# Standard Setting and Social Desirability

Manfred M. Straehle, Ph.D. Prometric, Inc.

Rory McCorkle, MBA Project Management Institute (PMI)

A Poster Session Presented at the 2009 Annual Convention of the American Psychological Association

#### **Presentation Outline**

- Research Question and Objective
- Background
  - Social Desirability
  - Standard Setting
- Method
  - Subjects
  - Procedure
- Results
- Implications
- Next Steps

#### Research Question

 Does Social Desirability Affect Judges Ratings in a Standard Setting Exercise?

## Objective

 To assess whether social desirability is related to standard setting judges' cut-scores resulting from both Angoff and Beuk methods.

### Background

- High stakes testing often conduct standard setting studies using subject matter experts or judges
- Currently, research has never considered the relationship between personality characteristics of judges and subject matter experts judgments in a standard setting
- One personality characteristic measure used in clinical psychology to determine the validity of a measurement is social desirability

# Social Desirability

- Definition:
  - The need for approval by appearing favorable to others
- Application:
  - Often used in conjunction with other personality measurements to exclude subjects with high social desirability

## Standard Setting

- A method for determining a passing score on an exam
- Modified Angoff Method
  - A criterion-based method widely used for setting a passing score on an exam
  - Asks participants to estimate the proportion of minimally proficient/borderline examinees who will answer each examination item correctly
- Modified Beuk Method
  - A compromise method which asks the following questions
    - 1) What should be the minimum level of knowledge required to pass an examination?
    - 2) What pass rate should be expected?

## Participants

- Forty-two experts on five different certification exams
- Participants represented the Audiology, Nursing,
  Procurement, and Project Management industries
- Participants were representative of their profession in regard to demographic characteristics (years of experience, area of practice, geography, ethnicity, and gender)
- Two of the standard setting were for programs accredited by an outside body (NOCA and ANSI/ISO)

#### Procedure

- 1. Training in the Modified Angoff and Beuk Methods
- 2. Participate in Modified Angoff Method (2 rounds)
  - a. Rated and answered examination items
  - b. Discussed ratings
  - c. Re-rated examination items
- 3. Participate in Modified Beuk Method
- 4. Complete Marlowe-Crowne Social Desirability Scale

#### Results

- Marlowe-Crowne Social Desirability Scale
  - Mean: 18.86
  - Standard Deviation: 5.45
- Three groups were formed based on one standard deviation of +/- 5.45 of the MCSD from the MCSD mean of 5.45

#### Results

MCSD Group	Angoff 1st Rating	Angoff 2 <sup>nd</sup> Rating	Beuk
Low (n=7)	79.80	80.61	79.29
	(3.87)	(3.39)	(7.32)
Average (n=28)	71.12	72.02	69.39
	(7.96)	(7.46)	(11.02)
High (n=7)	68.19	68.8o	69.00
	(7.69)	(6.98)	(11.12)
Total (n=42)	72.08	72.92	70.98
	(8.12)	(7.68)	(10.96)

Standard deviations are in parenthesis; Angoff scores are reported in percentages.

## Summary and Implications

- Experts who exhibited less social desirability have more stringent passing standards on the Angoff and Beuk scores than those with average and high social desirability scores
- Should we exclude individuals based on social desirability? Other factors?

#### Next Steps

- Increase sample size
- Consider interactions of independent variables (e.g., gender of MCSD group) on passing scores
- Consider using other personality scales and its affects on standard setting results