Psychometric evaluation of the myasthenia gravis composite using Rasch analysis.

INTRODUCTION: The MG Composite (MGC) is a validated outcome measure of the clinical manifestations of myasthenia gravis.

METHODS: We performed Rasch analyses of the MGC to investigate additional properties, including its unidimensionality and the appropriateness of the weights assigned to the response categories for the MGC items.

RESULTS: The fit statistics indicated that the 10 items belong together and can be summed for a total score. There was an overall absence of item order distortion between response categories. The Rasch model’s expected category response values were compatible with item weights previously assigned.

CONCLUSIONS: Our analysis suggests that: (1) the score can be summed to estimate an overall disease severity score; (2) the response options of the 10 items are not significantly distorted; and (3) the assigned weights of the response options are appropriate.