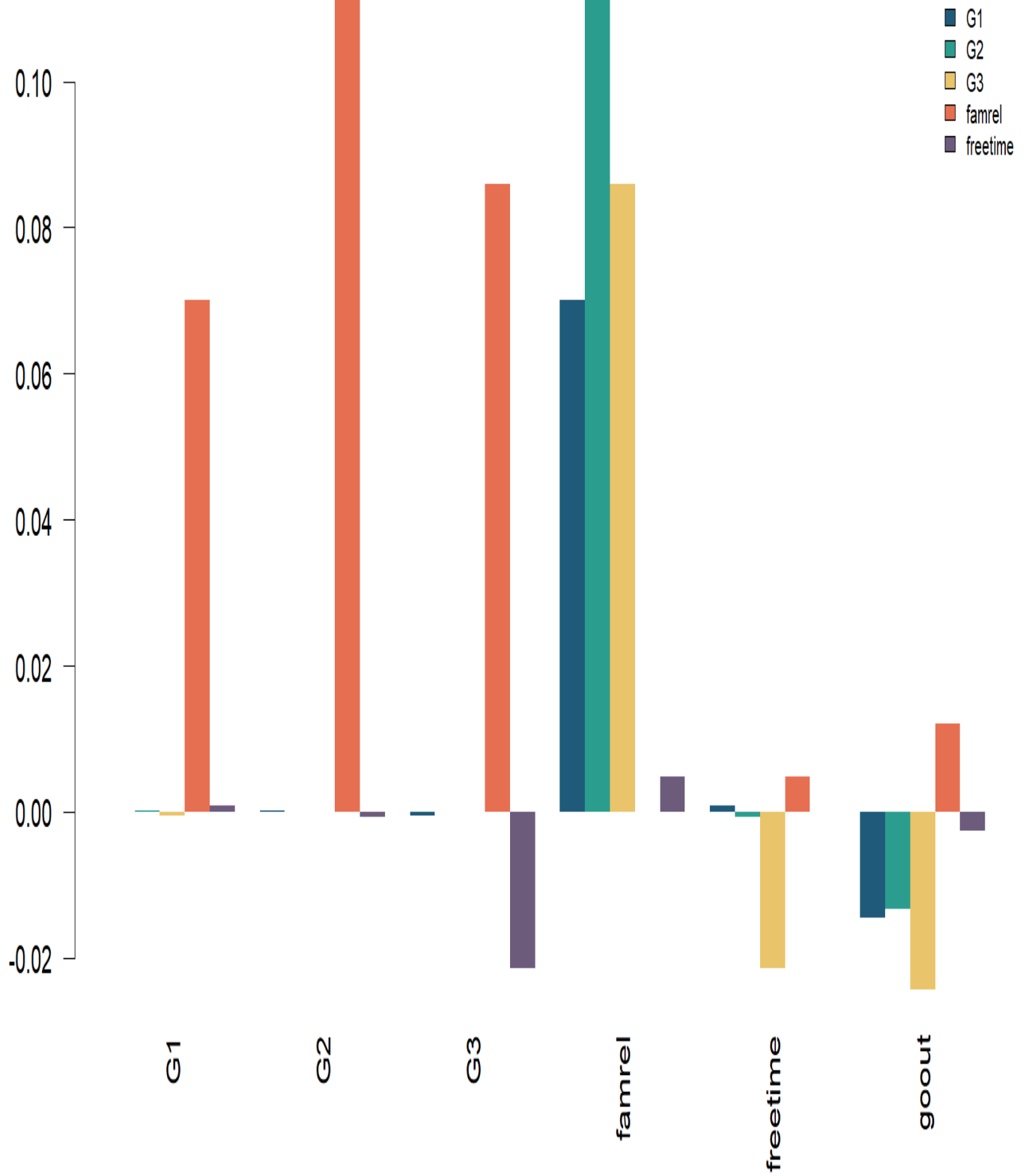
Goodness-of-Fit Index - primary metrics



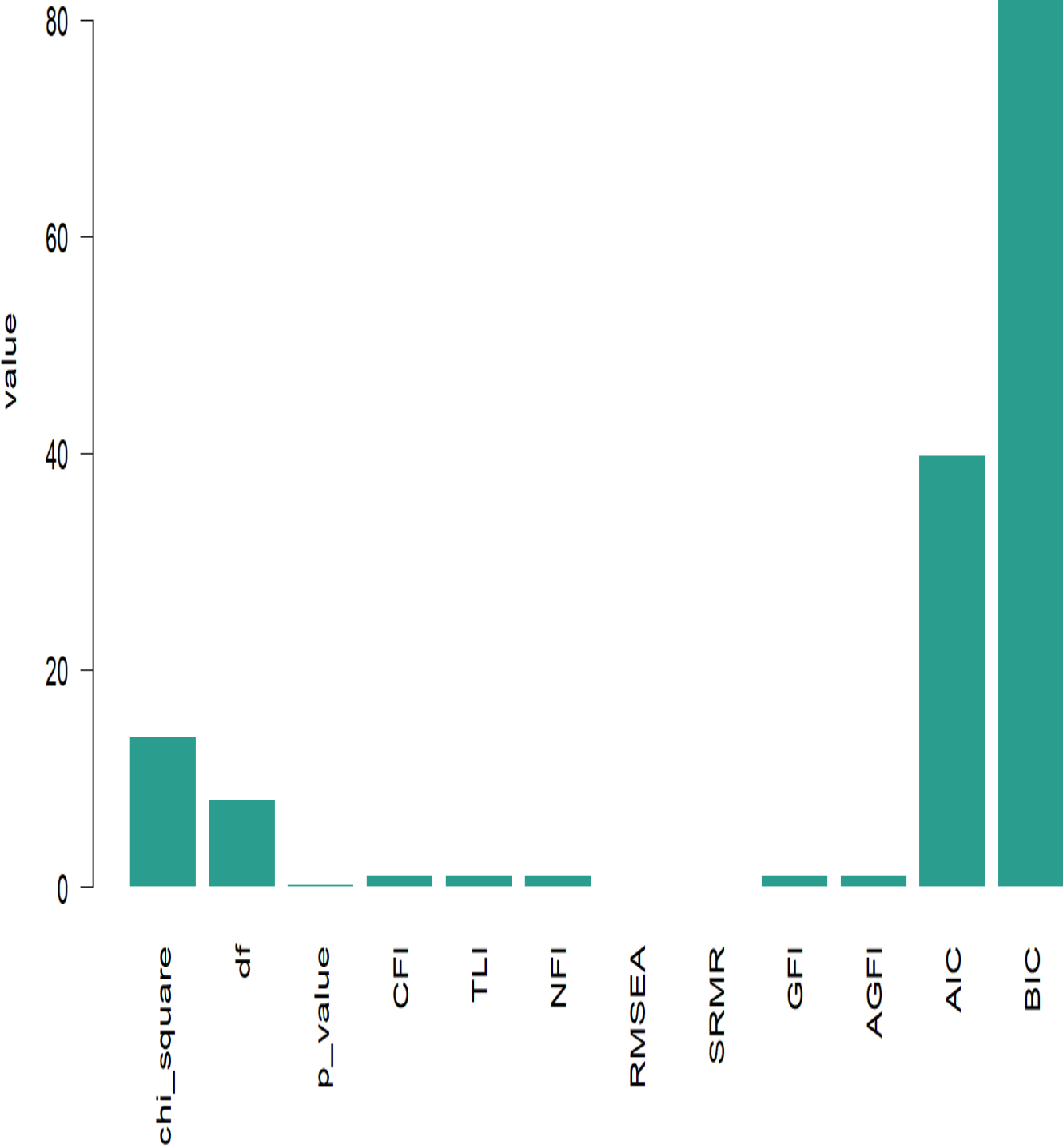
Goodness-of-Fit Index - gfi trace components



Goodness-of-Fit Index - covariance residual matrix



Goodness-of-Fit Index - fit context



Goodness-of-Fit Index verified results

