Differential item functioning analysis:

Detecting DIF items and testing DIF hypotheses

Louis A. Roussos
William F. Stout

Differential item functioning (DIF) analyses help ensure test equity. Because test multidimensionality is the basic cause of DIF, increased understanding of test multidimensionality and its effect on DIF can give a more accurate interpretation of test score, more control over the influence of relevant auxiliary dimensions, and the reduction of influence by unintended and irrelevant nuisance dimensions. To this end, this chapter promotes DIF hypothesis testing of suspected secondary dimensions to augment the traditional automatic one-item-at-time analysis. The chapter provides a detailed description of how to implement this procedure, including examples from the literature.

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