

**Reckase, Mark D.**

**Multidimensional item response theory.** (English) [Zbl 1291.62023](#)

*Statistics for Social and Behavioral Sciences*. New York, NY: Springer (ISBN 978-0-387-89975-6/hbk; 978-1-4614-1714-9/pbk; 978-0-387-89976-3/ebook). ix, 353 p. (2009).

Publisher's description: This is the first book to give thorough coverage to this emerging area of psychometrics. The book describes the commonly used multidimensional item response theory (MIRT) models and the important methods needed for their practical application. These methods include ways to determine the number of dimensions required to adequately model data, procedures for estimating model parameters, ways to define the space for a MIRT model, and procedures for transforming calibrations from different samples to put them in the same space. A full chapter is devoted to methods for multidimensional computerized adaptive testing.

The text is appropriate for an advanced course in psychometric theory or as a reference work for those interested in applying MIRT methodology. A working knowledge of unidimensional item response theory and matrix algebra is assumed. Knowledge of factor analysis is also helpful.

**MSC:**

- [62-02](#) Research exposition (monographs, survey articles) pertaining to statistics
- [62H15](#) Hypothesis testing in multivariate analysis
- [62-07](#) Data analysis (statistics) (MSC2010)
- [62N03](#) Testing in survival analysis and censored data
- [62P15](#) Applications of statistics to psychology
- [62P25](#) Applications of statistics to social sciences

Cited in **2** Reviews  
Cited in **69** Documents

**Software:**

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