

PubMed

Display Settings: Abstract

Adv Health Sci Educ Theory Pract. 2011 Dec;16(5):601-8. doi: 10.1007/s10459-011-9279-2. Epub 2011 Feb 1.

Optimization of answer keys for script concordance testing: should we exclude deviant panelists, deviant responses, or neither?

Gagnon R, Lubarsky S, Lambert C, Charlin B.

CPASS, Faculty of Medicine, University of Montreal, Centre-Ville Station, QC, Canada.

Abstract

The Script Concordance Test (SCT) uses a panel-based, aggregate scoring method that aims to capture the variability of responses of experienced practitioners to particular clinical situations. The use of this type of scoring method is a key determinant of the tool's discriminatory power, but deviant answers could potentially diminish the reliability of scores by introducing measurement error. (1) to investigate the effects on SCT psychometrics of excluding from the test's scoring key either deviant panelists or deviant answers; (2) to propose a method for excluding either deviant panelists or deviant answers. Using an SCT in radiation oncology, we examined three methods for reducing panel response variability. One method ('outliers') entailed removing from the panel members with very low total scores. Two other methods ('distance-from-mode' and 'judgment-by-experts') excluded widely deviant responses to individual questions from the test's scoring key. We compared the effects of these methods on score reliability, correlations between original and adjusted scores, and between-group effect sizes (panel-residents; panel-students; and residents-students). With a large panel ($n = 45$), optimization methods have no effect on reliability of scores, correlation and effect size. With a smaller panel ($n = 15$) no significant effect of optimization methods were observed on reliability and correlation, but significant variation on effect size was observed across samples. Measurement error resulting from deviant panelist responses on SCTs is negligible, provided the panel size is sufficiently large (>15). However, if removal of deviant answers is judged necessary, the distance-from-mode strategy is recommended.

Comment in

[Commentary: The response process validity of a script concordance test item.](#) [Adv Health Sci Educ Theory Pract. 2012]

PMID: 21286807 [PubMed - indexed for MEDLINE]

MeSH Terms

LinkOut - more resources