

Likert Scale Data Analysis

Method: Likert Scale Data Analysis

Method type: scale_analysis

Design: Integrated scoring, distribution, reliability, item diagnostics, and interpretable score bands for a six-item scale.

Variables: famrel, freetime, goout, Dalc, Walc, health

Inference scope: No single omnibus hypothesis test is imposed; the scale is evaluated through scoring, distribution, alpha, omega, and item-total evidence.

Formula: $\text{score}_i = \text{mean}(\text{aligned items})$; $\alpha = k/(k-1) * (1 - \sum(s_i^2)/s_{\text{total}}^2)$;
 $\omega = (\sum(\lambda))^2 / [(\sum(\lambda))^2 + \sum(\theta)]$.

Source rows: 649

Calculated metrics:

scale_mean: 3.6748844375963

scale_median: 3.666666666666667

scale_sd: 0.494934135888322

cronbach_alpha: 0.111762631246865

omega_total: 0.0201553821214475

high_score_percent: 69.7996918335901

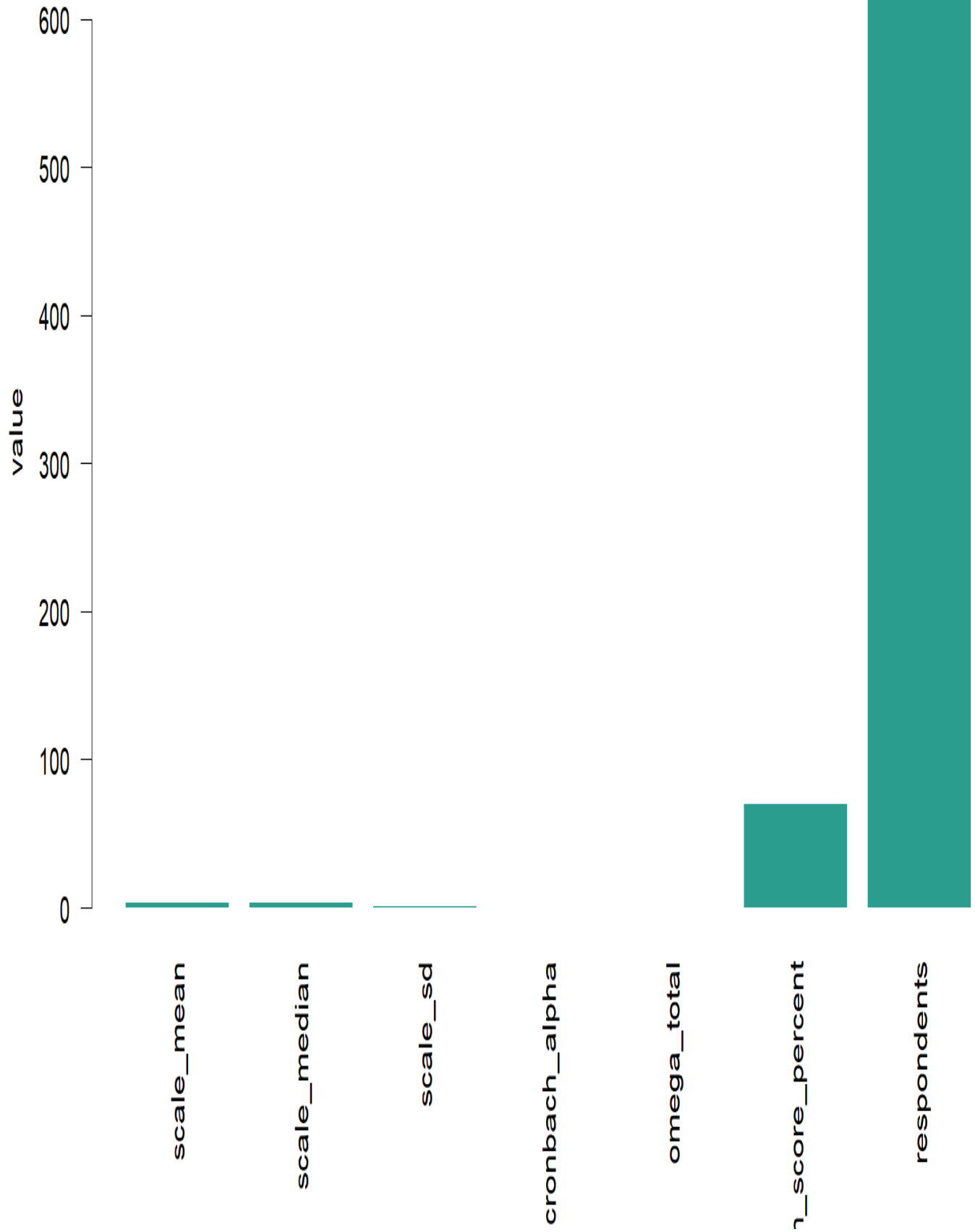
respondents: 649

Interpretation:

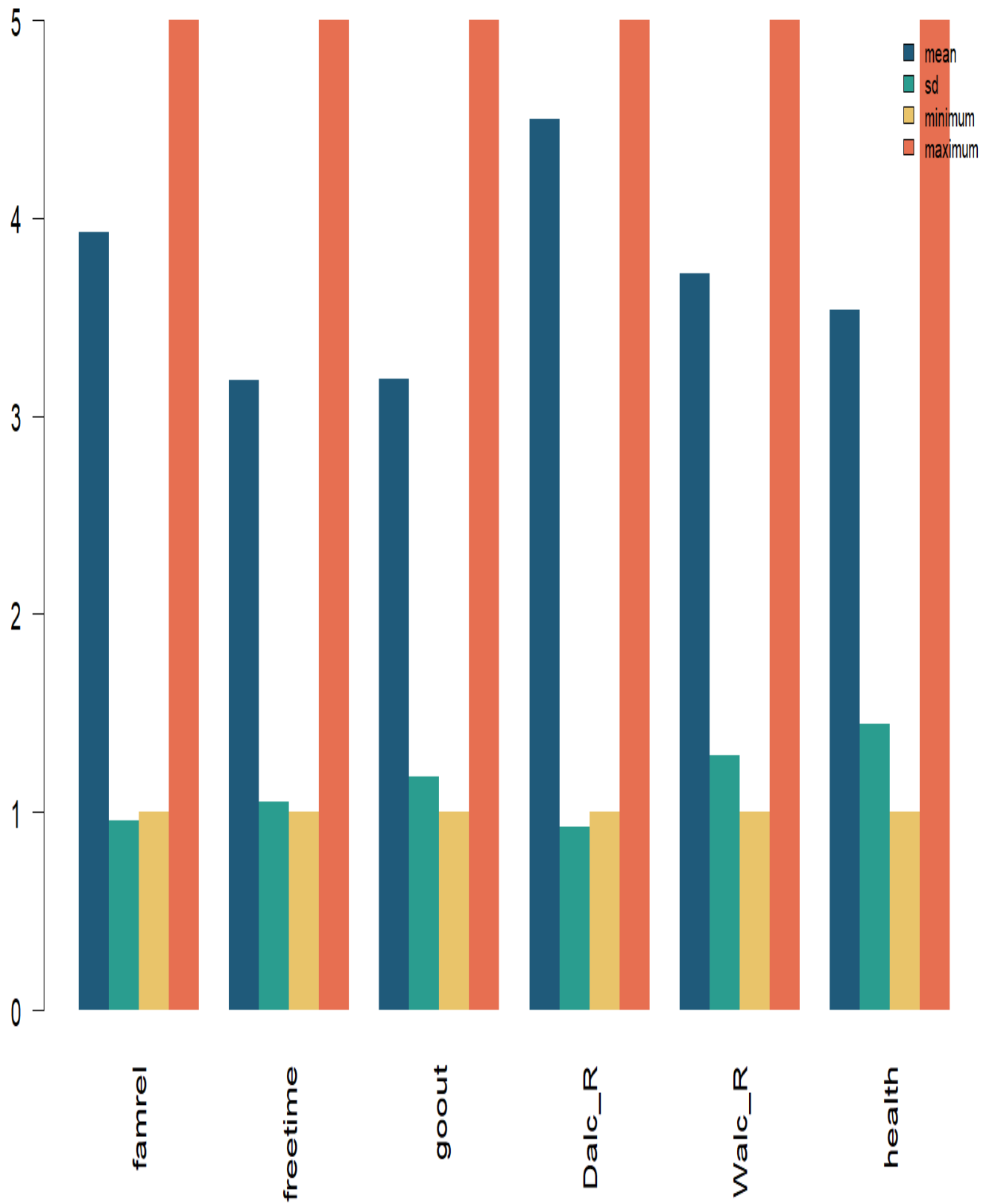
Scoring, distribution, alpha, omega, and item diagnostics are integrated.

Scale mean 3.6748844375963 omega 0.0201553821214475

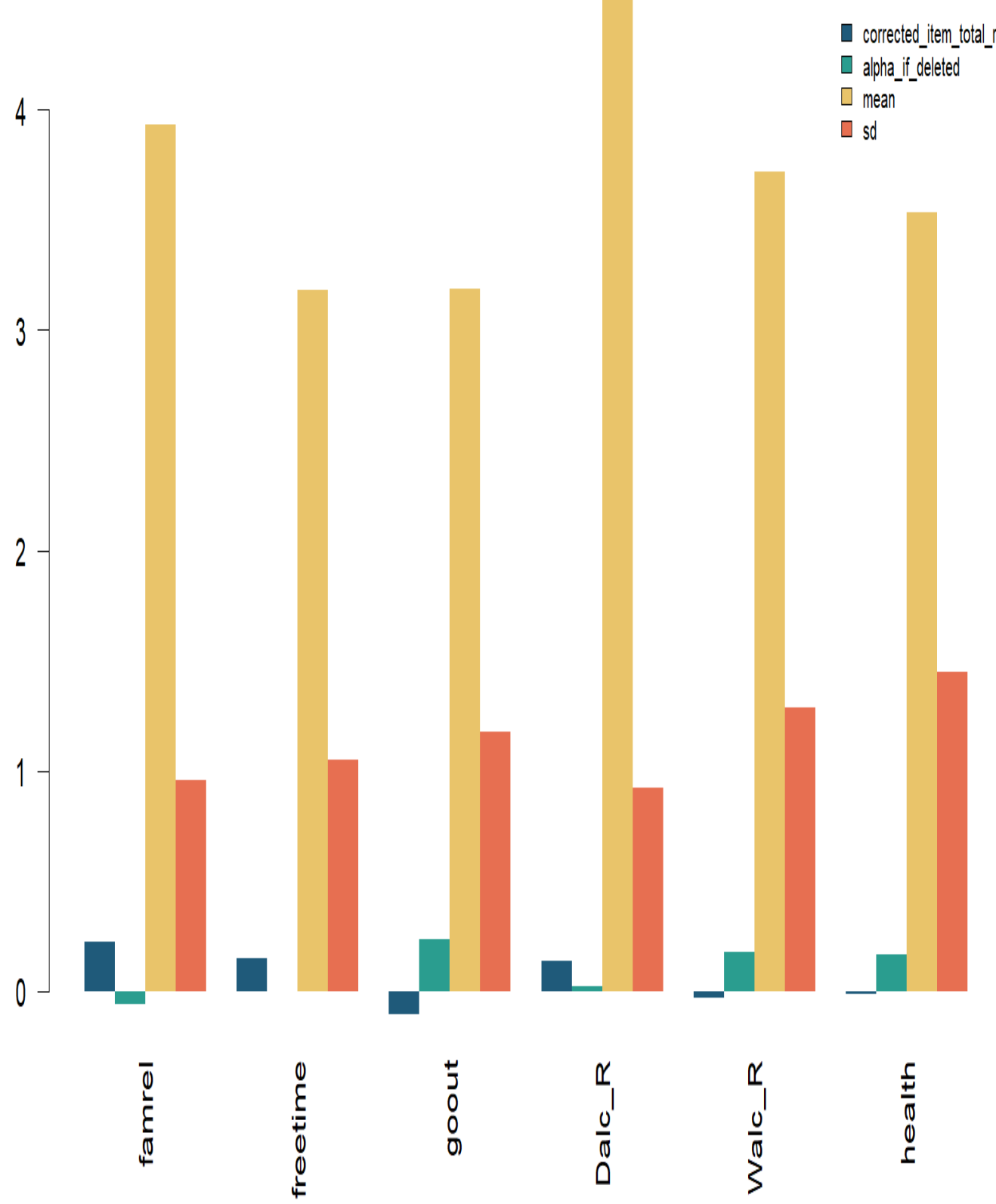
Likert Scale Data Analysis - primary metrics



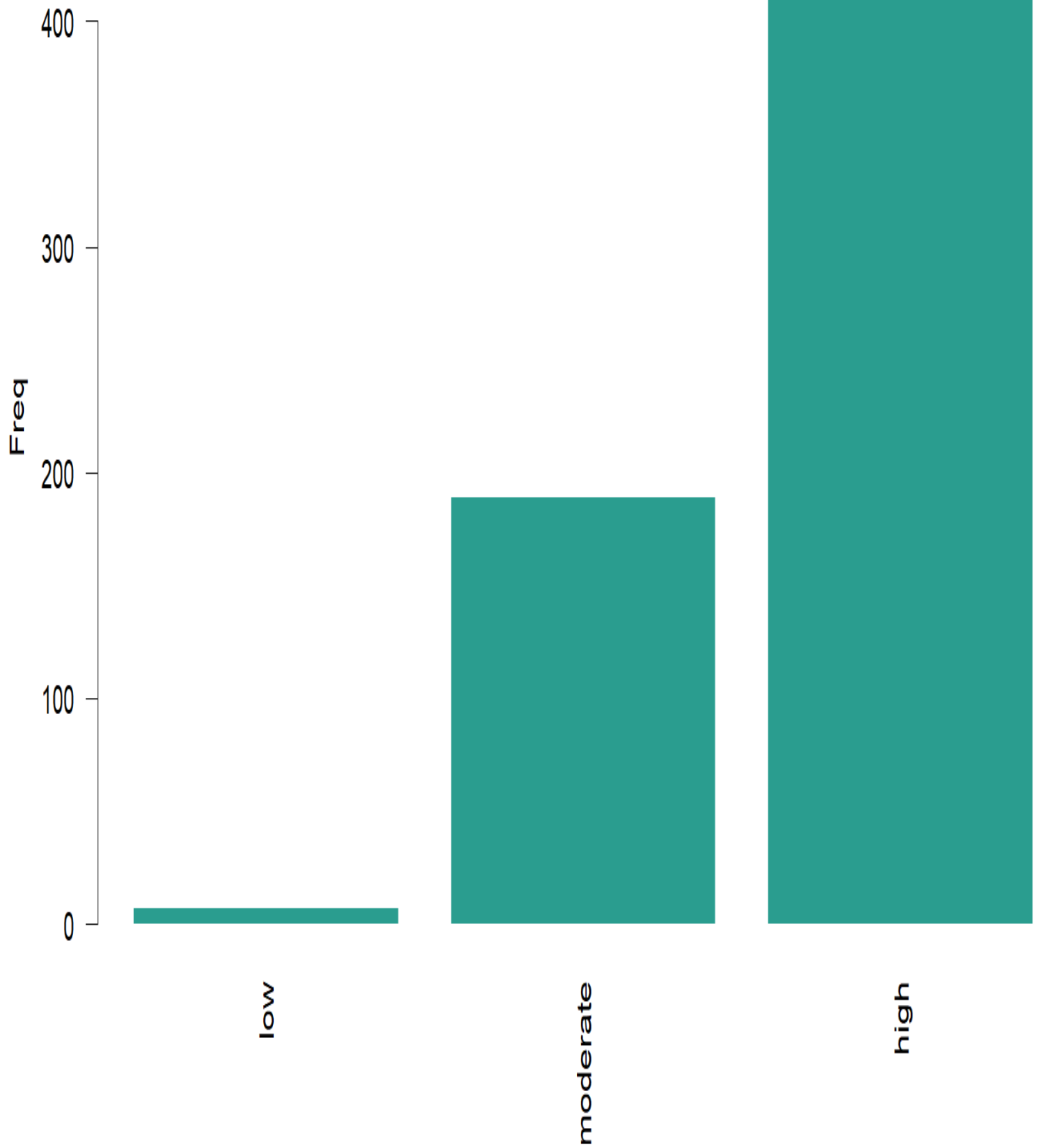
Likert Scale Data Analysis - aligned item summary



Likert Scale Data Analysis - item total diagnostics



Likert Scale Data Analysis - score band distribution



Likert Scale Data Analysis verified results

