

Session A2:

Tests and prediction of student succes

Paper 06

Examining assumptions of multi-dimensionality in a multiple mini-interview - A factor analysis

Program text

Current evidence indicates that an unquestioning acceptance of claims of stable multi-dimensional personal traits being evaluated in Multiple Mini-Interviews for student selection is not warranted.

Abstract

The use admission interviews in the selection of students is commonplace in health science educations where patient contact is central. Often the intention is to select and reject applicants on specific and predefined non-academic personal competencies, although very little evidence exist in the literature to support that such specificity is possible. The Multiple Mini-interview the most recent development in admission interviews. Only very few studies have examined the factor structure of Multiple Mini-Interview test scores for evidence of intended non-academic test constructs. The aim of this study was to examine aspects of validity in a Multiple Mini-Interview relating to the internal structure, and to the relationships with other variables that could be competing test constructs. The internal structure of Multiple Mini-Interview scores for a cohort of medical school applicants was examined with confirmatory and exploratory factor-analysis. The four intended non-academic test domains in the Multiple Mini-Interview were: communication, empathy, collaboration, and resilience. Linear regression analyses were used to examine the association between potential competing constructs (age, gender and grade-point averages) and the Multiple Mini-Interview scores. 175 medical school applicants participated in the Multiple Mini-Interview on the test day. Results showed that interview performance appeared to be overwhelmingly station/task specific. The proposed dimensionality (the four intended non-academic test domains) was not supported by the data structure. Neither station format nor pre-university grades appeared to be competing constructs, and the influence of gender and age on test scores was limited. These results - and the existing limited global evidence on MMI dimensionality – strongly suggest against an unquestioning acceptance of claims of stable multi-dimensional personal traits being evaluated in Multiple Mini-Interviews.

Authors

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Literature

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