

Development and Validation of the Responsibility for Negative Thoughts Questionnaire

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R e v i e w e r s

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1. Round 1

1.1. Reviewer 1

Reviewer:

The exploratory factor analysis was conducted using “principal component analysis with varimax rotation,” but principal component analysis is primarily a data-reduction procedure rather than a common-factor model for identifying latent constructs. Because the purpose of the study is instrument development and construct validation, principal axis factoring or maximum-likelihood factor analysis would generally be more theoretically appropriate. The authors should either reanalyze the data using a common-factor method or provide a convincing justification for selecting principal component analysis. Additionally, the use of orthogonal varimax rotation assumes uncorrelated factors, which appears inconsistent with the proposed second-order factor model; therefore, an oblique rotation such as promax or oblimin should be considered.

The criterion used for retaining three factors was limited to eigenvalues greater than 1.00. The sentence “The statistical indices obtained from the exploratory factor analysis indicated that three factors had eigenvalues greater than 1.00” reflects reliance on the Kaiser criterion, which frequently overestimates the number of factors. The factor-retention decision should be supported by parallel analysis, inspection of the scree plot, minimum average partial analysis, theoretical interpretability, and

examination of residual correlations. The authors should report whether these alternative criteria converged on a three-factor solution and provide the relevant results.

The convergent-validity section contains an inconsistency regarding the publication year of the Jerabek Social Anxiety Scale. Some parts of the manuscript refer to Jerabek (1997), whereas the original table identifies the measure as Jerabek (1996). This discrepancy should be resolved by consulting the original source and reporting the correct bibliographic information consistently throughout the manuscript. The authors should also describe the version used, number of items, scoring procedure, subscales, prior evidence of validity and reliability, translation or cultural adaptation process, and reliability coefficient obtained in the current sample.

Reliability assessment was restricted to Cronbach's alpha, despite the multidimensional and ordinal nature of the instrument. Although the reported coefficients are high, alpha depends on assumptions such as tau-equivalence and may be inflated by a large number of similar items. The authors should supplement alpha with McDonald's omega, composite reliability, average inter-item correlations, corrected item-total correlations, and alpha-if-item-deleted values. Test-retest reliability should also be examined to determine temporal stability. For the second-order model, omega hierarchical would be particularly informative for evaluating whether the total score represents a sufficiently reliable general factor.

Authors revised and uploaded the document.

1.2. Reviewer 2

Reviewer:

The manuscript reports that "No items were removed from the scale at this stage," but it does not provide item-level factor loadings, communalities, cross-loadings, or item complexity. A complete exploratory factor-analysis table should be included for all 35 items, with primary loadings, secondary loadings, communalities, and factor assignments. The criteria for acceptable loading magnitude and problematic cross-loading should be stated in advance. Retaining all items may indicate strong item performance, but it may also suggest that item-reduction decisions were insufficiently rigorous. Items with redundant content, high residual correlations, low communalities, or similar wording should be carefully examined.

It is unclear whether exploratory and confirmatory factor analyses were conducted using the same participants. Conducting both analyses on a single sample increases the risk of capitalizing on sample-specific variance and may overstate model fit. The authors should clarify whether the sample was randomly divided into independent exploratory and confirmatory subsamples. If the same dataset was used, the manuscript should acknowledge this as a major limitation and, preferably, perform cross-validation using a holdout sample, bootstrap validation, or an independent replication sample. Strong claims of structural confirmation are not warranted without genuine cross-validation.

The confirmatory factor-analysis procedure is insufficiently documented. The manuscript should report the software and version used, estimator, input matrix, treatment of ordinal item responses, assessment of multivariate normality, management of missing data, and method used to calculate standard errors. If questionnaire items were rated using an ordinal Likert scale, maximum likelihood based on continuous normal data may not be optimal; a robust estimator or weighted least squares estimator may be more appropriate. The response format, number of categories, skewness, kurtosis, and distributional characteristics of the items should therefore be reported.

The statement "An RMSEA value below 0.08 is generally considered indicative of an acceptable model fit" is overly simplified, and the manuscript relies heavily on conventional cutoff values without considering model complexity, confidence intervals, or alternative-model comparisons. The authors should report the RMSEA 90% confidence interval, standardized root mean square residual, Tucker-Lewis index, chi-square statistic, degrees of freedom, and exact probability value. Information criteria such as AIC or BIC would be useful when comparing the three-factor model with plausible one-factor, correlated-factor, and bifactor alternatives. Model fit should be interpreted holistically rather than as a mechanical cutoff exercise.

The justification for the second-order factor model requires further evidence. The manuscript states that "The second-order confirmatory factor analysis supported the three-factor structure," but no standardized second-order loadings, factor

correlations, explained variances, or comparisons with the correlated three-factor model are reported. A second-order model should not be preferred merely because it demonstrates acceptable fit. The authors should show that the three first-order factors are sufficiently correlated to justify a higher-order construct and compare the fit of the second-order model with the freely correlated first-order model. The practical implications of calculating a total score should also be supported by appropriate hierarchical reliability indices.

The convergent-validity strategy is conceptually questionable. The manuscript states that convergent validity was established through correlations with the Jerabek Social Anxiety Scale, yet social anxiety is not a direct measure of responsibility beliefs, thought control, magical thinking, or compensatory behavior. Positive correlations with social anxiety may provide evidence of theoretically related validity, but they are insufficient to establish convergent validity in the strict psychometric sense. The authors should explain the theoretical rationale for selecting social anxiety and, ideally, include measures of obsessive beliefs, thought-action fusion, rumination, negative automatic thoughts, metacognitive beliefs, compulsive behavior, and experiential avoidance.

Authors revised and uploaded the document.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.