A METHODS SEMINAR: ITEM RESPONSE THEORY MODELS FOR HEALTH SERVICES RESEARCH

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Abstract

This seminar is designed to provide insight into recent advances in the application of psychometrics in health care and health services research. We will briefly describe some fundamental results from item response theory (IRT), particularly as they apply to questions of health care assessment, and dynamic (adaptive) measurement. IRT methods solve many practical challenges for the researcher, and address several theoretical concerns associated with the development and use of adaptive health care instruments. We will attempt to provide insight into the use of logistic (Rasch-style) models for item characteristic curves, and into the use of dynamic schemes for tailoring item selection to individual respondents, making links from the educational testing literature to health services research. The discussion will include examples of the dynamic SF-36, an adaptive health outcome monitor available for trial at www.amIhealthy.com. No prior experience with item response models is assumed.

Biography

Thomas E. Love wrote his dissertation and an article in *Psychometrika* (1997) on using IRT methods to assess the effect of distractors (wrong answers) in multiple-choice achievement tests. He is currently involved with a project using IRT methods to evaluate cultural differences in terms of responses to a depression scale. He has lots of other interests, as may be discovered at www.chrp.org/love

The Methods Seminar Series is designed to start interesting conversations between researchers, and to provide insight into methodological results of particular interest. Our next Methods Seminar will be August 2, 2002, and feature David Litaker and Thomas Love on Hierarchical Models.