Instrument/Scale Development

OVERVIEW

Instrument/scale development is the systematic process of creating and testing questionnaire, survey, or rating scale items and response options. Scales are sets of questions that collectively are expected to measure theoretical constructs. The term instrument may refer to a question set as well, or it can refer to a collection of question sets (e.g., four scales that measure aspects of classroom engagement). Scale development may start with qualitative exploration of an unstudied construct or with the combining of items in an existing dataset that were not originally designed to measure a particular construct of interest. Often the goal of scale development is a quantitative measure of a theoretical construct that can be used in research and/or practice. Qualitative procedures that are important components of scale development include literature review of a construct, expert review of preliminary items, and cognitive testing of items with members of the target population of the scale. Quantitative steps include descriptive univariate and bivariate statistical analyses, exploratory factor analyses (EFA), confirmatory factor analyses (CFA), and invariance tests. Item response theory (IRT) and Rasch methods are also commonly used quantitative scale development methods.

ARTICLES AND CHAPTERS

Description of Method


This book chapter describes a mixed-methods scale development process that includes cognitive interviewing of children.


Provides a thorough review of guidelines for writing multiple-choice items.


Recommends best practices for developing an instrument in counseling psychology.

Applications


TEXTS


- The e-book is available through the OSU library at [link](#).


*A useful resource for educational researchers and students. The book provides detailed basic information on items, scales, and measurement characteristics. The book also includes discussion of the types of scores that can be calculated from raw scale scores and how they differ (e.g., stanines).*