



Using the *AERA/APA/NCME Standards for Educational and Psychological Testing* to Improve the Quality of Educational Research

American Educational Research Association
2017 Meeting
San Antonio, TX

Purpose of Mini-course

- ▶ Improve quality of research through application of AERA/APA/NCME/Standards
- ▶ We will focus on three chapters of 2014 Standards
 - ▶ Reliability/Precision and Errors of Measurement
 - ▶ Validity
 - ▶ Fairness in Testing

Agenda

- ▶ Introduction and Overview 1:00-1:30
- ▶ The Reliability/Precision Standards 1:30-2:30
 - ▶ Discussion
 - ▶ Activity
- ▶ Break 2:30-2:45
- ▶ The Validity Standards 2:45-3:45
 - ▶ Discussion
 - ▶ Activity
- ▶ The Fairness in Testing Standards 3:45-4:45
 - ▶ Discussion
 - ▶ Activity
- ▶ Wrap Up 4:45-5:00

Overview of the Standards

- ▶ 1954, APA issued *Technical Recommendations for Psychological Tests And Diagnostic Techniques*
- ▶ 1955, AERA and NCME published *Technical Recommendations for Achievement Tests*
- ▶ 1966, joint committee of APA, AERA, and NCME consolidated and modified the two separate documents into a single set of *Joint Standards for Educational and Psychological Tests and Manuals*
- ▶ The 1966 volume followed by a series of revisions in 1974, 1985, and 1999, referred to as the *Standards for Educational and Psychological Tests*
- ▶ The 2014 revision is the sixth version of the *Standards* and the fifth revision of the *Joint Standards*

Purpose of the Standards

- ▶ “...is to provide criteria for the development and evaluation of tests and testing practices and to provide guidelines for assessing the validity of interpretations of test scores for the intended test uses.”
 - ▶ AERA, APA, NCME (2014). *Standards for Educational and Psychological Testing*

Standards Influence and Citations

- ▶ Not established in response to any governmental or regulatory organization
- ▶ Not established as a result of legislation or judicial decisions
- ▶ Cited frequently in Supreme Court and Lower Court decisions regarding assessment practices
 - ▶ Albemarle Paper v. Moody, Washington v. Davis, Watson v. Ft. Worth Bank and Trust
- ▶ Today, all state assessments cite the *Standards* in both the development and uses of their educational programs
 - ▶ ESEA, PL-103-227

2014 Standards Joint Management Committee

Barbara Flake, PhD, Co-Chair
Distinguished Professor Emeritus
University of Nebraska

Laurens (Laurie) Wise, PhD, Co-Chair
Human Resources Research Organization

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Walter (Denny) Way, PhD
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Frank C. Worrell, PhD
University of California-Berkeley

The 2014 Joint Standards

- ▶ Gathering standards into topical clusters
- ▶ Consolidation of fairness topics into a single chapter
- ▶ Fairness chapter placed in foundational section with validity and reliability chapters
- ▶ Addressed topics related to new and emerging technologies
- ▶ Discussion of accountability testing expanded
- ▶ Focus was shifted from reliability alone to reliability and precision
- ▶ Validity chapter had only minimal changes but connection between validity concerns and standards in other chapters was clarified